

ENOVA SYSTEMS INC  
Form 10-K  
April 02, 2007

Table of Contents

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

**Form 10-K**

- ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**  
**For the fiscal year ended December 31, 2006**
- or
- TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**  
**For the transition period from        to**

**Commission file no. 1-33001**

**ENOVA SYSTEMS, INC.**

*(Exact name of registrant as specified in its charter)*

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

**95-3056150**  
*(I.R.S. Employer  
Identification Number)*

**19850 South Magellan Drive, Torrance, California 90502**  
*(Address of principal executive offices, including zip code)*

**(310) 527-2800**  
*(Registrant's telephone number, including area code)*

**Securities registered pursuant to Section 12(b) of the Act:**

<b>Title of Each Class</b>	<b>Name of Each Exchange on Which Registered</b>
Common Stock, no par value	The American Stock Exchange

**Securities registered pursuant to Section 12(g) of the Act:**

**None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act: Yes  No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act: Yes  No

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

Edgar Filing: ENOVA SYSTEMS INC - Form 10-K

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

Large accelerated filer  Accelerated filer  Non-accelerated filer

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

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant as of June 30, 2006 (the last business day of the registrant's more recently completed second quarter) was \$39,757,906

The number of shares of Common Stock outstanding as of March 27, 2007 was 14,816,000

---

**ENOVA SYSTEMS, INC.**

**2006 FORM 10-K ANNUAL REPORT**

**TABLE OF CONTENTS**

**PART I**

<u>Item 1.</u>	<u>Business</u>	3
<u>Item 1A.</u>	<u>Risk Factors and Cautionary Factors That May Impact Future Results</u>	15
<u>Item 2.</u>	<u>Properties</u>	19
<u>Item 3.</u>	<u>Legal Proceedings</u>	19
<u>Item 4.</u>	<u>Submission of Matters to a Vote of Security Holders</u>	19

**PART II**

<u>Item 5.</u>	<u>Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	20
<u>Item 6.</u>	<u>Selected Financial Data</u>	23
<u>Item 7.</u>	<u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	23
<u>Item 7A.</u>	<u>Quantitative and Qualitative Disclosures about Market Risk</u>	31
<u>Item 8.</u>	<u>Financial Statements and Supplementary Data</u>	31
<u>Item 9.</u>	<u>Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u>	31
<u>Item 9A.</u>	<u>Controls and Procedures</u>	33
<u>Item 9B.</u>	<u>Other Information</u>	34

**PART III**

<u>Item 10.</u>	<u>Directors and Executive Officers of the Registrant</u>	34
<u>Item 11.</u>	<u>Executive Compensation</u>	37
<u>Item 12.</u>	<u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	45
<u>Item 13.</u>	<u>Certain Relationships and Related Transactions, and Director Independence</u>	47
<u>Item 14.</u>	<u>Principal Accountant Fees and Services</u>	47

**PART IV**

<u>Item 15.</u>	<u>Exhibits and Financial Statement Schedules</u>	48
<u>EXHIBIT 3.1</u>		
<u>EXHIBIT 3.2</u>		
<u>EXHIBIT 23.1</u>		
<u>EXHIBIT 23.2</u>		
<u>EXHIBIT 31.1</u>		
<u>EXHIBIT 31.2</u>		
<u>EXHIBIT 32</u>		

**Table of Contents**

**PART I**

**Item 1. *Business***

**General**

In July 2000, we changed our name to Enova Systems, Inc. Our company, previously known as U.S. Electricar, Inc., a California corporation, was incorporated on July 30, 1976.

Enova believes it is a leader in the development and production of proprietary, commercial digital power management systems for transportation vehicles and stationary power generation systems. Power management systems control and monitor electric power in an automotive or commercial application such as an automobile or a stand-alone power generator. Drive systems are comprised of an electric motor, an electronics control unit and a gear unit which power an electric vehicle. Hybrid systems, which are similar to pure electric drive systems, contain an internal combustion engine in addition to the electric motor, eliminating external recharging of the battery system. A hydrogen fuel cell based system is similar to a hybrid system, except that instead of an internal combustion engine, a fuel cell is utilized as the power source. A fuel cell is a system which combines hydrogen and oxygen in a chemical process to produce electricity. Stationary power systems utilize similar components to those which are in a mobile drive system in addition to other elements. These stationary systems are effective as power-assist or back-up systems, alternative power, for residential, commercial and industrial applications.

A fundamental element of Enova's strategy is to develop and produce advanced proprietary software, firmware and hardware for applications in these alternative power markets. Our focus is digital power conversion, power management, and system integration, for two broad market applications—vehicle power generation and stationary power generation.

Specifically, we develop, design and produce drive systems and related components for electric, hybrid-electric, fuel cell and microturbine-powered vehicles. We also develop, design and produce power management and power conversion components for stationary distributed power generation systems. These stationary applications can employ hydrogen fuel cells, microturbines, or advanced batteries for power storage and generation. Additionally, we perform research and development to augment and support others' and our own related product development efforts.

Our product development strategy is to design and introduce to market successively advanced products, each based on our core technical competencies. In each of our product/market segments, we provide products and services to leverage our core competencies in digital power management, power conversion and system integration. We believe that the underlying technical requirements shared among the market segments will allow us to more quickly transition from one emerging market to the next, with the goal of capturing early market share.

Enova's primary market focus centers on both series and parallel heavy-duty drive systems for multiple vehicle and marine applications. A series hybrid system is one where only the electric motor connects to the drive shaft; a parallel hybrid system is one where both the internal combustion engine and the electric motor are connected to the drive shaft. We believe series-hybrid and parallel hybrid medium and heavy-duty drive system sales offer Enova the greatest return on investment in both the short and long term. We believe the medium and heavy-duty hybrid market's best chances of significant growth lie in identifying and pooling the largest possible numbers of early adopters in high-volume applications. We will attempt to utilize our competitive advantages, including customer alliances, to gain greater market share. By aligning ourselves with key customers in our target market(s), we believe that the alliance will result in the latest technology being implemented and customer requirements being met, with a minimal level of

additional time or expense. Additionally, our management believes that this area will see significant growth over the next several years. As we penetrate more market areas, we are continually refining and optimizing both our market strategy and our product line to maintain our leading edge in power management and conversion systems for mobile applications.

Our website, [www.enovsystems.com](http://www.enovsystems.com), contains up-to-date information on our company, our products, programs and current events. We are implementing an aggressive strategy to utilize our website and the internet as a prime focal point for current and prospective customers, investors and other affiliated parties seeking data on our business.

**Table of Contents**

During 2005, our recapitalization initiatives were successful. We entered into an agreement with a placement agent relating to the sale of 5,300,000 new shares (after the 1 for 45 reverse stock split described in Item 5 below) of our common stock, in connection with our listing on AIM in the United Kingdom. We received approximately \$18,000,000 of net proceeds from the offering.

During 2006, we experienced a decrease in production revenues. While we believe our development and market penetration initiatives are proving successful, we have not yet seen the maturation of these efforts into sustainable production revenues. In December, 2006, we announced a production contract with the Tanfield Group Plc., which we expect will lead to production of up to 200 units in 2007. We expect that this agreement will help to consolidate our position as a market leader in Europe.

In August, 2006, we entered into a contract with Verizon to design, integrate, and deliver 13 service vans. We believe that working with the 2nd largest fleet operator in North America will generate further exposure in the Domestic market, and bring additional focus on our unique fleet solutions. We believe that we have the operating resources to continue our market penetration efforts, but have not ruled out seeking additional capitalization.

As part of our continuing strategic relationship with International Truck and Engine Corp (IC Corp), we executed an agreement to produce the nation's first 19 hybrid school busses. IC Corp is the nation's largest school bus manufacturer, claiming over 60% of the Domestic Build. In addition to School Buses, IC Corp is teaming with Enova to supply hybrid buses to the Commercial Bus Market.

Enova believes that our business outlook is improving. Greater recognition and strong engineering have allowed us to make several key strides towards sustainable revenue. In conjunction with this expected outlook, we have recently made several key management changes early in 2007:

On November 17, 2006, The Company promoted Mike Staran to the position of Executive Vice President. In that role, Mr. Staran is responsible for operations, engineering, sales and marketing, and investor relations.

In January 2007, Corinne Bertrand resigned as Chief Financial Officer. In her place, Jarett Fenton was appointed as Chief Financial Officer.

In February of 2007, John Dexter retired from his position as Director of Operations.

We continue to receive greater recognition from both governmental and private industry with regards to both commercial and military application of its hybrid drive systems and fuel cell power management technologies. Although we believe that current negotiations with several parties may result in development and production contracts during 2007 and beyond, there are no assurances that such additional agreements will be realized.

During 2006, we continued to advance our technologies and products for greater market penetration for 2007 and beyond. We continue to develop independently and in conjunction with the Hyundai-Enova Innovative Technology Center (ITC) progress on several fronts to produce commercially available heavy-duty, series and parallel hybrid drive systems.

During 2006, we continued to develop and produce electric and hybrid electric drive systems and components for First Auto Works of China, International Truck and Engine (IC Corp), Ford Motor Company (Ford), Hyundai Motor Car, US Military, Wright Bus of the United Kingdom, and Tomoe of Japan as well as several other domestic and international vehicle and bus manufacturers. We also were successful in introducing our technology to companies such as Concurrent Technology Corporation (CTC), PUES (Tokyo Research and Development), Verizon,

Volvo/Mack, Tanfield/Smith Electric Vehicles and Navistar (International Truck and Engine, IC Corporation). The continued relationships, in addition to our newest customers helped Enova easily surpass, since our inception, the manufacturing of its 900th system. Our various electric and hybrid-electric drive systems, power management and power conversion systems are being used in applications including several light, medium and heavy duty trucks, train locomotives, transit buses and industrial vehicles.



**Table of Contents**

For the year ended December 31, 2006, the following customers each accounted for more than ten percent (10%) of our total revenues:

<b>Customer</b>	<b>Percent</b>
Hyundai Motor Company	39%
The State of Hawaii	16%

The Company operates as a single reportable segment and attributes revenues to countries based upon the location of the entity originating the sale. Revenues by geographic area are as follows:

	<b>2006</b>	<b>2005</b>	<b>2004</b>
United States	\$ 579,000	\$ 971,000	\$ 1,465,000
Italy	5,000	152,000	30,000
Korea	753,000	758,000	258,000
Japan	43,000	3,038,000	176,000
China	68,000	234,000	256,000
Malaysia	21,000	91,000	0
Ireland	115,000	0	166,000
Canada		120,000	0
United Kingdom	72,000	720,000	203,000
Norway	10,000	0	0
<b>Total</b>	<b>\$ 1,666,000</b>	<b>\$ 6,084,000</b>	<b>\$ 2,554,000</b>

Enova Systems is a trademark of Enova Systems, Inc . All other brand names or trademarks appearing in this annual report are the property of their respective holders.

***HybridPower<sup>tm</sup> Electric and Hybrid-Electric Drive Systems*****Environmental Initiatives and Legislation**

Because vehicles powered by internal combustion engines cause pollution, there has been significant public pressure in Europe and Asia, and enacted or pending legislation in the United States at the federal level and in certain states, to promote or mandate the use of vehicles with no tailpipe emissions ( zero emission vehicles ) or reduced tailpipe emissions ( low emission vehicles ). We believe legislation requiring or promoting zero or low emission vehicles is necessary to create a significant market for electric vehicles. The California Air Resources Board (CARB) is continually modifying its limits for low emission vehicles. Recently, CARB proposed additional amendments to the regulations. Furthermore, several car manufacturers have challenged these mandates in court and have obtained injunctions to delay these mandates. There can be no assurance that further legislation will be enacted or that current legislation or state mandates will not be repealed or amended, or that a different form of zero emission or low emission vehicle will not be invented, developed and produced, and achieve greater market acceptance than electric vehicles. Extensions, modifications or reductions of current federal and state legislation, mandates and potential tax incentives could adversely affect our business prospects if implemented.

Our products are subject to federal, state, local and foreign laws and regulations, governing, among other things, emissions as well as laws relating to occupational health and safety. Regulatory agencies may impose special requirements for implementation and operation of our products or may significantly impact or even eliminate some of our target markets. We may incur material costs or liabilities in complying with government regulations. In addition, potentially significant expenditures could be required in order to comply with evolving environmental and health and safety laws, regulations and requirements that may be adopted or imposed in the future.

**Strategic Alliances, Partnering and Technology Developments**

Our continuing strategy is to adapt ourselves to the ever-changing environment of alternative power markets for both stationary and mobile applications. Originally focusing on pure electric drive systems, we believe we are

**Table of Contents**

now positioned as a global supplier of drive systems for electric, hybrid and fuel cell applications. We are now entering stationary power markets with its power management systems and intend to develop other systems to monitor and control the complex fuel cell and ancillary device systems being developed for distributed generation and mobile applications.

We continue to seek and establish alliances with major players in the automotive, stationary power and fuel cell fields. 2006 allowed Enova to further its penetration into the European and Asian markets, as well as allow them to begin relationships with significant North American companies. We believe the medium and heavy-duty hybrid market's best chances of significant growth lie in identifying and pooling the largest possible numbers of early adopters in high-volume applications. We will utilize our competitive advantages, including customer alliances, to gain greater market share. By aligning ourselves with key customers in our target market(s), we believe that the alliance will result in the latest technology being implemented and customer requirements being met, with a minimal level of additional time or expense.

Some recent highlights of our accomplishments are:

International Truck and Engine (IC Corp), who claims to be the nation's largest School Bus manufacturer and Enova have supplied the nation's first production Hybrid School Buses. IC Corp currently maintains 60% of the School Bus market. In addition to School Buses, IC Corp is teaming with Enova to supply hybrid buses to the Commercial Bus Market. There are no assurances, however that any purchase orders will be realized.

WrightBus, the largest low-floor and Double Deck bus manufacturer in the United Kingdom, has taken delivery of our series hybrid diesel genset and integrated them into its medium and large bus applications. Six of these systems are now running seven days a week 18 hours a day in London. We to work with WrightBus on projects related to Enova's hybrid drive systems. There are no assurances, however that any purchase orders will be realized.

Tanfield, the World's largest electric vehicle manufacturer, has signed an arrangement with Enova where Enova will supply electric drive systems for Tanfield's 3.5, 7.5 and 12 ton vehicles.

First Auto Works, China's largest vehicle manufacturer, has indicated that it intends to purchase Enova's pre transmission hybrid system for FAW's bus applications. There are no assurances, however that any purchase orders will be realized.

Th!nk and Phoenix Motorcars, Electric Vehicles OEMs have both utilized Enova as a supplier of primary components/systems for their vehicles.

Verizon has recently taken receipt of thirteen (13) service vans incorporating Enova's technology. Verizon is the nation's second largest fleet operator with 58,000 vehicles. In addition to Verizon, we have begun development work with other large fleet operators in both the service van and pick up and delivery sectors. There are no assurances, however that any purchase orders will be realized.

We also received recognition from both governmental and private industry with regards to U.S. military applications of its hybrid drive systems and fuel cell power management technologies. Through 2006 we completed development on several new power management and drive systems such as our High Voltage version of our 120kW and 240 kW drive system, Dual 8kW inverter, 380V DC/DC converter, Mobile Fuel Cell Generator, a multi-functional processor, as well as upgrades to our Battery Care Management system, Fuel Cell Management system and our High Voltage Power Converter. We continued to develop and produce electric and hybrid electric drive systems and components for Ford Motor Company (Ford), the City of Honolulu and several domestic and international vehicle and bus

manufacturers in China, Italy, the United Kingdom, Malaysia and Japan. Our various electric and hybrid-electric drive systems, power management and power conversion systems are being used in applications including Class 8 trucks, monorail systems, transit buses and industrial vehicles. We have furthered our development and production of systems for both mobile and stationary fuel cell powered systems with major companies such as Ford, Chevron, Texaco, and UTC Fuel Cells, a division of United Technologies. We also are continuing on our current research and development programs with Mack/Volvo, EDO Corporation, the U.S. Air

## **Table of Contents**

Force and the U.S. Navy, as well as developing new programs with Hyundai Motor Company (HMC), the U.S. government and other private sector companies for hybrid and fuel cell systems.

Research and development programs included our advanced power management systems for fuel cells, our diesel generation engine/motor system for our heavy-duty drive systems, a dual 8kW inverter, and upgrades and improvements to our current power conversion and management components. Additionally, we continue to optimize our technologies to be more universally adaptable to the requirements of our current and prospective customers. By modifying our software and firmware, we believe we should be able to provide a more comprehensive, adaptive and effective solution to a larger base of customers and applications. We will continue to research and develop new technologies and products, both internally and in conjunction with our alliance partners and other manufacturers as we deem beneficial to our global growth strategy.

## **Products**

Enova's HybridPower hybrid electric drive system provides all the functionality one would find under the hood of an internal combustion engine powered vehicle. The HybridPower system consists of an enhanced electric motor and the electronic controls that regulate the flow of electricity to and from the batteries at various voltages and power to propel the vehicle. In addition to the motor and controller, the system includes a gear reduction/differential unit which ensures the desired propulsion and performance. The system is designed to be installed as a drop in, fully integrated turnkey fashion, or on a modular, as-needed basis. Regardless of power source (battery, fuel cell, diesel generator or turbine) the HybridPower electric motor is designed to meet the customer's drive cycle requirements.

Our family of medium-duty drive systems includes:

- 30kW, 60kW, 90kW all-electric drives

- 15/60kW hybrid drive

- 25/80kW hybrid drive

- 40/80kW hybrid drive

- 90kW hybrid drive

- combinations of these systems based on customer requirements.

Our family of heavy-duty electric drive systems includes:

- 120kW all-electric drive

- 120/60kW hybrid drive

- 240/60kW hybrid drive

- 90kW hybrid drive

- 100kW hybrid drive

- 100kW hybrid drive

Our drive systems, in conjunction with, internal combustion engines, microturbines, fuel cells, flywheels, and generators sets provide state of the art hybrid-electric propulsion systems.

Hybrid vehicles are those that utilize an electric motor and batteries in conjunction with an internal combustion engine (ICE), whether piston or turbine. With a hybrid system, a small piston or turbine engine fueled by gasoline or diesel, CNG, methane, etc., in a tank supplements the electric motor and battery. These systems are self-charging, in that the operating ICE recharges the battery.

There are two types of hybrid systems: series and parallel. A series hybrid system is one where only the electric motor connects to the drive shaft; a parallel hybrid system is one where both the internal combustion engine and the electric motor are connected to the drive shaft. In a series hybrid system, the ICE turns the generator, which charges

## **Table of Contents**

the battery, which through a control unit powers the electric motor, which turns the wheels. In a parallel hybrid system, both the electric motor and the ICE can operate simultaneously to drive the wheels. (See diagrams below.) In both hybrid systems and in pure electric systems, regenerative braking occurs which assists in the charging of the batteries.

The parallel hybrid system is ideally suited for conditions where most of the driving is done at constant speed cruising, with a smaller amount of the driving involving random acceleration, such as up hill or with stop and go conditions. For acceleration, the controller causes the electric motor to kick in to assist the ICE, both running simultaneously. When speed is steady or the ground is flat, only the ICE runs. Additionally, when the batteries are low, the controller causes the ICE and motor to charge the batteries. As a result, the series hybrid system is best suited for starts and stops, and is ideal for applications such as urban transit buses and urban garbage trucks. The design of the series hybrid system is based on a driving cycle with a high percentage of random acceleration conditions.

### ***Hybrid Drive Configurations***

Enova has identified three primary configurations based upon how well they meet market needs economic requirements. We have developed all of the relevant technology required to produce these drive systems and is currently introducing the Hybrid Power product line worldwide. All of our innovative hybrid drive systems are compatible with wide range of fuel sources and engine configurations.

#### ***Series Hybrid with Diesel Generator***

The Series Hybrid is typically ideal for low floor vehicles with a driving cycle that has a high percentage of stop and go and/or hilly terrain. Refuse trucks, urban delivery trucks and intra-city buses are the primary target markets for these drive systems. Our clients for this application include WrightBus of the U.K., MTrans of Malaysia and Tomoedenki of Japan

#### ***Post Transmission Parallel Hybrid***

The Post Transmission Parallel Hybrid is ideal for vehicles with a driving cycle with a high percentage of stop and go, as well as constant speed cruising. Target markets include refuse trucks, urban delivery trucks, School Buses and intra-city buses also. Our current and potential clients for this application include Navistar, Verizon, Mack Truck, Volvo and Waste Management.

**Table of Contents**

***Pre Transmission Parallel Hybrid***

The Pre-Transmission Parallel Hybrid is ideal for vehicles with a driving cycle having a small percentage of constant speed cruising and a large percentage of stop and go cruising. Target markets include inter-city transit buses and trucks as well as military vehicles. Our current and potential clients for this application include Volvo Truck, Cummins, Caterpillar and First Auto Works of China as well as other drive system and vehicle manufacturers for these types of driving cycles.

***Definitions:***

BCU Battery Care Unit; HCU Hybrid Control Unit; SDU Safety Disconnect Unit; VCU Vehicle Control Unit

CEU Control Electronics Unit (Houses MCU, DC-DC, and Charger); MCU Motor Control Unit;

EDM Electric Drive Motor; EDU Electric Drive Unit (Includes EDM & GDU); GDU Gear Drive Unit

GCU Generator Control Unit; EGM Electric Generator Motor; ICE Internal Combustion Engine

***Hybrid Drive Motors***

The electric drive unit is essentially an electric motor with additional features and functionality. The motor is liquid-cooled, environmentally sealed, designed to handle automotive shock and vibration, and includes parking pawl, which stops the vehicle when the driver parks the car. It also permits regenerative braking to provide power recovery, in which the mechanical energy of momentum is converted into electrical energy as the motor slows during braking or deceleration. The optional gear reduction unit takes the electric motor's high rpm and gears it down to the lower rpm required by the vehicle's conventional drive shaft. As the revolutions per minute (rpm) go down, the torque of the electric motor increases.

The HybridPower drive systems exclusively utilize induction AC motors for their high performance, power density, robustness and low cost. The AC drive system is scaleable and can be customized for different applications. Due to the large operating range that these propulsion systems offer, all parameters can be optimized; the user will not have to choose between acceleration, torque or vehicle speed.

***Hybrid Motor Controllers***

The controller houses all the components necessary to control the powering of a vehicle, in one easy-to-install package. Our main component is an inverter, which converts DC electricity to AC electricity. We also offers optional controllers for the air conditioning, power steering and heat pump, 12VDC/24VDC DC-to-DC converter for vehicle auxiliary loads such as cell phones, radio, lights, and a 6.6kW AC-to-DC on-board conductive charger which allows for direct 110 VAC or 220 VAC battery charging. These are located in the same housing as the controller, thus extra interconnects are not required. This approach simplifies the vehicle wiring harness and increases system reliability.

Using our proprietary Windows based software package, vehicle interfaces and control parameters can be programmed in-vehicle. Real-time vehicle performance parameters can be monitored and collected.





## **Table of Contents**

### ***Hybrid Drive Systems***

The Enova hybrid drive family currently includes a 120/60kW peak series hybrid system, a 240/60kW peak series hybrid system, a 90kW peak mild, pre-transmission parallel hybrid system, a 100kW peak post-transmission parallel hybrid systems and our 100kW peak pre-transmission parallel hybrid system to be introduced later this year.

The Enova HybridPower hybrid-electric drive systems are based on the component building blocks of the electric drive family, including the motor, controller and optional components. As an example, the 120/60 kW series hybrid system uses the 120kW electric drive components to propel the vehicle, and uses a 60kW diesel generator (genset) to generate power while the vehicle is in operation. This synergy of design reduces the development cost of our hybrid systems by taking advantage of existing designs. The diesel genset has been designed to take advantage of many different models of internal combustion engines for greater penetration into the burgeoning heavy-duty hybrid vehicle markets. Enova's genset will accept any engine with an industry standard bell housing and flywheel. Enova's control protocols are designed to easily interface with any standard engine controller with analog throttle inputs. Accessories for these drives include battery management, chargers and 12-volt power supplies, as for the electric drive family.

Our hybrid systems are designed to work with a variety of hybrid power generation technologies. In our 120/60kW hybrid system, an internal combustion engine connected to a motor and motor controller performs the power generation. Other power options include liquid fueled turbines, such as the Capstone system, fuel cells, such as the Hydrogenics or Ballard system, or many others. In all of these examples, Enova's battery management system provides the power management to allow for proper power control.

### ***Drive System Accessories***

Enova's drive system accessories range from battery management systems to hybrid controllers, to rapid charging systems. These critical components are designed to complement the HybridPower drive system family by providing the elements necessary to create a complete technical solution for alternative energy drive systems.

Enova's drive system accessories are not only integral, but also are the perfect complement to our drive systems and are designed to provide our customers with a Complete Solution to their drive system needs.

### ***Battery Care Unit***

Enova's Battery Care Unit (BCU) monitors, manages, protects, and reports on the condition of the vehicle's battery pack. It controls and manages battery performance, temperature, voltage and current to avoid harm to the batteries, to the entire system, and to the driver, operator and passengers. It also allows for monitoring for service to the battery and drive system. The BCU reports state-of-charge, amp hours and kilowatt-hours.

The BCU monitors the battery pack voltage and 28 additional individual voltages with a range of 0 to 18VDC. Optional expansion modules allow 28 additional inputs per module, with up to 16 modules permitted. The BCU has eight user-programmable outputs and four user-programmable inputs to allow full integration into the vehicle. These can be used to customize input and output parameters, and to provide for other custom monitoring and battery pack control. The device is approximately 7.1 inches by 4.3 inches by 1.6 inches.

The BCU directly interfaces with the HybridPower and other drive systems, and controls the Safety Disconnect Unit (SDU). It is capable of supporting any battery technology, and provides each type with optimized charging and protection algorithms. An internal real-time clock allows the BCU to wake up at user-specified times to initiate battery charging or pack monitoring. A precision shunt allows it to offer a wide dynamic range for monitoring charging and

motoring current, without the errors commonly associated with other types of sensors.

The non-volatile RAM allows the BCU to update, store and report key battery pack parameters such as amp hours, kilowatt-hours and state of charge. Using Enova's proprietary Windows-based diagnostic software, the BCU control parameters can be programmed live in-vehicle. Additionally, battery performance can be monitored in real-time. Reports can be output to a laptop computer for precise results and customer friendly usage.

## **Table of Contents**

### ***Hybrid Control Unit***

Enova has reconfigured its Battery Care Unit to perform the critical role of hybrid controller. The Hybrid Control Unit (HCU) continuously monitors the condition of the battery pack through communications with the BCU, monitors the driver commands through communications with the motor controller, and the state of the hybrid generator. Based upon the data received, the HCU provides continuous updates to the hybrid generator with instructions on mode of operation and power level. This innovative control loop ensures that the entire system is optimized to provide quick response to driver commands while providing the best possible system efficiency.

### ***Safety Disconnect Unit***

The Safety Disconnect Unit (SDU) is under the control of the BCU, and allows vehicle systems to gracefully connect and disconnect from the battery pack, when necessary, to prevent damage or harm. It also protects the battery pack during charging, protects it from surges, and constantly verifies that the battery pack is isolated from the vehicle chassis. In the event a ground isolation fault is detected, the BCU commands the SDU to break the battery connection thus ensuring a safe environment for the vehicle and operator. The SDU is available in two configurations to match the requirements of the drive systems.

### ***High Voltage Disconnect Unit***

The High Voltage Disconnect Unit (HVDU) is a reduced feature version of the Safety Disconnect Unit. The pre-charge board has been eliminated in order to provide a lower cost method of safely switching high voltage systems on the vehicle that do not require the soft start feature.

### ***Wiring Harness Connector Kits***

We provide complete mating connector kits to help the vehicle OEM with their production process. By using the Enova supplied kit the vehicle manufacturer is ensuring that they will have all of the necessary connectors to complete the vehicle build.

### ***Distributed Power Generation for Industrial/Commercial/Residential Applications***

Enova's distributed generation products are virtually identical in system configuration to that of a series hybrid vehicle, including a controller and battery management. For this market segment, we intend to provide DC-DC and DC-AC power conversion components to convert power supplied by batteries, fuel cells, generators and turbines to AC power that will be used by the end customer. Additionally, our BCU will provide power management functions to control the entire system. The main difference is that the 3-phase AC power typically supplied to the motor for propulsion power is, in this case, sent to the customer to supply power for their household or business.

### ***20kW bi-directional Fuel Cell Power Conditioning System***

Enova's 20kW bi-directional Fuel Cell Power Conditioning System, originally designed to meet the demands of an automotive Fuel Cell propulsion system, is now being applied to the stationary market for distributed generation applications.

This unique unit, not much larger than a conventional briefcase, provides a transparent interface between the Fuel Cell or Turbine, the battery pack, accessory loads, and the output load. Fast response time allows the output load to be serviced without interruption while the Fuel Cell or Turbine ramps up.

This unit is designed to interface directly with the Master Controller of the Stationary Generation System over a CAN bus. Other communications protocols supported are SAE J-1850, RS-232, and RS-485. Shown below is the unit under test, including the RS-232 based diagnostic software package. This proprietary package allows all key parameters of the Power Conditioner to be monitored and control boundaries to be adjusted.

**Table of Contents**

***Fuel Cell Management Unit***

Enova has reconfigured its Battery Management Unit to perform the functions required to monitor, manage, and report on the status of a Fuel Cell Stack. The FCU monitors the fuel cell voltage and 28 additional individual voltages with a range of 0 to 18vDC. Optional expansion modules allow 28 additional inputs per module, with up to 16 modules permitted. The FCU has eight (8) user-programmable outputs and four (4) user-programmable inputs to allow full integration into the distributed generation system. These can be used to customize input and output parameters, and to provide for other custom monitoring and battery pack control. The device is approximately 7.1 inches by 4.3 inches by 1.6 inches.

***Research and Development Strategy***

Enova maintains a strategy of continual enhancement of its current product line and development of more efficient and reliable products for the ever-changing alternative energy sectors. Management believes R&D must be continued in order to remain competitive, minimize production cost and meet our customers' specifications. Because microprocessors and other components continue to advance in speed, miniaturization and reduction of cost, we must re-examine its designs to take advantage of such developments. Enova endeavors to fund its R&D through customer contracts where applicable. We will, however provide internal funding where technology developed is critical to our future.

Our commitment to advancing technological superiority is evidenced by our internal efforts as well as our joint venture with HHI for future technologies.

***Manufacturing Strategy***

We have developed a multi-tiered manufacturing strategy that allows us to meet the market's demand for high quality production goods while optimizing cost of goods sold across the spectrum of low to high volumes. At the core of this strategy is a strong reliance on pre-selected highly qualified outside manufacturing houses that specialize in various aspects of the manufacturing process. It is through this closely managed outsourcing strategy that Enova is able to achieve substantive gross margins while minimizing fixed costs within the organization.

All tiers of manufacturing of electronic components begin with a complete engineering design package that includes a drawing tree, bill of material, electrical and mechanical drawings, and control software where appropriate. The control software and the design package are internally reviewed, validated, and released through our configuration management process.

For prototyping, electronic files for manufacturing circuit cards are generated and sent to pre-qualified circuit card manufacturers. The vendors selected for this phase of manufacturing are specialists in low volume. They are able to provide quantities as small as a single square meter of circuit card. The completed circuit cards are inspected and populated by in our own prototype and low volume manufacturing facility. From circuit cards and other components sub assemblies are created and tested. Finally, a complete unit is assembled and tested.

For low volume manufacturing, where volumes are less than 10 to 20 units, the process is similar to that for prototyping. In this case however, the manufacturing of the entire circuit card is performed by an outside vendor. The circuit vendors selected for this phase are specialists in low volume circuit card manufacturing, automated component population, and testing. Upon receipt, the completed circuit cards are inspected and, together with other components, sub assemblies are created and tested. Finally, a complete unit is assembled and tested.

For higher volume manufacturing Enova has established strategic alliances with ISO certified manufacturers that can take on all aspects of the process from component sourcing, to circuit card assembly, to component assembly, to final unit assembly and test. These completed components and units are shipped to our facility to where complete drive systems that meet the customer's unique requirements are packaged and shipped. In order to make this process as smooth as possible, Enova conducts a training session with the contract manufacturer here at our facility that covers the new product, the assembly and test instructions, as well as the design package.

As our market continues to grow and individual customers begin to order higher quantities of fixed drive system configurations, we intend to transition to a system where the final assembly is drop shipped directly to the

## **Table of Contents**

end customer. This critical concept has already been discussed with our strategic manufacturing partners and they are prepared to execute this change upon our request.

Our manufacturing strategy for mechanical components is somewhat more straightforward due to the nature of the final assemblies. ISO-900X certified contract manufacturers are in place that assemble and test motors to our specification. These motors are shipped to our facility where they are mated with the appropriate gear reduction unit. For low volume manufacturing where the annual volume is less than 50 75 units, the gear units are assembled and tested in our prototype and low volume manufacturing facility. Completed motor/gear assemblies are tested at our facility and shipped out to the end customer as part of a complete drive system.

For higher volume manufacturing we intend to transition the entire process of motor and gear assembly and test to a qualified contract manufacturer. Two strategic manufacturing partners have been identified and are prepared to ramp up at our request.

## **Competitive Conditions**

Competition within the mobile and stationary hybrid power sector is still somewhat fragmented, although there are indications of some consolidation at this time. The market is still divided into very large players such as Allison, Siemens, BAE and Eaton; or smaller competitors such as ISE Research, Azure Dynamics/Solectria; PEI, Unique Mobility and others. The larger companies tend to still focus on single solutions but maintain the capital and wherewithal to aggressively market such. The smaller competitors offer a more diversified product line, but do not have the market presence to generate significant penetration at this juncture.

Our research and experience has indicated that our target market segments certainly focus on price, but would buy based on reliability, performance and quality support when presented the life-cycle business model for hybrid technologies for their application. Enova has good indications that many would pay a 10-20% premium for hybrids from a secure vendor providing warranted performance, quality service and support.

The competition to develop and market electric, hybrid and fuel cell powered vehicles has increased during the last year and we expect this trend to continue. The competition consists of development stage companies as well as major U.S. and international companies. Our future prospects are highly dependent upon the successful development and introduction of new products that are responsive to market needs and can be manufactured and sold at a profit. There can be no assurance that we will be able to successfully develop or market any such products.

The development of hybrid-electric and alternative fuel vehicles, such as compressed natural gas, fuel cells and hybrid cars poses a competitive threat to our markets for low emission vehicles or LEVs but not in markets where government mandates call for zero emission vehicles or ZEVs. Enova is involved in the development of hybrid vehicles and fuel cell systems in order to meet future requirements and applications.

Various providers of electric vehicles have proposed products or offer products for sale in this emerging market. These products encompass a wide variety of technologies aimed at both consumer and commercial markets. The critical role of technology in this market is demonstrated through several product offerings. As the industry matures, key technologies and capabilities are expected to play critical competitive roles. Our goal is to position ourselves as a long term competitor in this industry by focusing on electric, hybrid and fuel cell powered drive systems and related sub systems, component integration, technology application and strategic alliances. The addition of new strategies to penetrate stationary power markets with current technologies will assist in creating a more diversified product mix. We believe that this strategy will enhance our position as a power management and conversion components supplier to both the mobile and stationary power markets.



In the near term and beyond, we believe that governments will require manufacturers of engines to lower their products' emissions substantially. The emerging technology in Hybrid Electric drive-trains can bring down emissions, while at the same time saving on fuel costs.

We believe the Hybrid Vehicle market is poised for substantial growth and that Enova Systems products are ready to participate in this market. Enova is positioning itself to capitalize on demands being placed on the market by offering solutions. Enova believes that our competitive advantages include:

Providing a full product line of power management, power conversion, and system integration

## **Table of Contents**

Providing products that allow the hardware to be software programmable and configurable

Offering a product line designed for the most advanced new fuel systems: electric, hybrid, fuel cell, microturbine powered vehicles, and battery, fuel cell, microturbine stationary power applications

Providing fully integrated, drop-in energy management and conversion system in one box

Providing scaleable modules

Offering systems with reduced footprint and weight, high functionality and low cost characteristics essential for all market applications due to our aerospace engineering experience

Being skilled, prepared and pro-active in meeting changing and sophisticated requirements of emerging alternative power markets and applications

Our positioning as a strategic ally with our global customer base, manufacturers and our R&D partners. By building a business based on long-standing relationships with satisfied clients such as International Truck and Engine, First Auto Works, Wright Group, Tanfield, and Hyundai, we simultaneously build defenses against competition. Teaming with recognized global manufacturers allows Enova to avoid utilizing resources for manufacturing infrastructure as well as exploit Hyundai's years of engineering expertise at relatively low costs.

## **Research and Development**

Enova believes that timely development and introduction of new technology and products are essential to maintaining a competitive advantage. We are currently focusing our development efforts primarily in the following areas:

Power Control and Drive Systems and related technologies for vehicle applications;

Stationary Power Management and Conversion and related technologies;

Heavy Duty Drive System development for Buses; Trucks, Industrial, Military and Marine applications;

Fuel Cell Generation system power management and process control;

Systems Integration of these technologies;

Technical and product development under DOE/DOT/DOD and Hyundai Group Contracts; and

OEM Technical and Product development.

For the years ended December 31, 2006, 2005, and 2004, we spent \$1,363,000, \$804,000, and \$925,000, respectively, on internal research and development activities. Enova is continually evaluating and updating the technology and equipment used in developing each of its products. The power management and conversion industry utilizes rapidly changing technology and we will endeavor to modernize our current products as well as continue to develop new leading edge technologies to maintain our competitive edge in the market.

## **Intellectual Property**

Enova currently holds four U.S. patents and has one patent pending, relating to power management and control, with an additional patent relating to crash management safety, which was originally issued in 1997. We also have trademarks or service marks in the United States and have been filing for international patents as well. We continually review and append our protection of proprietary technology. We continue to place emphasis on the development and acquisition of patentable technology. A majority of our intellectual property is contained within our software which we believe is best protected under trade secret intellectual property law. Under such provisions, Enova does not have to publish its proprietary code in order to maintain protection.

We maintain an internal review and compensation process to encourage our employees to create new patentable technologies. The status of patents involves complex legal and factual questions, and the breadth of claims allowed is uncertain. Accordingly, there can be no assurance that patent applications filed by us will result in

## **Table of Contents**

patents being issued. Moreover, there can be no assurance that third parties will not assert claims against us with respect to existing and future products. Although we intend to vigorously protect our rights, there can be no assurance that these measures will be successful. In the event of litigation to determine the validity of any third party claims, such litigation could result in significant expense to Enova. Additionally, the laws of certain countries in which our products are or may be developed, manufactured or sold may not protect our products and intellectual property rights to the same extent as the laws of the United States.

Enova's success depends in part on its ability to protect its proprietary technologies. Enova's pending or future patent applications may not be approved and the claims covered by such applications may be reduced. If allowed, patents may not be of sufficient scope or strength, others may independently develop similar technologies or products, duplicate any of Enova's products or design around its patents, and the patents may not provide Enova with competitive advantages. Further, patents held by third parties may prevent the commercialization of products incorporating Enova's technologies or third parties may challenge or seek to narrow, invalidate or circumvent any of Enova's pending or future patents. Enova also believes that foreign patents, if obtained, and the protection afforded by such foreign patents and foreign intellectual property laws, may be more limited than that provided under United States patents and intellectual property laws. Litigation, which could result in substantial costs and diversion of effort by Enova, may also be necessary to enforce any patents issued or licensed to Enova or to determine the scope and validity of third-party proprietary rights. Any such litigation, regardless of outcome, could be expensive and time-consuming, and adverse determinations in any such litigation could seriously harm Enova's business.

Enova relies on unpatented trade secrets and know-how and proprietary technological innovation and expertise which are protected in part by confidentiality and invention assignment agreements with its employees, advisors and consultants and non-disclosure agreements with certain of its suppliers and distributors. These agreements may be breached, Enova may not have adequate remedies for any breach or Enova's unpatented proprietary intellectual property may otherwise become known or independently discovered by competitors. Further, the laws of certain foreign countries may not protect Enova's products or intellectual property rights to the same extent as do the laws of the United States.

## **Employees**

As of December 31, 2006, we had 39 full time employees. Additionally, we employ 4 individuals as independent contractors, engaged on an hourly basis, one of whom is domiciled in South Korea. The departmental breakdown of these individuals includes 4 in administration, 1 in sales, 15 in engineering and research and development, and 15 in production.

## **Available Information**

We file electronically with the SEC our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934. We make available free of charge on or through our website copies of these reports as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. The SEC maintains an internet site that contains reports, proxy and information statements and other information regarding our filings at [www.sec.gov](http://www.sec.gov). You may also read and copy any of our materials filed with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington, DC 20549. Information regarding the operation of the Public Reference Room can be obtained by calling the SEC at 1-800-SEC-0330. Our website address is [www.enovsystems.com](http://www.enovsystems.com). Information found on, or that can be accessed through, our website is not incorporated by reference into this annual report.

## **Item 1A. Risk Factors**

The statements in this Section describe the major risks to our business and should be considered carefully. In addition, these statements constitute our cautionary statements under the Private Securities Litigation Reform Act of 1995.

*This annual report on Form 10-K, including the documents that we incorporate by reference, contains statements indicating expectations about future performance and other forward-looking statements that involve*

**Table of Contents**

*risks and uncertainties. We usually use words such as may, will, should, expect, plan, anticipate, believe, predict, future, intend, potential, or continue or the negative of these terms or similar expressions to identify forward-looking statements. These statements appear throughout the Form 10-K and are statements regarding our current intent, belief, or expectation, primarily with respect to our operations and related industry developments. Examples of these statements include, but are not limited to, statements regarding the following: our expansion plans, our future operating expenses, our future losses, our future expenditures for research and development and the sufficiency of our cash resources. You should not place undue reliance on these forward-looking statements, which apply only as of the date of this annual report. Our actual results could differ materially from those anticipated in these forward-looking statements for many reasons, including the risks faced by us and described in this Risk Factors section and elsewhere in this annual report.*

*We cannot guarantee that any forward-looking statement will be realized, although we believe we have been prudent in our plans and assumptions. Achievement of future results is subject to risks, uncertainties and potentially inaccurate assumptions. Should known or unknown risks or uncertainties materialize, or should underlying assumptions prove inaccurate, actual results could differ materially from past results and those anticipated, estimated or projected. You should bear this in mind as you consider forward-looking statements.*

*We undertake no obligation to publicly update forward-looking statements, whether as a result of new information, future events or otherwise. You are advised, however, to consult any further disclosures we make on related subjects in our 10-Q and 8-K reports to the SEC. Also note that we provide the following cautionary discussion of risks, uncertainties and possibly inaccurate assumptions relevant to our businesses. These are factors that, individually or in the aggregate, we think could cause our actual results to differ materially from expected and historical results. We note these factors for investors as permitted by the Private Securities Litigation Reform Act of 1995. You should understand that it is not possible to predict or identify all such factors. Consequently, you should not consider the following to be a complete discussion of all potential risks or uncertainties.*

***We may not have net operating losses in the future against which to offset our future profits, if any***

We have experienced recurring losses from operations and had an accumulated deficit of \$107,422,000 at December 31, 2006. There is no assurance, however, that any net operating losses will be available to us in the future as an offset against future profits, if any, for income tax purposes.

***We have experienced continued losses and may never become profitable***

For the years ended December 31, 2006, 2005, 2004 and 2003, we had net losses of \$4,836,000, \$2,127,000, \$3,382,000, and \$3,186,000, respectively, on sales of \$1,666,000, \$6,084,000, \$2,554,000, and \$4,310,000, respectively. We may never become profitable, which may cause the market price of our common stock to drop.

***The nature of our industry is dependent on technological advancement and highly competitive***

The mobile and stationary power markets, including electric vehicle and hybrid electric vehicles, continue to be subject to rapid technological change. Most of the major domestic and foreign automobile manufacturers: (1) have already produced electric and hybrid vehicles, and/or (2) have developed improved electric storage, propulsion and control systems, and/or (3) are now entering or have entered into production, while continuing to improve technology or incorporate newer technology. Various companies are also developing improved electric storage, propulsion and control systems. In addition, the stationary power market is still in its infancy. A number of established energy companies are developing new technologies. Cost-effective methods to reduce price per kilowatt have yet to be established and the stationary power market is not yet viable.

Our current products are designed for use with, and are dependent upon, existing technology. As technologies change, and subject to our limited available resources, we plan to upgrade or adapt our products in order to continue to provide products with the latest technology. We cannot assure you, however, that we will be able to avoid technological obsolescence, that the market for our products will not ultimately be dominated by technologies other than ours, or that we will be able to adapt to changes in or create leading edge technology. In addition, further proprietary technological development by others could prohibit us from using our own technology.

**Table of Contents**

***Our industry is affected by political and legislative changes***

In recent years there has been significant public pressure to enact legislation in the United States and abroad to reduce or eliminate automobile pollution. Although states such as California have enacted such legislation, we cannot assure you that there will not be further legislation enacted changing current requirements or that current legislation or state mandates will not be repealed or amended, or that a different form of zero emission or low emission vehicle will not be invented, developed and produced, and achieve greater market acceptance than electric or hybrid electric vehicles. Extensions, modifications or reductions of current federal and state legislation, mandates and potential tax incentives could also adversely affect our business prospects if implemented.

***We are subject to increasing emission regulations in a changing legislative climate***

Because vehicles powered by internal combustion engines cause pollution, there has been significant public pressure in Europe and Asia, and enacted or pending legislation in the United States at the federal level and in certain states, to promote or mandate the use of vehicles with no tailpipe emissions ( zero emission vehicles ) or reduced tailpipe emissions ( low emission vehicles ). Legislation requiring or promoting zero or low emission vehicles is necessary to create a significant market for electric vehicles. The California Air Resources Board (CARB) is continuing to modify its regulations regarding its mandatory limits for zero emission and low emission vehicles. Furthermore, several car manufacturers have challenged these mandates in court and have obtained injunctions to delay these mandates.

***There are substantial risks involved in the development of unproven products***

In order to remain competitive, we must adapt existing products as well as develop new products and technologies. In fiscal years 2006, 2005, 2004 and 2003, we spent collectively in excess of \$3.5 million on research and development of new products and technology. Despite our best efforts a new product or technology may prove to be unworkable, not cost effective, or otherwise unmarketable. We cannot assure you that any new product or technology we may develop will be successful or that an adequate market for such product or technology will ever develop.

***We may be unable to effectively compete with other companies who have significantly greater resources than we have***

Many of our competitors, in the automotive, electronic and other industries, are larger, more established companies that have substantially greater financial, personnel, and other resources than we do. These companies may be actively engaged in the research and development of power management and conversion systems. Because of their greater resources, some of our competitors may be able to adapt more quickly to new or emerging technologies and changes in customer requirements, or to devote greater resources to the promotion and sales of their products than we can. We believe that developing and maintaining a competitive advantage will require continued investment in product development, manufacturing capability and sales and marketing. We cannot assure you however that we will have sufficient resources to make the necessary investments to do so. In addition, current and potential competitors may establish collaborative relationships among themselves or with third parties, including third parties with whom we have relationships. Accordingly, new competitors or alliances may emerge and rapidly acquire significant market share.

***Potential intellectual property, shareholder or other litigation could adversely impact our business***

Because of the nature of our business, we may face litigation relating to intellectual property matters, labor matters, product liability or shareholder disputes. Any litigation could be costly, divert management attention or result in increased costs of doing business. Although we intend to vigorously defend any future lawsuits, we cannot assure you



that we would ultimately prevail in these efforts. An adverse judgment could negatively impact the price of our common stock and our ability to obtain future financing on favorable terms or at all.

**Table of Contents**

***We may be exposed to product liability or tort claims if our products fail, which could adversely impact our results of operations***

A malfunction or the inadequate design of our products could result in product liability or other tort claims. Accidents involving our products could lead to personal injury or physical damage. Any liability for damages resulting from malfunctions could be substantial and could materially adversely affect our business and results of operations. In addition, a well-publicized actual or perceived problem could adversely affect the market's perception of our products. This could result in a decline in demand for our products, which would materially adversely affect our financial condition and results of operations.

***We are an early growth stage company***

Although we were originally founded in 1976, many aspects of our business are still in the early growth stage development, and our proposed operations are subject to all of the risks inherent in a start-up or growing business enterprise, including the likelihood of continued operating losses. Enova is relatively new in focusing its efforts on electric systems, hybrid systems and fuel cell management systems. The likelihood of our success must be considered in light of the problems, expenses, difficulties, complications, and delays frequently encountered in connection with the growth of an existing business, the development of new products and channels of distribution, and current and future development in several key technical fields, as well as the competitive and regulatory environment in which we operate.

***We are highly dependent on a few key personnel and will need to retain and attract such personnel in a labor competitive market***

Our success is largely dependent on the performance of our key management and technical personnel, the loss of one or more of whom could adversely affect our business. Additionally, in order to successfully implement our anticipated growth, we will be dependent on our ability to hire additional qualified personnel. There can be no assurance that we will be able to retain or hire other necessary personnel. We do not maintain key man life insurance on any of our key personnel. We believe that our future success will depend in part upon our continued ability to attract, retain, and motivate additional highly skilled personnel in an increasingly competitive market.

***There are minimal barriers to entry in our market***

We presently license or own only certain proprietary technology and, therefore, have created little or no barrier to entry for competitors other than the time and significant expense required to assemble and develop similar production and design capabilities. Our competitors may enter into exclusive arrangements with our current or potential suppliers, thereby giving them a competitive edge which we may not be able to overcome, and which may exclude us from similar relationships.

***We extend credit to our customers, which exposes us to credit risk***

Most of our outstanding accounts receivable are from a limited number of large customers. At December 31, 2006, the five highest outstanding accounts receivable balances totaled \$494,000, representing 80% of our gross accounts receivable, with one customer accounting for \$221,000, representing 36% of our gross accounts receivable. If we fail to monitor and manage effectively the resulting credit risk and a material portion of our accounts receivable is not paid in a timely manner or becomes uncollectible, our business would be significantly harmed, and we could incur a significant loss associated with any outstanding accounts receivable.

*We are exposed to risks relating to evaluations of our internal controls*

In connection with the audit of our financial statements for the year ended December 31, 2006, PMB Helin Donovan, LLP, our independent registered public accounting firm, notified our management and audit committee of the existence of significant deficiencies in internal controls, which is an accounting term for internal controls deficiencies that, in the judgment of our independent registered public accounting firm, are significant and which could adversely affect our ability to record, process, summarize and report financial information.

## **Table of Contents**

PMB Helin Donovan concluded that these significant deficiencies constituted a material weakness in our internal controls. Auditing literature defines material weakness as a particularly serious reportable condition where the internal control does not reduce to a relatively low level the risk that misstatements caused by error or fraud may occur in amounts that would be material in relation to the financial statements and the risk that such misstatements would not be detected within a timely period by employees in the normal course of performing their assigned functions. A material weakness is a control deficiency, or combination of control deficiencies, that results in more than a remote likelihood that a material misstatement of the annual or interim financial statements will not be prevented or detected.

As of December 31, 2006, we did not maintain effective controls over the inventory pricing, tracking, and the reserve analysis process. This control deficiency resulted in an audit adjustment to our 2006 financial statements and could result in a misstatement to inventory and cost of sales that would result in a material misstatement to the annual and interim financial statements that would not be prevented or detected. Accordingly, our management has determined that this deficiency constituted a material weakness.

Under the current SEC rules and regulations as we understand them, for the fiscal year ending on or after December 15, 2007, our management will be required to assess the effectiveness of our internal controls in order to satisfy the requirements of Section 404 of the Sarbanes-Oxley Act and the related SEC rules. Likewise, our independent registered public accounting firm will be required to make its own assessment for the fiscal year ending on or after December 15, 2008.

While we intend to address these material weaknesses and have begun efforts to remediate these material weaknesses, including, subsequent to the filing of this annual report on Form 10-K, the hiring of a Chief Financial Officer and a Controller to oversee the remedial process, there is no assurance that this will be accomplished. These efforts may necessitate significant time and attention of our management and additional resources. If we fail to satisfactorily strengthen the effectiveness of our internal controls, neither we nor our independent registered public accounting firm may be able to conclude on an ongoing basis that we have effective internal control over financial reporting in accordance with Section 404 of the Sarbanes-Oxley Act.

### ***Item 2. Properties***

Enova's corporate offices are located in Torrance, California, in leased office space of approximately 20,000 square feet. This facility houses our various departments, including engineering, operations, executive, finance, planning, purchasing, investor relations and human resources. This lease terminates in February 2008. The monthly lease expense is approximately \$14,000. Enova also has a leased office in Hawaii which is rented on a month-to-month basis at \$1,500 per month, and a sales office in Michigan that it leases on a month-to-month basis at \$500 per month.

### ***Item 3. Legal Proceedings***

We may from time to time become a party to various legal proceedings arising in the ordinary course of business. At December 31, 2006, we had no known material current, pending or threatened litigation.

### ***Item 4. Submission of Matters to a Vote of Security Holders***

We held our 2006 annual meeting on November 17, 2006. A quorum of 7,462,123 shares were present or represented by proxy, consisting of 7,421,587 shares of our common stock, 39,838 shares of series A convertible preferred stock, and 698 shares of series B convertible preferred stock. Common stock and Series A convertible preferred stock vote together as one class to elect six directors. In accordance with its terms, Series B convertible preferred stock has the right to elect two directors. For the remaining proposals, all classes of stock vote together as a single class. At the

annual meeting, three matters were submitted to a vote of security holders:

1) To elect seven directors to serve until the 2007 annual meeting.

Bjorn Ahlstrom

For 6,689,549

Withhold 771,876

**Table of Contents**

Malcolm R. Currie	
For	6,688,411
Withhold	773,014
Sten Langenius	
For	6,689,529
Withhold	771,896
Anthony N. Rawlinson	
For	6,689,487
Withhold	771,938
Edwin O. Riddell	
For	6,689,487
Withhold	771,938
John R. Wallace	
For	6,685,869
Withhold	775,556
Donald H. Dreyer (elected by Series B convertible preferred stock)	
For	698
Withhold	0
2) To vote on ratifying the selection of Windes & McClaughry Accountancy Corporation as our independent accountants. *Windes was succeeded by PMB Helin Donovan LLP as our independent accountants.	
For	7,460,957
Against	977
Abstain	190
3) To vote on ratifying the 2006 Equity Compensation Plan.	
For	7,395,642
Against	14,181
Abstain	52,301

**PART II****Item 5. Market for Registrant's Common Equity, Related Shareholder Matters and Issuer Purchases of Equity Securities**

The shares of our common stock trade on the American Stock Exchange under the trading symbol ENA and on the London Stock Exchange AIM Market under the symbol ENV.S.L or ENV.L . The following table sets forth the high and low bid prices of the Common Stock as reflected on the AMEX and as reported on the NASD over-the-counter market bulletin board by the National Quote Bureau. Our common stock became listed on the AMEX on August 29, 2006. The over-the-counter market bulletin board quotations reflect inter-dealer prices,

**Table of Contents**

without retail mark-up, markdown or commission, and may not necessarily represent actual transactions. Quotations have been restated to reflect the 1-45 reverse stock split, effective July 20, 2005.

	<b>Common Stock</b>		<b>Average Daily</b>
	<b>High Price</b>	<b>Low Price</b>	<b>Volume</b>
Calendar 2006			
Fourth Quarter	\$ 5.10	\$ 2.95	7,105
Third Quarter	\$ 5.85	\$ 3.40	4,624
Second Quarter	\$ 4.85	\$ 3.65	4,338
First Quarter	\$ 5.35	\$ 3.31	12,582
Calendar 2005			
Fourth Quarter	\$ 4.50	\$ 3.25	7,976
Second Quarter	\$ 5.18	\$ 3.38	4,164
Third Quarter	\$ 5.90	\$ 2.50	6,461
First Quarter	\$ 5.40	\$ 4.05	5,285

On March 27, 2007, the last reported high bid price of the Common Stock was \$4.05 and the last reported low bid price was \$3.90. As of March 27, 2007, there were approximately 1,462 holders of record of our Common Stock. As of March 27, 2006, 106 shareholders, many of whom are also Common Stock shareholders, held our Series A Preferred Stock. As of March 27, 2007, approximately 33 shareholders held our Series B Preferred Stock. The number of holders of record excludes beneficial holders whose shares are held in the name of nominees or trustees.

**Stock Issuances**

On July 19, 2005, we entered into an agreement with a placement agent relating to the sale of up to 5,350,000 new shares of our common stock, after the reverse 1-45 stock split as described above. Pursuant to the agreement, we sold all such shares of common stock at a price of \$3.78 per share to certain eligible investors located outside the United States pursuant to the requirements of Regulation S under the Securities Act of 1933, as amended. The gross proceeds from the sale are approximately \$20,000,000, before fees to Investec Bank, which served as our nominated advisor and broker, and other costs associated with the listing and placement of approximately \$2,000,000. We received approximately \$18,000,000 of net proceeds from the offering. As a result of the offering, we listed our common stock for trading on the AIM Market of the London Stock Exchange on July 25, 2005.

**Dividend Policy**

To date, we have neither declared nor paid any cash dividends on shares of our Common Stock or Series A or B Preferred Stock. We presently intend to retain all future earnings for our business and do not anticipate paying cash dividends on our Common Stock or Series A or B Preferred Stock in the foreseeable future. We are required to pay dividends on our Series A and B Preferred Stock before dividends may be paid on any shares of Common Stock. At December 31, 2006, Enova had an accumulated deficit of approximately \$107,422,000 and, until this deficit is eliminated, will be prohibited from paying dividends on any class of stock except out of net profits, unless it meets certain asset and other tests under Section 500 et. seq. of the California Corporations Code.



**Table of Contents**

**Performance Graph**

The graph below compares the cumulative five year total shareholder return on our Common Stock with the cumulative total return on the Standard & Poor's Small Capitalization 600 Index and an index of peer companies selected by us. A group of five other electric vehicle companies comprise the peer group index: Amerigon, Inc. (ARGN), Arotehch Corp. (ARTX), Azure Dynamics Corp. (AZD.TO), Energy Conversion Devices, Inc. (ENER), UQM Technology, Inc. (UQM), and Valence Technology, Inc. (VLNC).

The period shown commences on December 31, 2001, and ends on December 31, 2006, the end of our last fiscal year. The graph assumes an investment of \$100 on December 31, 2001 and the reinvestment of any dividends. The comparisons in the graph below are based upon historical data and are not indicative of, nor intended to forecast, future performance of our Common Stock.

The performance graph and related information in this subsection is not soliciting material, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended.

**Table of Contents****Item 6. Selected Financial Data**

The following selected financial data tables set forth selected financial data for the years ended December 31, 2006, 2005, 2004, 2003, and 2002. The statement of operations data and balance sheet data for and as of the end of the years ended December 31, 2006, 2005, 2004, 2003, and 2002 are derived from the audited financial statements of Enova. The following selected financial data should be read in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operations and the Financial Statements, including the notes thereto, appearing elsewhere in this Form 10-K.

	2006	As of and for the Year Ended December 31				2002
		2005	2004	2003		
(In thousands, except per share data)						
<b>Statement of Operations Data</b>						
Net revenues	1,666	\$ 6,084	\$ 2,554	\$ 4,310	\$ 4,455	
Cost of revenues	2,900	6,001	2,239	3,304	3,784	
Gross margin	(1,234)	83	315	1,006	671	
Operating expenses						
Research and Development	1,363	804	925	799	1,152	
Asset Impairment				200		
Selling, general and administrative	4,178	2,870	2,325	2,919	2,837	
Total Operating Expense	5,541	3,674	3,250	3,918	3,989	
Other Income and Expense						
Interest and Financing Income and (Fees)	550	13	(255)	(234)	(199)	
Equity in losses	(3)	(118)	(192)	(40)		
Legal Settlements					(81)	
Gain on Debt Restructuring	1,392	1,569				
Total Other Income and (Expense)	1,939	1,464	(447)	(274)	(280)	
Net loss	(4,836)	\$ (2,127)	\$ (3,382)	\$ (3,186)	\$ (3,598)	
Per common share:						
Net loss per common share	\$ (0.33)	\$ (0.18)	\$ (0.38)	\$ (0.43)	\$ (0.49)	
Weighted average number common shares outstanding	14,802,000	11,644,000	8,832,000	7,441,000	7,253,000	

**Balance Sheet Data**

Total assets	\$	15,730	\$	21,973	\$	5,888	\$	4,870	\$	6,224
Long-term debt	\$	1,295	\$	2,321	\$	3,341	\$	3,347	\$	3,332
Shareholders' equity (deficit)	\$	11,964	\$	16,604	\$	103	\$	(864)	\$	287

**Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations**

You should read this Management's Discussion and Analysis of Financial Condition and Results of Operations in conjunction with our 2006 Financial Statements and accompanying Notes. The matters addressed in this Management's Discussion and Analysis of Financial Condition and Results of Operations, may contain certain forward-looking statements involving risks and uncertainties.

**Overview**

Enova Systems believes it is a leading supplier of efficient, environmentally-friendly digital power components and systems products in conjunction with our associated engineering services. Our core competencies are focused on the development and commercialization of power management and conversion systems for mobile and

## **Table of Contents**

stationary applications. Enova applies unique enabling technologies in the areas of alternative energy propulsion systems for light and heavy-duty vehicles as well as power conditioning and management systems for distributed generation systems. Our products can be found in a variety of OEM vehicles including those from Hyundai Motor Company and Ford Motor Company, trucks and buses for First Auto Works of China, Mack Truck, WrightBus of the U.K. and the U.S. Military, as well as digital power systems for EDO, Hydrogenics and UTC Fuel Cells, a division of United Technologies.

We continue to support IC Corp. in their efforts to maximize exposure in the Hybrid School Bus Market. We have been involved in large shows in Albany, NY and Reno, NV, Chicago, IL, Washington, DC as well as smaller venues throughout the Midwest. The exposure via shows and direct interface was aggressively pursued throughout the remainder of 2006, in an effort to promote IC Corp.'s production intent for Hybrid School Buses. IC Corp. claims to be the nation's largest integrated school bus manufacturer with 60-65% of the school bus market share.

In July, IC Corp. announced it was ready to move to production on Hybrid School Buses. At the same time, IC Corp. announced that Enova would be their Hybrid drive system supplier. Also in July, Enova and IC Corp. were awarded a contract for nineteen Hybrid School Buses. These buses will be delivered to eleven states throughout the next three to six months. The award was based on a project coordinated by the Advanced Energy consortium and was the first major Hybrid School Bus award of its kind.

Ford Motor Company continues to evaluate our components in thirty Ford Focus Hydrogen Fuel Cell Vehicles being evaluated in three countries. According to Ford Motor Company communications, the vehicles have functioned satisfactorily, and they continue to evaluate markets for producing additional vehicles. In August, Enova announced that Ford Motor Company has ordered four (4) advanced design High Voltage Energy Converters (HVECs). This award confirms Ford's continued interest in Enova's technology and is expected to be delivered to Ford during the 2nd quarter 2007.

Throughout 2006 we hosted and visited numerous potential customers from the Pick Up and Delivery, Medium Duty and Heavy Duty markets. During the 4th quarter of 2006, we provided a large fleet operator a functional vehicle for evaluation. Every effort is made to continue to mature these relationships, as we hope that they will eventually lead to viable business relationships.

We also anticipate continuing our work with Tsinghua University of China, and their fuel cell bus development program. We believe that China intends to use hybrid-electric buses to shuttle athletes and guests at the 2008 Beijing Summer Olympics and the 2010 World's Expo in Shanghai and China it is seeking up to one thousand full-size hybrid-electric buses to support these global events. MTrans of Malaysia has integrated two of our standard HybridPower 120kW drive system into a hybrid 10-meter bus with a Capstone microturbine as its power source. This drive system is currently on demonstration in Hong Kong, PRC. Also, Hyundai continues to evaluate our converters in their fuel cell hybrid electric vehicles and we currently expect to deliver an additional sixteen units in 2007.

Some recent highlights of Enova's accomplishments are:

International Truck and Engine (IC Corp), who claims to be the nation's largest School Bus manufacturer and Enova have supplied the nation's first production Hybrid School Buses. IC Corp currently maintains 60% of the School Bus market. In addition to School Buses, IC Corp is teaming with Enova to supply hybrid buses to the Commercial Bus Market. There are no assurances, however that any purchase orders will be realized.

WrightBus, the largest low-floor and Double Deck bus manufacturer in the United Kingdom, has taken delivery of our series hybrid diesel genset and integrated them into its medium and large bus applications. Six of these systems are now running seven days a week 18 hours a day in London. Enova with WrightBus on

projects related to Enova's hybrid drive systems. There are no assurances, however that any purchase orders will be realized.

Tanfield, the World's largest electric vehicle manufacturer, has signed an arrangement with Enova where Enova will supply electric drive systems for Tanfield's 3.5, 7.5 and 12 ton vehicles.

## **Table of Contents**

First Auto Works, China's largest vehicle manufacturer, has indicated that it intends to purchase Enova's pre transmission hybrid system for bus applications. There are no assurances, however that any purchase orders will be realized.

Th!nk and Phoenix Motorcars, Electric Vehicles OEMs have both utilized Enova as a supplier of primary components/systems for their vehicles.

Verizon has recently took receipt of thirteen (13) service vans incorporating Enova's technology. Verizon is the nation's second largest fleet operator with 58,000 vehicles. In addition to Verizon, Enova has begun development work with other large fleet operators in both the service van and pick up and delivery sectors. There are no assurances, however that any purchase orders will be realized.

Enova's product focus is digital power management and power conversion systems. Its software, firmware, and hardware manage and control the power that drives either a vehicle or stationary device(s). They convert the power into the appropriate forms required by the vehicle or device and manage the flow of this energy to optimize efficiency and provide protection for both the system and its users. Our products and systems are the enabling technologies for power systems.

The latest state-of-the-art technologies, such as hybrid vehicles, fuel cell and micro turbine based systems, and stationary power generation, all require some type of power management and conversion mechanism. Enova Systems supplies these essential components. Enova drive systems are fuel-neutral, meaning that they have the ability to utilize any type of fuel, including diesel, liquid natural gas or bio-diesel fuels. We also develop, design and produce power management and power conversion components for stationary power generation both on-site distributed power and on-site telecommunications back-up power applications. These stationary applications also employ fuel cells, microturbines and advanced batteries for power storage and generation. Additionally, Enova performs significant research and development to augment and support others' and our internal related product development efforts.

Our products are production-engineered. This means they are designed so they can be commercially produced (i.e., all formats and files are designed with manufacturability in mind, from the start). For the automotive market, Enova designs its products to ISO 9000X manufacturing and quality standards. We believe Enova's redundancy of systems and rigorous quality standards result in high performance and reduced risk. For every component and piece of hardware, there are detailed performance specifications. Each piece is tested and evaluated against these specifications, which enhances and confirms the value of the systems to OEM customers. Our engineering services focus on system integration support for product sales and custom product design.

## **Critical Accounting Policies**

Financial Reporting Release No. 60 requires all companies to include a discussion of critical accounting policies or methods used in the preparation of financial statements. Note 1 of the notes to the financial statements includes a summary of the significant accounting policies and methods used in the preparation of our financial statements. The following is a brief discussion of the more significant accounting policies and methods that we use.

Our discussion and analysis of our financial condition and result of operations are based on our financial statements, which have been prepared in conformity with accounting principles generally accepted in the United States of America. Our preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the dates of the financial statements and the reported amounts of revenues and expenses during the reporting periods. We based our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances.

The most significant estimates and assumptions relate to revenue recognition and potential allowances for doubtful accounts. Actual amounts may differ from such estimates under different assumptions or conditions. The following summarizes our critical accounting policies and significant estimates used in preparing our financial statements:

The first-in, first-out (FIFO) method to value our inventories;

**Table of Contents**

Review of customers' receivables to determine the need for an allowance for credit losses based on estimates of customers' ability to pay. If the financial condition of our customers were to deteriorate, an additional allowance may be required.

**Revenue recognition** We are required to make judgments based on historical experience and future expectations, as to the reliability of shipments made to its customers. These judgments are required to assess the propriety of the recognition of revenue based on Staff Accounting Bulletin (SAB) No. 104, Revenue Recognition, and related guidance. We make these assessments based on the following factors: i) customer-specific information, ii) return policies, and iii) historical experience for issues not yet identified. Under FAS Concepts No. 5, revenues are not recognized until earned. The percentage-of-completion method can be used to recognize revenues when estimates of costs to complete and the extent of progress toward completion of contracts are reasonably dependable. If reasonably dependable estimates are not available, the percentage-of-completion method should not be used.

These accounting policies are applied consistently for all years presented. Our operating results would be affected if other alternatives were used. Information about the impact on our operating results is included in the footnotes to our financial statements.

***Recent Accounting Pronouncements***

In February 2006, the FASB issued SFAS No. 155, Accounting for Certain Hybrid Financial Instruments, an amendment of FASB Statements No. 133 and 140. This statement amends SFAS No. 133, Accounting for Derivative Instruments and Hedging Activities, and SFAS No. 140, Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities, and resolves issues addressed in SFAS 133 Implementation Issue No. D1, Application of Statement 133 to Beneficial Interest in Securitized Financial Assets. We are required to apply SFAS 155 to all financial instruments acquired, issued or subject to a re-measurement event beginning January 1, 2007, although early adoption is permitted as of the beginning of an entity's fiscal year. The provisions of SFAS 155 are not expected to have any impact on the financial statements at adoption.

In September 2006, the FASB issued SFAS 157 Fair Value Measurement, which defines fair value, establishes a framework for measuring fair value and expanded disclosures about fair value measurement. Companies are required to adopt the new standard for fiscal periods beginning after November 15, 2007. We are evaluating the impact of this standard and currently does not expect it to have a significant impact on its financial position, results of operations or cash flows.

In September 2006, the SEC staff issued Staff Accounting Bulletin No. 108, Considering the Effects of Prior Year Misstatements when Quantifying Misstatements in Current Year Financial Statements, which addresses how uncorrected errors in previous years should be considered when quantifying errors in current-year financial statements. SAB 108 requires companies to consider the effect of all carry over and reversing effects of prior-year misstatements when quantifying errors in current-year financial statements and the related financial statement disclosures. SAB 108 must be applied to annual financial statements for the first fiscal year ending after November 15, 2006. Our adoption of this standard will not have any impact on its financial position, results of operations or cash flows.

In June 2006, the FASB issued Interpretation No. 48 (FIN 48), Accounting for Uncertainty in Income Taxes. FIN 48 prescribes detailed guidance for the financial statement recognition, measurement and disclosure of uncertain tax positions recognized in an enterprise's financial statements in accordance with FASB Statement No. 109, Accounting for Income Taxes. Tax positions must meet a more-likely-than-not recognition threshold at the effective date to be



recognized upon the adoption of FIN 48 and in subsequent periods. FIN 48 will be effective for fiscal years beginning after December 15, 2006 (our fiscal year 2007) and the provisions of FIN 48 will be applied to all tax positions under Statement No. 109 upon initial adoption. The cumulative effect of applying the provisions of this interpretation will be reported as an adjustment to the opening balance of retained earnings for that fiscal year. We do not expect the adoption of FIN 48 to have a material impact on its financial position, results of operations or cash flow.

**Table of Contents**

In February 2007, the FASB issued SFAS No. 159, The Fair Value Option for Financial Assets and Financial Liabilities Including an amendment of FASB Statement No. 115. SFAS 159 expands the use of fair value accounting but does not affect existing standards which require assets or liabilities to be carried at fair value. Under SFAS 159, a company may elect to use fair value to measure accounts and loans receivable, available-for-sale and held-to-maturity securities, equity method investments, accounts payable, guarantees and issued debt. Other eligible items include firm commitments for financial instruments that otherwise would not be recognized at inception and non-cash warranty obligations where a warrantor is permitted to pay a third party to provide the warranty goods or services. If the use of fair value is elected, any upfront costs and fees related to the item must be recognized in earnings and cannot be deferred, e.g., debt issue costs. The fair value election is irrevocable and generally made on an instrument-by-instrument basis, even if a company has similar instruments that it elects not to measure based on fair value. At the adoption date, unrealized gains and losses on existing items for which fair value has been elected are reported as a cumulative adjustment to beginning retained earnings. Subsequent to the adoption of SFAS 159, changes in fair value are recognized in earnings. SFAS 159 is effective for fiscal years beginning after November 15, 2007 and is required to be adopted by us in the first quarter of fiscal 2009. Enova is currently is determining whether fair value accounting is appropriate for any of its eligible items and cannot estimate the impact, if any, which SFAS 159 will have on its consolidated results of operations and financial condition.

**Results of Operations*****Years Ended December 31, 2006 and 2005***

Net sales of \$1,666,000 for the twelve months ended December 31, 2006 decreased by \$4,418,000 or 73% from \$6,084,000 during the same period in 2005. The primary source of our revenue in 2005 was our contract with Tomoe Engineering. While we expect to do further business with Tomoe in the future, we did not have any recurring revenue from this relationship in 2006. Our revenues for 2006 primarily derived from our relationships with Hyundai Motor Company and the State of Hawaii, representing 39% and 16% respectively of overall revenues. These percentages are higher than in prior years because of our 2006 decline in overall revenues. In 2006, Enova focused on building new customer relationships in an effort to support our goals of transitioning into a production company. While we did continue several development projects throughout the year, the process by which management selected which development projects were accepted in 2006 largely depended on our assessment of which contracts had the greatest potential for a production contract. Consequently, we believe that the decline in revenue when comparing the years ended 2005 and 2006 is a result of our not actively seeking the types of non-recurring contracts that we had traditionally accepted in the past. This is evidenced by the fact that we have over \$6,000,000 in production-type purchase orders on hand as of March 27, 2007.

Cost of sales consists of component and material costs, direct labor costs, integration costs and overhead related to manufacturing our products. Product development costs incurred in the performance of engineering development contracts for the U.S. Government and private companies are charged to cost of sales. Our customers continue to require additional integration and support services to customize, integrate and evaluate our products. We believe that a portion of these costs are initial, one-time costs for these customers and anticipate similar costs to be incurred with respect to new customers as we gain additional market share. Customers who have been using our products over one year do not incur this same type of initial costs. Cost of sales for the year ended December 31, 2006 decreased \$3,101,000, or 52%, from \$6,001,000 for the year ended December 31, 2005. This decrease is primarily attributable to the decrease in sales for the year combined with initial costs on first year customers, as described above.

Research and development expenses consist primarily of personnel, facilities, equipment and supplies for our research and development activities. Non-funded development costs are reported as research and development expense. Research and development expense increased in 2006 to \$1,363,000 from \$804,000 for the same period in 2005, an

increase of \$559,000 or 70%. During 2006, and as a consequence of our focus on production type revenues, we experienced a decrease in funded research and development. This increased our need to absorb these costs. In 2006, we continued to enhance our technologies to be more universally adaptable to the requirements of our current and prospective customers. By modifying our software and firmware, we believe we should be able to provide a more comprehensive, adaptive and effective solution to a larger base of customers and applications. We will

**Table of Contents**

continue to research and develop new technologies and products, both internally and in conjunction with our alliance partners and other manufacturers as we deem beneficial to our global growth strategy.

Selling, general and administrative expenses consist primarily of personnel and related costs of sales and marketing employees, consulting fees and expenses for travel, trade shows and promotional activities and personnel and related costs for general corporate functions, including finance, accounting, strategic and business development, human resources and legal. Selling, general and administrative expenses increased by \$1,308,000 at 2006 from the balance for the year ended December 31, 2005 of \$2,870,000, representing a 46% increase in these costs. The predominant reason for the increase is Enova's increased expenditures on sales and marketing initiatives. This includes such things as trade shows, travel, marketing materials, and market consultants. This, combined with an increased headcount and the associated increases in wages, health and workers compensation insurance, explain our increased selling, general and administrative expenses.

For the year ended December 31, 2006, interest and other income, increased by \$537,000 to \$550,000, up over 4000% from the 2005 balance. The increase is a result of our comparatively higher average cash balance throughout 2006, when compared to the average cash balance during 2005, and the increase in the associated interest revenue. The comparatively higher cash balance was the result of the equity offering that occurred in the third quarter of 2005.

In January and February of 2006, we settled \$1,083,000 of principal and \$472,000 of accrued interest under the secured note payable to the Credit Managers Association of California (CMAC). In consideration for the settlement, we paid the beneficiaries \$163,000. We evaluated this transaction under the guidance set forth in SFAS 140

Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities and noted that the extinguishment of these liabilities was consistent with the guidance.

***Years Ended December 31, 2005 and 2004***

Net sales of \$6,084,000 for the twelve months ended December 31, 2005 increased by \$3,530,000 or 138% from \$2,554,000 during the same period in 2004. The increase in sales was a result of Enova's expanding research and development initiatives with Hyundai Motor Company (HMC) as well as the production associated with the Tomoe Machinery contract. In 2005, sales attributable to the Tomoe production contract were about \$3,000,000. Additionally, sales related to the HMC development project were approximately \$758,000.

Cost of sales consists of component and material costs, direct labor costs, integration costs and overhead related to manufacturing our products. Product development costs incurred in the performance of engineering development contracts for the U.S. Government and private companies are charged to cost of sales for this contract revenue. During 2005, our trend of establishing new customers and strengthening current alliances with customers, such as Tomoe and MTrans in the heavy-duty drive system market continued. Our new customers continue to require additional integration and support services to customize, integrate and evaluate our products. We believe these costs to be initial, one-time costs for these customers and anticipate similar costs to be incurred with respect to new customers as we gain additional market share. Customers who have been using our products over one year do not incur this same type of initial costs. Cost of sales for the year ended December 31, 2005 increased 3,762,000, or 168%, from \$2,239,000 for the year ended December 31, 2004. This increase is primarily attributable to the increase in sales for the year and the scrapping of \$376,000 of raw materials that were no longer usable.

Research and development expenses consist primarily of personnel, facilities, equipment and supplies for our research and development activities. Non-funded development costs are reported as research and development expense. Research and development expense decreased in 2005 to \$804,000 from \$925,000 for the same period in 2004, a decrease of \$121,000 or 13%. During 2005, externally funded research and development from partners such as FAW, Mack/Volvo, Hyundai, and the U.S. Government offset the costs of development for new products in the areas of

mobile and stationary power management and conversion thereby reducing the need for internal funding. We believe that this trend is continuing. Programs included our new parallel hybrid drive systems, our diesel generation engine/motor system for our heavy-duty drive systems, and upgrades and improvements to our current power conversion and management components. Additionally, we continued to enhance our technologies to be more universally adaptable to the requirements of our current and prospective customers. By modifying our software and firmware, we believe we should be able to provide a more comprehensive, adaptive and effective

## **Table of Contents**

solution to a larger base of customers and applications. We will continue to research and develop new technologies and products, both internally and in conjunction with our alliance partners and other manufacturers as we deem beneficial to our global growth strategy.

Selling, general and administrative expenses consist primarily of personnel and related costs of sales and marketing employees, consulting fees and expenses for travel, trade shows and promotional activities and personnel and related costs for general corporate functions, including finance, accounting, strategic and business development, human resources and legal. Selling, general and administrative expenses increased by \$545,000 at 2005 from 2004 levels due to increased headcount and the associated increases in wages, health and workers compensation insurance, and taxes of approximately \$279,000 and from a \$266,000 increase in the allowance for doubtful accounts. For the year ended December 31, 2005, these expenses totaled \$2,870,000 up from \$2,325,000 for the similar period in 2004. This represents an 23% increase in these expenses. We are continually reviewing operations to control overhead costs and increase operational efficiencies.

For the year ended December 31, 2005, interest and financing fees shifted to a net other income of \$13,000 from a net expense of \$255,000. The change is a result of our comparatively higher cash balance at 2005 and the associated interest revenue as well as a \$50,000 gain on a foreign currency transaction in the United Kingdom. The comparatively higher cash balance was the result of the equity offering that occurred in the third quarter of 2005.

In 2005, we charged off approximately \$376,000 of our inventory relating to obsolete and slow moving raw materials. We believe that the relatively slight fluctuation in the inventory balances compared to the increased sales volume illustrates Enova's continuing efforts to monitor and control inventory utilization.

In December 2005, we were informed by the Credit Managers Association of California that \$1,011,000 of principal and \$447,000 accrued interest under the secured note payable had been disclaimed and extinguished by the beneficiaries of such principal amount. The extinguishment result from the resolution of a substantially aged negotiation regarding consideration paid in settlement of the principal amount. We have recognized a gain on the extinguishment of the principal and associated accrued interest. We evaluated this transaction under the guidance set forth in SFAS 140 Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities and noted that the extinguishment of these liabilities were consistent with the guidance.

In October 2005, we agreed to a settlement on the unsecured 10% note payable. In exchange for immediate payment of the full principal balance of \$120,000, the beneficiary of the note agreed to forgive the entire accrued interest balance of \$111,000. We have recognized a gain on the extinguishment of the associated accrued interest. We evaluated this transaction under the guidance set forth in SFAS 140 Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities and noted that the extinguishment of these liabilities were consistent with the guidance.

## **Liquidity and Capital Resources**

We have experienced losses primarily attributable to research, development, marketing and other costs associated with our strategic plan as an international developer and supplier of electric propulsion and power management systems and components. Cash flows from operations have not been sufficient to meet our obligations. Therefore, we have had to raise funds through several financing transactions. At least until we reach breakeven volume in sales and develop and/or acquire the capability to manufacture and sell our products profitably, we will need to continue to rely on cash from external financing sources.

Our operations during the year ended December 31, 2006 were financed by development contracts and product sales, as well as from working capital reserves.

During the year ended December 31, 2006, our operations required \$5,144,000 more in cash than was generated, versus \$2,997,000 in 2005 and \$2,156,000 in 2004. Enova continues to increase marketing and development spending as well as administrative expenses necessary for expansion to meet expected customer demand. Accounts receivable decreased by \$1,815,000 from \$2,173,000, or approximately 84% from the balance at December 31, 2005 (net of write-offs). The decrease is due to lengthened delivery timelines for our customers, many of whom are characterized as early adopters of our unique technology. We are currently experiencing an

**Table of Contents**

increase in sales activity for our drive systems, components and development services which commenced in the fourth quarter of 2006, which we anticipate will increase receivables in future quarters.

Inventory increased from \$1,016,000 at the year ended December 31, 2005 to \$1,704,000 at the year ended December 31, 2006, representing a 68% increase in the balance. In the fourth quarter of 2005, Enova completed and shipped our largest project of 2005 to Tomoe Manufacturing. This resulted in a depressed inventory balance at the end of 2005. Conversely, in the fourth quarter of 2006, Enova was increasing inventory purchasing in anticipation increased sales volume in the first quarter of 2007.

Prepaid expenses and other current assets increased by net \$526,000 during 2006 from the December 31, 2005 balance of \$182,000 or almost 289%. The increase is caused primarily by the interest receivable on a certificate of deposit and cash held in a short term, cash equivalent, investment account. Furthermore, prepaid expenses increased because of prepaid integration costs associated with the Verizon van project.

Net fixed assets increased by \$51,000 or 9%, for the year ended December 31, 2006 from the prior year balance of \$576,000 primarily due to the purchase of additional production tooling, machinery, and equipment associated with production.

Investments decreased by \$3,000 during 2006, net of our pro-rata share of losses attributable to the investment, which reflects our forty percent (42%) interest in the Hyundai-Enova Innovative Technology Center (ITC) as noted elsewhere in this Form 10-K. For the year ended December 31, 2006, the ITC generated a net loss of approximately \$7,000, resulting in a charge to Enova of \$3,000 utilizing the equity method of accounting for our interest in the ITC. Based on contractual obligations of our Joint Venture Agreement with Hyundai Heavy Industries Co., we made an additional investment of \$1,000,000 in 2004 which was funded by HHI through a stock purchase in September 2004 as noted in the Hyundai-Enova Innovative Technology Center description later in this Form 10-K.

Intangible Assets decreased by \$116,000 during 2006 from \$190,000 in 2005 as we continued to amortize the asset relating to the Ford Value Participation Agreement. Enova did not recognize any additional intellectual property assets, including patents and trademarks, during 2006.

Accounts payable decreased in 2006 by 73% from \$1,396,000 at December 31, 2005 to \$382,000 at December 31, 2006. At December 31, 2005, Enova had an outstanding trade payable to Hyundai Heavy Industries for approximately \$1,250,000, associated with their assistance in the production of hybrid motors for the Tomoe Engineering contract. The year end 2006 accounts payable balance represents balances owed to vendors for fourth quarter inventory purchases made in expectation of increased sales volume in the first quarter of 2007.

Enova reported \$399,000 of deferred revenue at December 31, 2006, compared to not having a deferred revenue balance at December 31, 2005. In the fourth quarter of 2005, Enova shipped our largest project of the year, and all revenue on this contract was appropriately recognized in 2005. During the fourth quarter of 2006, we have collected funds from several of our customers for charges related to in-house orders. However, based on our interpretation of the relevant revenue recognition guidance, Enova has concluded that these collections would appropriately be recognized as revenue in the first quarter of 2007.

Accrued interest decreased by \$378,000 for the year ended December 31, 2006, a decrease of 34%. The decrease is associated with the net effect of interest accrued on the Note due the Credit Managers Association of California (CMAC) for \$2.3 million (year end 2005 balance) per the terms of the Note, combined with the settlement and forgiveness of certain portions of the CMAC note in 2006. See additional explanation in the Results of Operations subsection above.



Other accrued expenses and payables increased by \$362,000 during 2006, from \$302,000 at December 31, 2005. The increase is a consequence of additional professional service fees incurred related to the re-filing of our third quarter Form 10-Q combined with additional accrued marketing and investor relations costs.

The future unavailability or inadequacy of financing to meet future needs could force us to delay, modify, suspend or cease some or all aspects of our planned operations.

**Table of Contents*****Contractual Obligations***

As of December 31, 2006, our contractual obligations for the next five years, and thereafter, were as follows (in thousands):

	<b>Total</b>	<b>Payments Due by Period</b>			<b>More Than 5 Years</b>
		<b>Less Than 1 Year</b>	<b>1-3 Years</b>	<b>3-5 Years</b>	
Long-Term Debt Obligations	\$ 1,366	\$ 71	\$ 57	\$	\$ 1,238
Capital Lease Obligations					
Operating Lease Obligations	\$ 436	\$ 279	\$ 157		
Purchase Obligations					
Accrued Interest	\$ 735				\$ 735
Total	\$ 2,537	\$ 350	\$ 214	\$	\$ 1,973

***Hyundai-Enova Innovative Technology Center***

In September 2003, Enova and Hyundai Heavy Industries, Co. Ltd. (HHI) funded the Hyundai-Enova Innovative Technology Center (HEITC) to be located at Enova's Torrance headquarters. In connection with the Joint Venture Agreement entered into between the two parties in March 2003, HHI purchased \$1,500,000 of common stock of Enova Systems, Inc. HHI purchased 23,076,923 shares representing a 6.2% ownership in Enova. Of this amount, Enova invested \$1,000,000 in the HEITC for a forty percent (40%) ownership interest. HHI invested an additional \$1,500,000 for a sixty percent (60%) ownership interest in the HEITC. In September 2004, HHI invested an additional \$1,500,000 in Enova and \$1,500,000 in the HEITC under the same terms as the initial investment. In this second tranche, HHI purchased 11,335,315 restricted shares of common stock in accordance with the Joint Venture Agreement. The joint venture company officially opened in November 2003 to pursue advanced research and development in hybrid automotive and stationary applications for fuel cell technologies. Share amounts do not include the effect of our July 2005 1-for-45 reverse stock split.

**Item 7A. *Quantitative and Qualitative Disclosures about Market Risk***

None.

**Item 8. *Financial Statements and Supplementary Data***

All information required by this Item is included on pages F-1 to F-27 in Item 15 of Part IV of this annual report on form 10-K and is incorporated into this Item by reference. See Item 15.

**Item 9. *Changes in and Disagreements With Accountants on Accounting and Financial Disclosures***

On June 12, 2006, Singer Lewak Greenbaum & Goldstein LLP ceased being our registered public accounting firm and we engaged Windes & McClaughry Accountancy Corporation as our new independent registered public accounting firm for the fiscal year ending December 31, 2006. The decision regarding the end of the Singer Lewak engagement

and the commencement of the engagement of Windes was made and approved by the audit committee of our board of directors after a review of our current needs in light of its listing on the AIM market.

The reports of Singer Lewak on the our financial statements for the fiscal years ended December 31, 2005 and December 31, 2004 contained no adverse opinion or disclaimer of opinion and were not qualified or modified as to uncertainty, audit scope or accounting principle.

During the fiscal years ended December 31, 2005 and December 31, 2004, and through the date Singer Lewak ceased its services, there were no disagreements with Singer Lewak on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, which disagreements, if not resolved to the satisfaction of Singer Lewak would have caused it to make reference to the subject matter of the disagreement in its reports on our financial statements for such years. During the fiscal years ended December 31, 2005 and

**Table of Contents**

December 31, 2004, and through the date of this Current Report on Form 8-K, there were no reportable events within the meaning of Item 304(a)(1)(v) of Regulation S-K.

On January 31, 2007, we dismissed Windes as our registered public accounting firm and engaged PMB Helin Donovan, LLP as our new independent registered public accounting firm. The decision regarding the end of the Windes engagement and the commencement of the PMB Helin Donovan's engagement was made and approved by the audit committee of our board of directors after consideration of our current needs and position. Concurrent with the change in auditor, we also undertook managerial changes to our finance and operations departments, including a change in chief financial officer. In light of these organization changes and given the disagreement between us and Windes with respect to the filing of our Form 10-Q for the fiscal quarter ended September 30, 2006 filed November 13, 2006, the audit committee believed that engagement of a new auditor would lead to enhanced communications with respect to audit matters.

During the course of its engagement, Windes did not provide an audit report on our financial statements. Therefore, there is no applicable disclosure within the meaning of Item 304(a)(1)(ii).

During our two most recent fiscal years, and through the date of Windes' dismissal, we and Windes had the following three disagreements within the meaning of Item 304(a)(1)(iv) of Regulation S-K on matters of accounting principles or practices, financial statement disclosure, or auditing or review scope or procedure, which if not resolved to the satisfaction of Windes would have caused it to make reference to the subject matter of the disagreement in its reports on our financial statements:

First, as reflected in the Current Reports on Form 8-K dated November 29 and December 5, 2006, Windes and we disagreed whether Windes authorized the Form 10-Q filing. After numerous discussions among Windes and us involving management and the audit committee, the disagreement was resolved by filing the requisite Item 4.02 Form 8-K and later filing the amended Form 10-Q for the fiscal period ended September 30, 2006 on December 29, 2006.

Second, Windes and we disagreed whether we followed the appropriate accounting policy and accounting literature to record revenue. This disagreement was resolved upon further analysis and by reversing the recorded revenue and related expenses in the amended Form 10-Q.

Third, Windes and we disagreed whether adequate documentation had been produced to support a material debt forgiveness transaction which, although negotiated in the 2005 fiscal year, was completed in the first quarter of the 2006 fiscal year and therefore included in our year-to-date operations. Consistent with the amended Form 10-Q's Item 4 Controls and Procedures disclosure, we were unable to locate original documentation to support the accounting treatment for the transaction. This disagreement was resolved when we obtained replacement copies to reflect the original documentation and the accounting treatment.

Our audit committee discussed the subject matter of all three disagreements above with Windes and authorized Windes to respond fully to inquiries of PMB Helin Donovan concerning the subject matter of the disagreements.

During our two most recent fiscal years and through the date of Windes' dismissal, the following were reportable events within the meaning of Item 304(a)(1)(v) of Regulation S-K:

(A) Consistent with our Item 4 Controls and Procedures disclosure in the amended Form 10-Q, Windes advised that material weaknesses existed in our internal controls, and thereby our financial statement preparation and disclosure, regarding the (i) correct application of relevant accounting standards; (ii) ability to produce original documentation to support an accounting treatment; and (iii) internal and external communication by us in ensuring

there was appropriate independent accountant review and authorization to file periodic reports such as the Form 10-Q for the fiscal period ended September 30, 2006.

(B) Given the three disagreements cited above, Windes expressed concern about its ability to rely on management representations. As a result, consistent with the Item 4 Controls and Procedures disclosure in our amended Form 10-Q, we agreed to dedicate additional time and resources to internal control matters and specifically agreed to (1) retain a consultant to review our accounting, documentation, and internal control

## **Table of Contents**

policies and (2) implement more stringent oversight policies to ensure proper auditor authorization is received prior to making SEC filings.

(C) Given the third disagreement cited above with respect to adequate documentation, Windes further advised us that it would need to expand significantly the scope of its audit within the meaning of Item 304(a)(1)(v)(C) to ensure that proper and sufficient documentation existed to support accounting conclusions reached in prior fiscal periods including the cited debt forgiveness transaction.

### **Item 9A. *Controls and Procedures***

#### **Disclosure Controls and Procedures**

As of the end of the period covered by this 2006 Form 10-K, we carried out an evaluation, under the supervision and with the participation of our principal executive officer and principal financial officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934. Based on this evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were not effective.

First, as of December 31, 2006, we did not maintain effective controls over the inventory pricing, tracking, and the reserve analysis process. This control deficiency resulted in an audit adjustment to our 2006 financial statements and could result in a misstatement to cost of sales that would result in a material misstatement to the annual and interim financial statements that would not be prevented or detected. Our independent registered public accounting firm, PMB Helin Donovan, concluded that these significant deficiencies constituted a material weakness in our internal controls. Our management also determined that these deficiencies constitute a material weakness that impacted our disclosure controls and procedures.

Second, as previously disclosed in our amended Form 10-Q filed December 29, 2006 and in a Form 8-K filed November 29, 2006, our then independent auditor Windes & McClaughry Accountancy Corporation notified us that the initial Form 10-Q for the quarter ended September 30, 2006 as filed November 13, 2006 was filed without Windes' express authorization. Although we believed we were authorized to file the Form 10-Q at the time, the notification by our independent auditor signified that our disclosure controls and procedures were not effective. We subsequently obtained authorization from Windes to refile the Form 10-Q as amended on December 29, 2006.

Third, in connection with filing the Form 10-Q described in the prior paragraph, we initially recorded revenue for invoiced purchase orders that upon further reflection had not been properly earned as revenue pursuant to relevant accounting literature. Accordingly, in the amended 10-Q for the quarter ended September 30, 2006, we reversed out the associated components of revenue and related costs resulting in a net increase in operating loss of \$4,000.

Fourth, in two distinct instances, we encountered problems that did not materially impact our financial statements, yet contributed to our conclusion that our disclosure controls and procedures were not effective. We identified a clerical error in the preparation of the first quarter 2006 financial statements that resulted in a misclassification of certain line items within the total revenue and total cost of revenue. The total revenue, total cost of revenue, gross profit and net loss were not affected by the misclassification. Also, during the fourth quarter, in connection with the Form 10-Q filing issue discussed in the previous paragraph, we were unable to produce original documentation to support an accounting treatment that commenced in late 2005. Ultimately, we were able to obtain replacement documents that supported the original accounting treatment.

#### **Changes in Internal Controls over Financial Reporting**

In connection with resolving the previously disclosed September 30, 2006 Form 10-Q filing issue, each of the Chief Executive Officer, Chief Financial Officer, and the Chairman of the Audit Committee agreed to document that written auditor authorization has been delivered to Enova prior to filing any periodic report, current report, or registration statement that requires auditor consent or review.

**Table of Contents**

To enhance its internal controls over financial reporting, we hired Jarett Fenton as a special consultant to assist in reviewing and documenting our accounting memoranda, assess our preparation for Section 404 compliance, and perform other documentation roles as requested. Mr. Fenton subsequently was hired as an employee and appointed to the position of Chief Financial Officer.

As part of our ongoing efforts to improve controls and in preparation for Section 404 testing of internal controls over financial reporting required by the Sarbanes-Oxley Act under current SEC rules starting with our fiscal year ended December 31, 2007, we substantially implemented a new accounting and reporting system in the fourth quarter of 2006. In particular, this accounting and reporting system will provide for greater monitoring controls over financial transactions and reduce errors through automation and application controls. Further, we changed responsibility sets to have a higher degree of segregation among critical duties. We segregated the payroll function from the accounting function. We added an independent treasury function and added clerical help to assist in the segregation of the payable and receivable function.

**Item 9B. *Other Information***

None

**PART III****Item 10. *Directors and Executive Officers of the Registrant***

The following table sets forth certain information with respect to the current Directors and executive officers of Enova:

<b>Name</b>	<b>Age</b>	<b>Position</b>
Anthony N. Rawlinson	52	Chairman of the Board of Directors
Edwin O. Riddell	63	Chief Executive Officer, President, and Director
Jarett Fenton	30	Chief Financial Officer
Bjorn Ahlstrom(1)(2)	73	Director
Dr. Malcolm Currie(1)	80	Director
Donald H. Dreyer(2)	69	Director
Sten Langenius	72	Director
John Wallace(2)(3)	58	Director
Michael Staran	50	Executive Vice President

(1) Member of the Compensation Committee

(2) Member of the Audit Committee

(3) Financial Expert on Audit Committee

*Anthony Rawlinson, Chairman of the Board of Directors.* Mr. Rawlinson was appointed Chairman of the Board of Directors in July 1999. He is Managing Director of The Global Value Investment Portfolio Management Pte. Ltd., a Singapore-based international fund management company, managing discretionary equity portfolios for institutions,



pension funds and clients globally since 1996. Mr. Rawlinson is also Chairman of Cardsoft Inc., a privately-held company based in San Mateo California since 2001. Cardsoft develops and markets embedded Java software solutions that provide security and interoperability for applications running on disparate fixed and wireless payment devices. From June 2004 to June 2005 Mr. Rawlinson served as a director of Calvalley Petroleum, an oil and gas company. From February 2000 to October 2003 Mr. Rawlinson served as a director of Matrix Oil, an oil and gas exploration company.

*Edwin O. Riddell, Chief Executive Officer, President, and Director.* Mr. Riddell was appointed President and Chief Executive Officer on August 20, 2004. Mr. Riddell has been a Director of Enova since 1995. Since 1999, Mr. Riddell has been President of CR Transportation Services, a consultant to the electric vehicle industry. From 1992 to 1999, Mr. Riddell was Product Line Manager of the Transportation Business Unit at the Electric Power

**Table of Contents**

Research Institute, and from 1985 until 1992, he served with the Transportation Group, Inc. as Vice President, Engineering, working on electric public transportation systems. From 1979 to 1985, he was Vice President, General Manager and COO of Lift-U, Inc., the leading manufacturer of handicapped wheelchair lifts for the transit industry. Mr. Riddell has also worked with Ford, Chrysler, and General Motors in the area of auto design, and has worked as a member of senior management for a number of public transit vehicle manufacturers. Mr. Riddell has been a member of the American Public Transportation Association's (APTA) Member Board of Governors for over 15 years, and has served on APTA's Board of Directors. Mr. Riddell was also Managing Partner of the U.S. Advanced Battery Consortium.

*Jarett Fenton, Chief Financial Officer.* From March 2003 through February 2007, Mr. Fenton served as the Chief Executive of the Clarity Group, a company he founded. The Clarity Group is a SEC reporting and corporate compliance consultancy. Mr. Fenton's primary responsibility was practice development and he eventually grew the company to include such clients as Countrywide Financial and PC Mall Inc., as well as smaller SEC registrants. From September 1998 to March of 2003, Mr. Fenton served as a Senior Associate in the Middle Market practice of PricewaterhouseCoopers in the Orange County, CA office. At PricewaterhouseCoopers Mr. Fenton facilitated audit engagements, worked on SEC reporting issues, controls assessments, client reporting, financial guidance interpretation and staff development. Mr. Fenton has a BA in Business Economics with an emphasis in Accounting from the University of California at Santa Barbara and is a Certified Public Accountant in the State of California.

*Bjorn Ahlstrom, Director.* Mr. Ahlstrom was elected to the Board of Directors in June 2004. Mr. Ahlstrom currently is a consultant in the heavy-duty vehicle industry. Mr. Ahlstrom retired as Chairman of Volvo Group North America, Inc. on April 1, 2004. Prior to that, Mr. Ahlstrom was President and Chief Executive Officer of Volvo North America Corporation from 1971 until 1994. During this term, Volvo North America Corporation owned and operated Volvo's businesses in the United States and Canada. Under Mr. Ahlstrom's leadership, VNAC grew from a \$50 million car importer in the early 1970s to a \$6 billion company with manufacturing and marketing operations for cars, trucks, marine engines, and financial services. In 1981, Mr. Ahlstrom received the Royal Order of the North Star from King Carl XVI Gustaf of Sweden. The United States Government awarded him the Medal of Peace and Commerce in 1983. He received the Ellis Island Medal of Honor in 1990. Mr. Ahlstrom has been awarded honorary Doctor of Law degree from St John's University, NY, and Ramapo College of New Jersey.

*Malcolm R. Currie, Ph.D, Director.* Dr. Currie had served as a Director of Enova from 1995 through 1997 and then 1999 to the present. From 1986 until 1992, Dr. Currie served as Chairman and Chief Executive Officer of Hughes Aircraft Co., and from 1985 until 1988, he was the Chief Executive Officer of Delco Electronics. His career in electronics and management has included research with many patents and papers in microwave and millimeter wave electronics, laser, space systems, and related fields. He has led major programs in radar, commercial satellites, communication systems, and defense electronics. He served as Undersecretary of Defense for Research and Engineering, the Defense Science Board, and currently serves on the Boards of Directors of LSI Logic, Inamed Corp., Innovative Micro Technology, Regal One, and Currie Technologies. He is past president of the American Institute of Aeronautics and Astronautics, and is a Member of the Board of Trustees of the University of Southern California.

*Donald H. Dreyer, Director.* Mr. Dreyer was elected a Director of Enova in January 1997. Mr. Dreyer is President and CEO of Dreyer & Company, Inc., a consultancy in credit, accounts receivable and insolvency services, which he founded in 1990. Mr. Dreyer has served as Chairman of the Board of Credit Managers Association of California during the 1994 to 1995 term and remains a current member. Mr. Dreyer is also a member of the American Bankruptcy Institute and the National Advisory Committee of Dun & Bradstreet, Inc.

*Sten Langenius, Director.* Mr. Langenius was made director in July 2006. Mr. Langenius currently serves as CEO and on the Board of Directors of Utsiktsvägen Consulting & Investment AB since 1998. He has been a member of the Boards of Gunnebo Industrier AB (Sweden) since 2005, NSS, Nordic Shelter Solutions Group OY (Finland) since

2002, Fästelement Intressenter AB and Fameco Group AB (Sweden) since 2005, chairman of the board of Nordea Region West Sweden, Large Companies Group (formerly known as Merita Nordbanken Region West (Sweden), name changed in 2005) since 1995. Mr. Langenius was formerly President and Chief Executive Officer of Volvo Truck Corporation. Prior to joining Volvo, he was President of IBM Svenska AB. Mr. Langenius brings an extensive and impressive background to Enova.

## **Table of Contents**

*John R. Wallace, Director.* Mr. Wallace was elected as a Director of Enova in 2002. Since November of 2005, he has held the position of CEO, Xantrex Technology, Inc. in Burnaby, B.C., Canada. From 2002 to 2005, he worked independently as a consultant in the alternative energy sector. Mr. Wallace retired from the Ford Motor Company in 2002. Prior to his retirement, he was executive director of TH!NK Group. He has been active in Ford Motor Company's alternative fuel vehicle programs since 1990, serving first as: Director, Technology Development Programs; then as Director, Electric Vehicle Programs; Director, Alternative Fuel Vehicles and finally Director, Environmental Vehicles. He is past Chairman of the Board of Directors of TH!NK Nordic; he is past chairman of the United States Advanced Battery Consortium; Co-Chairman of the Electric Vehicle Association of the Americas, and past Chairman of the California Fuel Cell Partnership. He served as Director of Ford's Electronic Systems Research Laboratory, Research Staff, from 1988 through 1990. Prior to joining Ford Research Staff, he was president of Ford Microelectronics, Inc., in Colorado Springs. His other experience includes work as program manager with Intel Corporation. He also served as Director, Western Development Center, for Perkin-Elmer Corporation and as President of Precision Microdesign, Inc.

*Michael Staran, Executive Vice President.* From 1998 to 2005 Mr. Staran was the President of Effective Solutions People LLC., providing specialized consulting to the OEM (original equipment manufacturer) supplier segment in the automotive industry. Mr. Staran consulted with Enova from November 2004 through February 2005 when he was hired by Enova as Director of Sales and Marketing. In September 2005, Mr. Staran was promoted to Vice President of Sales and Marketing. Mr. Staran's affiliations and work history range from companies such as Ford, General Motors and DaimlerChrysler to suppliers such as Johnson Controls Inc. and Decoma International where he was vice president of sales and marketing for 13 years. Mike holds a Bachelor of Science degree in Mechanical Engineering with a minor in Mathematics from Lawrence Institute of Technology in Southfield, Michigan. Mr. Staran has developed three patented mechanical designs within the automotive components sector.

## **Relationships Among Directors or Executive Officers**

There are no family relationships among any of the Directors or executive officers of Enova.

## **Board Composition**

Our Articles of Incorporation provide that the holders of the Series B Preferred Stock are entitled, voting as a separate class, to elect two members of the Board. The holders of the Common Stock and Series A Preferred Stock, voting together as a single class, are entitled to elect the balance of the members of the Board. At our most recent annual meeting, only one director, Donald Dreyer, was nominated and elected by the holders of the Series B Preferred Stock and the remaining six directors were elected by the holders of the Common Stock and Series A Preferred Stock.

## **Section 16(a) Beneficial Ownership Reporting Compliance**

Section 16(a) of the Securities Exchange Act requires our Directors, executive officers and persons who own more than 10% of our common stock to file reports of ownership and changes in ownership of our Common Stock to the SEC. Copies of these reports are also required to be delivered to Enova

We believe, based solely on our review of the copies of such reports received and written representations from applicable individuals, that the following individuals did not timely file the following reports during our last fiscal year: (i) Dr. Currie, a member of the Company's Board of Directors, did not timely file a Form 4 on two separate transactions, (ii) Mr. Staran, our Executive Vice President, has not timely filed a Form 3, and has informed us that he intends to file the Form 3 promptly after we file this Form 10-K.

**Code of Ethics**

We have adopted a Code of Ethics, which constitutes a code of ethics as defined by the SEC, that applies to our Board of Directors as well as our Chief Executive Officer, Chief Financial Officer, principal accounting officer, controller, and our other employees. A copy of the Code of Ethics may be obtained free of charge by writing to Enova Systems, Inc., 19850 S. Magellan Drive, Torrance, California 90502, Attention: Chief Financial Officer or by accessing the Investor Relations section of our website [www.enovasystems.com](http://www.enovasystems.com). To the extent required by the

## **Table of Contents**

rules of the SEC and the AMEX, we will disclose amendments and waivers relating to these documents in the same place on our website.

### **Audit Committee**

The Board of Directors has established an Audit Committee. The current members of this committee are Messrs. Ahlstrom, Dreyer (Chair) and Wallace. The Board of Directors has determined that Mr. Wallace is an audit committee financial expert as defined by the SEC and the AMEX. Mr. Wallace's designation by the Board as an audit committee financial expert is not intended to be a representation that he is an expert for any purpose as a result of such designation, nor is it intended to impose on him any duties, obligations or liability that are greater than the duties, obligations or liability imposed on him as a member of the Audit Committee and the Board in the absence of such designation. The Board of Directors has determined that the members of the Audit Committee, including the audit committee financial expert, are independent under the rules of the SEC and the AMEX. The Audit Committee, among other functions, has the sole authority to appoint and replace the independent auditors, is responsible for the compensation and oversight of the work of the independent auditors, reviews the results of the audit engagement with the independent auditors, and reviews and discusses with management and the independent auditors quarterly and annual financial statements and major changes in accounting and auditing principles.

### **Item 11. *Executive Compensation***

#### **Compensation Discussion and Analysis**

The purpose of this Compensation Discussion and Analysis is to describe the material elements of compensation provided to the Company's named executive officers for fiscal year 2006.

#### ***Executive Compensation Philosophy***

Enova believes in rewarding executives based on their individual performance as well as aligning their interests with those of our stockholders, with the ultimate objective of improving stockholder value. To that end, we believe executive compensation packages should include both cash and stock-based compensation that reward performance. The goal of our executive compensation programs is to attract, retain and motivate key executives and to reward executives for value creation.

At the core of our compensation philosophy is our guiding belief that pay should be linked to performance, and several factors underscore that philosophy. First, a substantial portion of executive officer compensation is determined by each executive officer's contribution to our profitability.

We believe that total compensation and accountability should increase with position and responsibility. Consistent with this philosophy, total compensation is higher for individuals with greater responsibility and greater ability to influence Enova's targeted results and strategic initiatives. As position and responsibility increases, a greater portion of the named executive officer's total compensation is performance-based pay.

In addition, our compensation methods focus management on achieving strong annual performance in a manner that supports and ensures our long-term success and profitability. We believe that stock options issued under the Enova's stock option plans create long-term incentives that align the interests of management with the interests of long-term stockholders.

While overall compensation levels must be sufficiently competitive to attract talented leaders, we believe that compensation should be set at responsible levels. Our executive compensation programs are intended to be consistent

with Enova's cost control strategies.

***The Compensation-Setting Process***

The Compensation Committee administers the compensation program for the named executive officers and certain key employees, and makes all related decisions. The Compensation Committee also administers our employee stock option plan. The Compensation Committee ensures that the total compensation paid to the named executive officers is fair, reasonable and competitive. The Compensation Committee did not retain compensation

**Table of Contents**

advisors during 2006, nor has it done so in the past. The fundamental responsibilities of the Compensation Committee are:

to review at least annually the goals and objectives and the structure of Enova's plans for executive compensation, incentive compensation, equity-based compensation, and its general compensation plans and employee benefit plans (including retirement and health insurance plans);

to evaluate annually the performance of the Chief Executive Officer in light of the goals and objectives of Enova's executive compensation plans, and to determine his or her compensation level based on this evaluation;

to review annually and determine the compensation level of all other executive officers of Enova, in light of the goals and objectives of Enova's executive compensation plans;

in consultation with the Chief Executive Officer, to oversee the annual evaluation of management of Enova, including other executive officers and key employees;

periodically, as the Compensation Committee deems necessary or desirable and pursuant to the applicable equity-based compensation plan, to grant, or recommend that the Board of Directors grant, equity-based compensation awards to any officer or employee of Enova for such number of shares of common stock as the Compensation Committee, in its sole discretion, shall deem to be in the best interest of the Enova; and

to review and recommend to the Board of Directors all equity-based compensation plans.

The Compensation Committee's decisions involve a year-round process in determination of business and succession planning, evaluation of management performance, and consideration of our business environment. The individual judgments made by the Compensation Committee are subjective and are based largely on the Compensation Committee's perception of each executive's contribution to both our past performance and long-term growth potential.

Management plays a significant role in the compensation-setting process. The most significant aspects of management's role are:

evaluating employee performance; and

recommending salary levels and equity compensation awards.

Our Chief Executive Officer also participates in Compensation Committee meetings at the Compensation Committee's request to provide:

background information regarding Enova's strategic objectives;

his evaluation of the performance of the named executive officers and other key employees; and

compensation recommendations as to the named executive officers (other than himself).

***2006 Compensation***

This section describes the compensation decisions that were made with respect to the named executive officers for fiscal 2006.



*Executive Summary*

In 2006, we continued to apply the compensation principles described above in determining the compensation of our named executive officers.

We increased base salaries for certain named executive officers.

We paid one cash bonus of \$10,000 to Michael Staran as part of his meeting certain non-financial goals set by the committee.

In fiscal 2006, only one option grant was made to a named executive officer. All other grants related to performance in 2006, were granted in 2005. The executives did not meet the 2006 performance requirement.

**Table of Contents**

The primary components of total compensation for our named executive officers during fiscal year 2006 were as follows:

Base Salary;

Cash Incentive (Bonus); and

Equity Incentive

*Base Salary*

In determining base salaries, we consider the executive's qualifications and experience, scope of responsibilities, the goals and objectives established for the executive, the executive's past performance, internal pay equity, the tax deductibility of base salary and cash incentive payments, and the extent to which the company's earnings were affected by the executive's actions. While base salaries are not primarily performance-based, it is important for Enova to provide adequate fixed compensation to executives working in a highly volatile and competitive industry.

Base salary is largely determined based on the subjective judgment of the Compensation Committee without the use of a formula, taking into account the factors described above. In determining the base salary of the named executive officers, the Compensation Committee may periodically determine the applicable peer group and refer to surveys of compensation data for similar positions with similar companies.

*Cash Incentive*

Cash incentive bonus payments are discretionary, based primarily on each executive officers contribution to our profitability over the applicable performance measurement periods. The Compensation Committee believes that revenue and profitability are the most useful measures of management's effectiveness in creating value for the stockholders of the Company.

For 2006, we established a performance cash incentive bonus formula for our Chief Executive Officer as follows:

<b>Revenue Target</b>	<b>Bonus</b>
\$13,000,000	\$15,000
\$14,500,000	\$30,000
\$15,500,000	\$45,000

Corinne Bertrand and Mike Staran, who later was elevated to the position of Executive Vice President, also were eligible for similar performance cash incentives of \$10,000, \$20,000 and \$30,000 at the same revenue thresholds, respectively. We did not make any cash incentive bonus payments in 2006 because we did not meet the relevant revenue targets.

*Equity Incentive*

During 2005 and 2006, our executive officers were eligible to receive performance-based stock options granted under Enova's 1996 Employee and Consultant Stock Option Plan and 2006 Equity Compensation Plan. The 1996 plan expired in 2006 for purposes of issuing new grants. Going forward, awards will be made under 2006 Equity

Compensation Plan, which our shareholders adopted at the November 2006 annual meeting. We grant all stock options based on the fair market value as of the date of grant. The exercise price for stock option grants is determined by reference to the closing price per share on the AMEX at the close of business on the date of grant. The Company has not established a new performance based equity incentive plan.

Option awards under the compensation programs discussed above are made at regular or special Compensation Committee meetings. The effective date for such grants is the date of such meeting. We may also make grants of equity incentive awards at the discretion of the Compensation Committee or the board of directors in connection with the hiring of new executive officers and other employees.

In determining the number of options to be granted to executives and the frequency of option grants, we take into account the individual's position, scope of responsibility, ability to affect profitability, the individual's

**Table of Contents**

performance and the value of stock options in relation to other elements of total compensation. Our profitability in its industry and over the applicable performance measurement periods is also taken into account when determining the number of options to be granted to executives.

*Perquisites and Other Personal Benefits Compensation*

We provide named executive officers with perquisites and other personal benefits that we and the Compensation Committee believes are reasonable and consistent with its overall compensation program to better enable us to attract and retain superior employees for key positions. The Compensation Committee periodically reviews the levels of perquisites and other personal benefits provided to named executive officers. The amounts shown in the Summary Compensation Table under the heading **Other Compensation** represent the value of living accommodations, the value of certain health and life insurance benefits, and the incremental cost of vehicle transportation. Executive officers did not receive any other perquisites or other personal benefits or property.

**Summary Compensation Table**

The table below summarizes the total compensation paid or earned by each of the named executive officers for the fiscal year ended December 31, 2006. Other than the three individuals named below, we had no other executive officers during 2006.

Name and Principal Position (a)	Year	Salary (\$)	Bonus (\$)	Stock Awards (\$)	Option Awards (\$)	Plan Compensation (\$)	Change in Pension Value and Nonqualified Deferred Incentive Compensation (\$)	All Other Compensation (\$)	Total (\$)
Edwin Riddell, Chief Executive Officer(1)	2006	216,000						54,000(3)	270,000
Corinne Bertrand, Chief Financial Officer(1)	2006	119,000	5,000					11,000(4)	135,000
Michael Staran, Executive Vice President(2)	2006	139,000	10,000					17,000(5)	166,000

(1) Ms. Bertrand was appointed to the position of Chief Financial Officer on April 3, 2006. She resigned her position effective January 31, 2007. Enova did not have a chief financial officer for the balance of 2006. The prior chief financial officer, Larry Lombard, resigned his position effective December 9, 2005. In the interim, our Chief Executive Officer, Edwin Riddell, served as acting Chief Financial Officer.

- (2) Mr. Staran was appointed to this position on November 17, 2006. He previously was employed by Enova November 17, 2006 as a non-executive Vice President of Sales and Marketing. The amounts shown reflect his total 2006 compensation as both executive and non-executive vice president.
- (3) The amount reflects \$6,000 in insurance premiums and \$48,000 in perquisites representing approximately \$34,000 in living accommodations, \$6,000 in automobile expenses, and \$8,000 for other miscellaneous perquisites.
- (4) The amount reflects \$11,000 in health and life insurance premiums.
- (5) The amount reflects \$11,000 in health and life insurance premiums and \$6,000 in office expense reimbursements, shown as perquisites.

**Table of Contents****Grants of Plan-Based Awards**

The following table sets forth certain information with respect to grants of plan-based awards for the fiscal year ended December 31, 2006 to the named executives.

Name	Grant Date	Estimated Future Payouts Under Non-Equity Incentive Plan Awards			Estimated Future Payouts Under Equity Incentive Plan Awards			All Other Awards	All Other Awards	Exercise Price	Grant Date Fair Value of Stock and
		Threshold	Target	Maximum	Threshold	Target	Maximum	Stock Units	Underlying Options	(\$/Sh)	of
(a)		(\$)	(\$)	(\$)	(#)	(#)	(#)	(#)	(#)	(\$/Sh)	(\$)
Edwin Riddell											
Corinne Bertrand	3-06-06				23,000	23,000	23,000			5.25	(1)
Michael Staran											

(1) These options vested based on the same 2006 revenue milestones that were established under the original executive equity compensation plan grant in 2005. At the time of the 2006 executive grant, it had become apparent that the 2006 performance target was unlikely. Consequently, these options were deemed by the Company to have zero value.

**Employment Contracts, Termination of Employment and Change in Control Arrangements**

Effective January 3, 2005, as ratified by the Board of Directors on January 27, 2005, Enova entered into a letter agreement with its President and Chief Executive Officer, Edwin Riddell. The letter agreement subsequently was amended on May 1, 2005 and on December 13, 2005 effective on January 9, 2006. Pursuant to the [illegible] amended letter agreement, Mr. Riddell will receive a yearly salary of \$225,000. In addition, Mr. Riddell will be eligible for performance awards mutually agreed upon by both parties. The actual performance goals for 2006 are reflected in Compensation Discussion and Analysis above. Under the original letter agreement, Mr. Riddell also received options to purchase 1,000,000 shares of Enova common stock at an original exercise price of \$0.11 per share. The stock options vested over three years in equal monthly installments and will expire five years from the date of issuance. The agreement also provides for health benefits, a standard life insurance policy, living accommodations, and a company automobile. Mr. Riddell's employment is at-will and may be terminated by either Mr. Riddell or Enova for any reason and at any time.

Mr. Riddell's employment is at-will and may be terminated by Enova for any reason and at any time. In the event that Mr. Riddell's employment is terminated by Enova without cause, as defined in the Agreement, Mr. Riddell is entitled to receive 12 months' salary and health benefits as severance. If the Board should change Mr. Riddell's duties or authority so that it may reasonably be found that Mr. Riddell is no longer performing as the Chief Executive Officer of Enova or if Enova is sold, merged, or closed, then, in either instance, Mr. Riddell shall have the right to terminate the Agreement and receive the same severance payment as if his employment had been terminated without cause. Mr. Riddell may otherwise terminate his employment at any time with 120 days written notice of his decision to terminate to Enova, but will not be entitled to any severance benefits. In the event of a single period of prolonged inability to work due to the result of a sickness or an injury, Mr. Riddell will be compensated at his full rate pay for at least 6 (six) months from the date of the sickness or injury. Assuming a severance triggering event occurred on December 31, 2006, Mr. Riddell would be entitled to 12 monthly payments of approximately \$23,000.

During the term of his employment and during the 12-month period following termination of his employment, Mr. Riddell has agreed not to directly own, manage, operate, join, control, or participate in or be connected with, as an officer, employee, partner, stockholder or otherwise, any competitive company or related business, partnership, firm or corporation that is at the time engaged principally or significantly in a business that is, directly or indirectly, at the time in competition with the business of Enova.

During the term of his employment and during the 12-month period following termination of his employment, Mr. Riddell has agreed not to directly or indirectly through his own efforts, or otherwise, contract with, or in any way retain the services of, any employee or former employee of Enova, if such individual has provided professional or support services to Enova at any time since May 1, 2005 without the express written consent of Enova. In addition

**Table of Contents**

Mr. Riddell has agreed not to interfere with the relationship of Enova and any of its employees and he will not attempt to divert from Enova any business in which Enova has been actively engaged during his employment.

Effective with her appointment as Chief Financial Officer on April 3, 2006, Corinne Bertrand and Enova entered into a letter agreement on March 13, 2006. Pursuant to the letter agreement, Ms. Bertrand was entitled to an annual salary of \$170,000 and a signing bonus of \$5,000. In addition, Ms. Bertrand was eligible for performance-based cash bonuses described above. Ms. Bertrand also received unvested options to purchase 23,000 shares of Enova common stock at an exercise price of \$5.25 per share, subject to the achievement of certain performance-based revenue targets for the year ending December 31, 2006. The letter agreement also provided for certain health benefits, and a standard life insurance policy. Ms. Bertrand's employment was at-will and was eligible to be terminated by either her or Enova for any reason and at any time. Ms. Bertrand resigned her position effective January 31, 2007.

In connection with his appointment as Chief Financial Officer effective February 5, 2007, Jarett Fenton entered into a letter agreement to receive an annual salary of \$170,000. In addition, Enova agreed to issue Mr. Fenton 5,000 shares of common stock, participation in the executive bonus program, and health and life insurance benefits. In 2006, as principal of The Clarity Group, Mr. Fenton served as a consultant to Enova. During 2006, Enova paid The Clarity Group fees of \$93,000 of which Mr. Fenton received approximately \$79,050.

In connection with his appointment as Executive Vice President, effective November, 11, 2007, Mike Staran entered into a letter agreement, executed on March 27, 2007, to receive an annual salary of \$190,000. In addition, Enova agreed to issue Mr. Staran 5,000 shares of common stock, participation in the executive bonus program, and health and life insurance benefits. Mr. Staran will also receiving living and transportation reimbursements.

Mr. Staran's employment is at-will and may be terminated by Enova for any reason and at any time. In the event that Mr. Staran's employment is terminated by Enova without cause, as defined in the Agreement, Mr. Staran is entitled to receive (i) three month's salary and health benefits as severance and (ii) reimbursement for reasonable relocation expenses to return to Michigan. If the Board should change Mr. Staran's duties or authority so that it may reasonably be found that Mr. Staran is no longer performing as the Executive Vice President of Enova or if Enova is sold, merged, or closed, then, in either instance, Mr. Staran shall have the right to terminate the Agreement and receive the same severance payment as if his employment had been terminated without cause. Mr. Staran may otherwise terminate his employment at any time with 120 days written notice of his decision to terminate to Enova, but will not be entitled to any severance benefits. In the event of a single period of prolonged inability to work due to the result of a sickness or an injury, Mr. Staran will be compensated at his full rate pay for at least 3 (three) months from the date of the sickness or injury. Assuming a severance triggering event occurred on December 31, 2006, Mr. Staran would be entitled to three monthly payments of approximately \$16,500 and reasonable relocation reimbursement discussed above.

During the term of his employment and during the 12-month period following termination of his employment, Mr. Staran has agreed not to directly own, manage, operate, join, control, or participate in or be connected with, as an officer, employee, partner, stockholder or otherwise, any competitive company or related business, partnership, firm or corporation that is at the time engaged principally or significantly in a business that is, directly or indirectly, at the time in competition with the business of Enova.

During the term of his employment and during the 12-month period following termination of his employment, Mr. Staran has agreed not to directly or indirectly through his own efforts, or otherwise, contract with, or in any way retain the services of, any employee or former employee of Enova, if such individual has provided professional or support services to Enova at any time since March 27, 2007. In addition Mr. Staran has agreed not to interfere with the relationship of Enova and any of its employees and he will not attempt to divert from Enova any business in which Enova has been actively engaged during his employment.





**Table of Contents****Outstanding Equity Awards at Fiscal Year-End**

Name (a)	Option Awards					Stock Awards			
	Number of Securities Underlying Unexercised Options Exerciseable	Number of Securities Underlying Unexercised Options Unexercisable	Number of Securities Underlying Unexercised Options Unearned	Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested (\$)	Shares, Units or Rights That Have Not Vested (#)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Rights That Have Not Vested (\$)
Edwin Riddell	23,000			4.35	9-21-15				
Corinne Bertrand	15,000	7,000		4.95	2-15-10				
Michael Staran	23,000			4.35	9-21-15				

In 2005, the Compensation Committee granted performance based stock options to executives under Enova's 1996 Stock Option Plan. The options vested evenly in two annual tranches, based upon us reaching certain revenue milestones in 2005 and 2006. In 2005, these revenue milestones were met and the awards vested. In 2006, the revenue milestone was not met, and the options expired. We granted an additional set of second tranche options under the 1996 Plan to two new executives in 2006. These options also expired when the revenue milestone was not met.

**Option Exercises and Stock Vested**

Enova has not had any option exercises, that would be required to be disclosed as an exercise. Therefore, in accordance with SEC rules, we have omitted these tables.

**Pension Benefits Nonqualified Deferred Compensation**

Enova does not offer any post employment compensation that would be required to be disclosed as pension benefits or non-qualified deferred compensation. Therefore, in accordance with SEC rules, we have omitted these tables.

### **Compensation of Directors**

Non-employee Directors receive quarterly compensation at a flat rate of \$4,000 in cash and \$6,000 in stock. Prior to Enova's listing on AMEX on August 28, 2006, these stock awards were valued on the last trading day of the quarter at the average of the closing ask and bid prices on the over the counter bulletin board. After Enova's listing on AMEX, the stock awards were valued on the last trading day of the quarter at the closing stock price on AMEX. The flat rate is not dependent on the amount or type of services performed by the Directors. All Directors are also reimbursed for out-of-pocket expenses incurred in connection with attending Board and committee meetings.

In addition to the compensation paid for their service on the Board, members of Enova's Audit Committee receive an additional annual compensation of \$5,000. In addition to the Audit Committee membership compensation, the Chairman of Enova's audit committee receives an additional \$5,000 annual compensation for his service as Chairman.

Our Chief Executive Officer, Mr. Riddell did not receive separate consideration for his service as a director.

**Table of Contents**

The table below summarizes the compensation paid by Enova, to our Directors for the fiscal year ended December 31, 2006.

Name (a)	Fees Earned or Paid in Cash (\$)	Stock Awards(1) (\$)	Option Award (\$)	Change in Pension Value and			Total (\$)
				Non-Equity Incentive Plan Compensation (\$)	Nonqualified Deferred Compensation Earnings (\$)	All Other Compensation (\$)	
Anthony Rawlinson	\$ 16,000	\$ 24,000					\$ 40,000
Malcom Currie	\$ 16,000	\$ 24,000					\$ 40,000
Sten Langenius	\$ 8,000	\$ 12,000					\$ 20,000
Bjorn Ahlstrom	\$ 21,000	\$ 24,000					\$ 45,000
John Wallace	\$ 21,000	\$ 24,000					\$ 45,000
Don Dreyer	\$ 26,000	\$ 24,000					\$ 50,000

(1) Amounts determined in accordance with FAS 123R. Messrs. Rawlinson, Currie, Ahlstrom, Wallace and Dreyer received the following common stock grants during the first and second quarter of fiscal year 2006 (grant date fair value in parenthesis): 1,176 shares granted on March 31, 2006 (\$5,998) and 1,644 shares granted on June 30, 2006 (\$6,001). Messrs. Rawlinson, Currie, Langenius, Ahlstrom, Wallace and Dreyer received the following common stock grants during the third and fourth quarters of fiscal year 2006 (grant date fair value in parenthesis): 1,145 shares granted on September 29, 2006 (\$6,000); and 2,000 shares granted on December 29, 2006 (\$6,000).

As of December 31, 2006, the following Directors held the following number of Enova Common Stock: Mr. Rawlinson 578,615 shares; Dr. Currie 26,505 shares; Mr. Langenius 3,145 shares; Mr. Ahlstrom 13,837 shares; Mr. Wallace 14,429 shares; and Mr. Dreyer 25,144 shares.

**Compensation Committee Interlocks and Insider Participation**

The members of the Compensation Committee during fiscal year 2006 were Bjorn Ahlstrom and Malcom Currie. None of the members of the Compensation Committee was an Enova officer or employee in the past fiscal year. None of the Compensation Committee members has ever served as an Enova officer. No Enova executive officer served as a director or a member of the compensation committee of another entity, one of whose executive officers either served on our Board of Directors or on its Compensation Committee.

**Report of the Compensation Committee**

The Compensation Committee has submitted the following report for inclusion in this Annual Report on Form 10-K:

Our Committee has reviewed and discussed with management the Compensation Discussion and Analysis contained in this Annual Report on Form 10-K. Based on our Committee's review of and the discussions with management with respect to the Compensation Discussion and Analysis, our Committee recommended to the Board of Directors that the Compensation Discussion and Analysis be included in this Annual Report on Form 10-K for the fiscal year ended December 31, 2006 for filing with the SEC.

**COMPENSATION COMMITTEE**

Bjorn Ahlstrom  
Malcom Currie

The preceding Report of the Compensation Committee shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent that Enova specifically incorporated it by reference.

**Table of Contents****Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters**

The following table sets forth certain information known to us as of December 31, 2006 with respect to beneficial ownership of:

Each shareholder known to us to own more than 5% of our voting securities;

Each director and named executive officer holding equity securities; and

All directors and named executive officers together as a group holding equity securities.

Beneficial ownership is determined in accordance with the rule of the SEC. Shares of common stock subject to options currently exercisable or exercisable within 60 days of December 31, 2006 are deemed outstanding for calculating the percentage of outstanding share of the person holding these options, but are not deemed outstanding for the percentage of any other person. Percentage of beneficial ownership is based upon 14,816,000 shares of common stock outstanding as of December 31, 2006. To our knowledge, except as set forth in the footnotes to this table and subject to applicable community property laws, each person named in the table has sole voting and investment power with respect to the shares set forth opposite such person's name. Except as otherwise indicated, the address of each of the persons in this table is as follows: c/o Enova Systems, Inc., 19850 South Magellan Drive, Torrance, CA 90502.

Name	Shares Beneficially Owned(1)	Percentage of Shares Beneficially Owned(2)	Voting Percentage (3)
Jagen, Pty., Ltd. 9 Oxford Street, South Ybarra 3141 Melbourne, Victoria Australia	3,222,222(4)	21.75%	21.59%
Hyundai Heavy Industries, Co. 1 Cheona-Dong, Dong-Ku Ulsan, Korea	764,716	5.16%	5.12%
Anthony N. Rawlinson	578,615(5)	3.90%	3.97%
Edwin O. Riddell	55,824(6)	*	*
Corinne Bertrand	0(7)	*	*
Bjorn Ahlstrom	13,837	*	*
Dr. Malcolm Currie	26,505	*	*
Donald H. Dreyer	25,144	*	*
Sten Langenius	3,145	*	*
John R. Wallace	14,429	*	*
Mike Staran	23,000(8)	*	*
Delphi Delco Electronics	28,406(9)	*	*
Jean Schulz	29,558(10)	*	*
All directors and executive officers as a group (9 persons)	740,499	4.98%	4.7%

\* Indicates less than 1%

- (1) Number of Common Stock shares includes Series A Preferred Stock, Series B Preferred Stock and Common Stock shares issuable pursuant to stock options, warrants and other securities convertible into Common Stock beneficially held by the person or class in question which may be exercised or converted within 60 days after December, 31 2006.
- (2) The percentages are based on the number of shares of Common Stock, Series A Preferred Stock and Series B Preferred Stock owned by the shareholder divided by the sum of: (i) the total Common Stock outstanding, (ii) the Series A Preferred Stock owned by such shareholder; (iii) the Series B Preferred Stock owned by such shareholder; and (iv) Common Stock issuable pursuant to warrants, options and other convertible securities exercisable or convertible by such shareholder within sixty (60) days after December 31, 2006.

**Table of Contents**

- (3) The percentages are based on the number of shares of Common Stock, Series A Preferred Stock and/or Series B Preferred Stock owned by the shareholder divided by the sum of: (i) the total Common Stock outstanding, (ii) the total Series A Preferred Stock outstanding and (iii) the total Series B Preferred Stock outstanding. This percentage calculation has been included to show more accurately the actual voting power of each of the shareholders, since the calculation takes into account the fact that the outstanding Series A Preferred Stock and Series B Preferred Stock are entitled to vote together with the Common Stock as a single class on certain matters to be voted upon by the shareholders.
- (4) Based upon the Schedule 13D filed August 6, 2002, each of Jagen Pty. Ltd., Jagen Nominees, Pty. Dtd., and the B. Liberman Family Trust share voting and dispositive ownership of the post-split common stock reflected in the table. The B. Liberman Family Trust is the controlling shareholder of Jagen Pty. Ltd. and Jagen Nominees, Pty. Ltd. Is the trustee of the B. Liberman Family Trust. Jagen Pty. Ltd. is managed by Boris Liberman and Justin Liberman, who are father and son, neither of whom directly own any shares of Enova Systems, Inc.
- (5) The total number of common stock beneficially owned by Mr. Rawlinson includes 578,615 shares he owns directly and 13,702 shares held by The Global Value Investment Portfolio Management Pte. Ltd.. Mr. Rawlinson is managing director of The Global Value Investment Portfolio Management Pte. Ltd., for which he is deemed to exercise investment control. Mr. Rawlinson disclaims beneficial ownership of the shares held by The Global Value Investment Portfolio Management Pte. Ltd. Of the shares he directly owns, Mr. Rawlinson has pledged 555,555 shares of stock as of March 9, 2007.
- (6) Includes 30,000 shares of Common Stock issuable pursuant to stock options exercisable at a price of \$4.35.
- (7) As of December 31, 2006, Ms. Bertrand held only unexercisable options to acquire shares of Common Stock. She resigned as Chief Financial Officer as January 31, 2007.
- (8) This amount reflects shares of Common Stock issuable pursuant to exercisable stock options.
- (9) The number of shares shown represents the ownership of 639,360 shares of Series B Preferred Stock, each of which is convertible into 2/45 shares of Common Stock. These 639,360 shares represent 55% of the outstanding shares of Series B Preferred Stock.
- (10) The number of shares shown represents the ownership of 1,329,111 shares of Series A Preferred Stock, each of which is convertible into 1/45 share of Common Stock. These 1,329,111 shares represent 49% of the outstanding shares of Series A Preferred Stock.

**Equity Compensation Plan Information**

For the fiscal year ended December 31, 2006, we had two equity compensation plans: the 1996 Option Plan and the 2006 Equity Compensation Plan. Each plan was adopted with the approval of our shareholders. The 1996 Stock Option Plan has expired for purposes of issuing new grants. The 1996 Stock Option Plan, however, will continue to govern awards previously granted under that plan. The 2006 plan, adopted at our annual meeting in November 2006, has a total of 3,000,000 shares reserved for issuance. The following table provides information regarding our equity compensation plans as of December 31, 2006:

**Equity Compensation Plan Information**



<b>Plan category</b>	<b>Number of Securities to be Issued upon Exercise of Outstanding Options, Warrants and Rights (a)</b>	<b>Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights (b)</b>	<b>Number of Securities Remaining Available for Future Issuance under</b>
			<b>Equity Compensation Plans (Excluding Securities Reflected in Column (a)) (c)</b>
Equity compensation plans approved by security holders	162,000	\$ 4.43	3,000,000
Equity compensation plans not approved by security holders			
<b>Total</b>	162,000	\$ 4.43	3,000,000

**Table of Contents**

**Item 13. *Certain Relationships and Related Transactions, and Director Independence***

The following is the only transaction, since January 1, 2006 or currently proposed, in which we were or are to be a participant and the amount involved exceeds \$120,000 and in which any related person, as defined under SEC rules, will have a direct or indirect material interest:

During 2006, we purchased from Hyundai Heavy Industries, Co. (HHI) approximately \$404,115 in components, materials and services for manufacture of our drive systems and power management systems. These purchases were made on terms and conditions equal to or better than our standard commercial terms with other vendors. At the year ended December 31, 2006, we had approximately \$138,000 in outstanding payables to HHI.

Daniel Riddell, the son of our Chief Executive Officer, is a majority owner of a website consulting firm, which provides services (branding) to the Company. These services were utilized on terms and conditions equal to or better than our standard commercial terms with other vendors. The Company paid consulting fees and expenses to this firm in the amount of approximately \$149,000 in 2006.

Currently, the Board of Directors reviews related party arrangements and has approval authority. The Board will consider the business case for the relationship and issue their approval. Given the relatively small size of our company and transparency of transactions within the company, we believe our management and audit committee is positioned to identify potentially related party transactions. While the policy is not currently in writing, the Board of Directors intends to formalize the policy soon after we file this Form 10-K.

**Director Independence**

Each of the following directors are independent under applicable AMEX rules: Messrs. Messrs. Ahlstrom, Currie, Langenius Dreyer, Rawlinson, and Wallace. These persons represent a majority of the board of directors. All the members of the compensation, nominating or audit committees are independent. Messrs. Ahlstrom and Currie constitute the compensation committee. Messrs. Rawlinson and Currie constitute the nominating committee. Messrs. Ahlstrom, Dreyer, and Wallace constitute the audit committee.

**Item 14. *Principal Accountant Fees and Services***

PMB Helin Donovan was engaged in January 2007 to audit our financial statements for the fiscal year ended December 31, 2006. PMB Helin Donovan replaced Singer Lewak Greenbaum and Goldstein LLP as our auditors. Singer Lewak audited our financial statements for the fiscal year ended December 31, 2005, having previously been engaged to audit our financial statements for the years ended December 31, 2004 and 2003.

Additionally, Enova engaged Windes & McClaughry Accountancy Corporation to review Enova's second and third quarter 2006 Form's 10-Q.

***Audit Fees***

Having been engaged subsequent to the end of the year, PMB Helin Donovan has not billed us for professional services in 2006.

The aggregate fees billed during the last fiscal year by Windes for the review of Enova's second and third quarter 2006 Form's 10-Q were \$69,000.

The aggregate fees billed for professional services rendered by Singer Lewak for the audit of Enova's financial statements for the fiscal year ended December 31, 2005 and for its review of financial statements included in Enova's Forms 10-Q during the last two fiscal years and other services that are normally provided by an accountant in connection with statutory and regulatory filings or engagements during such fiscal years were \$143,000. In 2006, in conjunction with the review of Enova's First Quarter 2006 Form 10-Q, Enova was billed \$38,000 by Singer Lewak.

**Table of Contents**

***Audit-Related Fees***

PMB Helin Donovan did not perform for Enova any assurance and related services that were reasonably related to the performance of the audit of our financial statements for the fiscal year ended December 31, 2006.

***Tax Fees***

In 2006, Enova paid Windes & McClaughry \$5,000 for tax preparation services. In 2005, we paid Singer Lewak \$5,000 for tax preparation services. We did not make any further payments to Windes and Singer Lewak, nor any payments to PMB Helin Donovan, in fiscal 2005 or fiscal 2006 with respect to tax compliance, tax advice, or tax planning services

***All Other Fees***

Neither PMB Helin Donovan LLP, nor Singer Lewak performed any other services for fees other than audit fees in fiscal 2006 or 2005.

**Audit Committee Pre-Approval of Audit and Permissible Non-Audit Services of Independent Auditors**

The Audit Committee pre-approves all audit and permissible non-audit services provided by the independent auditors. These services may include audit services, audit-related services, tax services and other services. Pre-approval is provided for up to one year, and any pre-approval is detailed as to the particular service or category of services and is subject to a specific budget. The independent auditors and management are required to periodically report to the Audit Committee regarding the extent of services provided by the independent auditors in accordance with this pre-approval, and the fees for the services performed to date. The Audit Committee may also pre-approve particular services on a case-by-case basis.

**PART IV**

**Item 15. *Exhibits, Financial Statement Schedules, and Reports on Form 8-K***

**(a) 1. Financial Statements**

The financial statements filed as a part of this report are identified in the Index to Financial Statements on page F-1.

**(a) 2. Financial Statement Schedule**

No financial statement schedules are filed as a part of this report.

**(a)3. Exhibits**

<b>Exhibit #</b>	<b>Description</b>
3.1	Amended and Restated Articles of Incorporation of the Registrant*
3.2	Amended and Restated Bylaws of the Registrant*
10.1	Form of Indemnification Agreement (filed as Exhibit 10.26 to our Quarterly Report on Form 10-Q for the quarter ended June 30, 2005, as filed on August 15, 2005, and incorporated herein by reference)

Edgar Filing: ENOVA SYSTEMS INC - Form 10-K

- 10.2 Form of Security Agreement made as of May 31, 1995, between Enova and Credit Managers Association of California, Trustee (filed as Exhibit 10.85 to our Quarterly Report on Form 10-Q for the quarter ended April 30, 1996, as filed on June 14, 1996, and incorporated herein by reference).
- 10.3 Stock Purchase Agreement and Technology License Agreement dated February 27, 1997, by and between Enova and Hyundai Motor Company and Hyundai Electronics Industries Co., Ltd. (filed as Exhibit 10.98 to our Quarterly Report on Form 10-Q for fiscal quarter ended January 31, 1997, as filed on March 14, 1997, and incorporated herein by reference).

**Table of Contents**

<b>Exhibit #</b>	<b>Description</b>
10.4	Agreement (redacted) between Enova and Eco Power Technology, dated June 12, 2001, to produce and sell power drive systems (filed as Exhibit 10.19 to Amendment No. 6 to our Registration Statement on Form S-1, No. 333-85308, and incorporated herein by reference).
10.5	Agreement (redacted) between Enova and Tomoe Electro-Mechanical Engineering and Manufacturing, Inc., dated November 19, 2001, to produce and sell power drive systems (filed as Exhibit 10.20 to Amendment No. 6 to our Registration Statement on Form S-1, No. 333-85308, and incorporated herein by reference).
10.6	Agreement (redacted) between Enova and Moriah Corporation, dated January 22, 2002, to produce and sell power drive systems (filed as Exhibit 10.21 to Amendment No. 6 to our Registration Statement on Form S-1, No. 333-85308, and incorporated herein by reference).
10.7	Joint Venture Agreement (redacted) to form advanced research and development corporation, dated as of March 18, 2003, by and between Enova and Hyundai Heavy Industries Co. Ltd. (filed as Exhibit 10.24 to our Quarterly Report on Form 10-Q for Three Months ended March 31, 2003 and incorporated herein by reference).
10.8	Warrant and Common Stock Purchase Agreement dated June 3, 2006 between Enova and Eruca Limited (filed as Exhibit 10.24 to our Quarterly Report on Form 10-Q for the period ended June 30, 2005 and incorporated herein by reference)
10.9	Form of Warrant Agreement dated June 3, 2005 between Enova and Eruca Limited (filed as Exhibit 10.25 to our Quarterly Report on Form 10-Q for the period ended June 30, 2005 and incorporated herein by reference)
10.10	Waiver and Termination of Shareholders Agreement dated July 16, 2005 between Enova and Jagen Pty, Ltd (filed as Exhibit 10.27 to our Quarterly Report on Form 10-Q for the period ended September 30, 2006 and incorporated herein by reference)
10.11	Form of Employment Agreement dated May 1, 2005 between Registrant and Edwin Riddell, Chief Executive Officer and President of the Registrant (Filed as Exhibit 10.22 to our Quarterly Report on Form 10-Q for the period ended March 31, 2005 and incorporated herein by reference)
23.1	Consents of Singer Lewak Greenbaum and Goldstein LLP
23.2	Consent of PMB Helin Donovan
31.1*	Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act Of 2002
31.2*	Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32*	Certification Pursuant to 18 U.S.C. Section 1350

\* Filed herewith.

**Table of Contents****SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) 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.

**ENOVA SYSTEMS, INC.**

By: /s/ Edwin O. Riddell

Edwin O. Riddell,  
Chief Executive Officer & President

Dated: April 2, 2007

**POWER OF ATTORNEY**

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Edwin O. Riddell, with full power to act alone, his true and lawful attorney-in-fact and agent, with full power of substitution for him and in his name, place and stead, in any and all capacities, to sign any and all amendments to the annual report on Form 10-K, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent may lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, each of the undersigned has executed this Power of Attorney as of the date indicated. Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed by the following persons on behalf of the registrant and in the capacities and on the date indicated.

<b>Signature</b>	<b>Title</b>	<b>Date</b>
/s/ Edwin O. Riddell Edwin O. Riddell	Chief Executive Officer, President, and Director (Principal Executive Officer)	April 2, 2007
/s/ Jarett Fenton Jarett Fenton	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	April 2, 2007
/s/ Anthony N. Rawlinson Anthony N. Rawlinson	Director, Chairman of the Board	April 2, 2007
/s/ Bjorn Ahlstrom Bjorn Ahlstrom	Director	April 2, 2007
/s/ Malcolm Currie	Director	April 2, 2007

Malcolm Currie



**Table of Contents**

<b>Signature</b>	<b>Title</b>	<b>Date</b>
/s/ Donald H. Dreyer Donald H. Dreyer	Director	April 2, 2007
/s/ Sten Langenius Sten Langenius	Director	April 2, 2007
/s/ John R. Wallace John R. Wallace	Director	April 2, 2007

**Table of Contents**

**ENOVA SYSTEMS, INC.  
FINANCIAL STATEMENTS  
FOR THE YEARS ENDED  
DECEMBER 31, 2006, 2005, AND 2004**

**Table of Contents**

**ENOVA SYSTEMS, INC.**

**CONTENTS**

**December 31, 2006 and 2005**

	<b>Page</b>
<b><u>REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM</u></b>	F-1 and F-2
<b><u>FINANCIAL STATEMENTS</u></b>	
<u>Balance Sheets</u>	F-3
<u>Statements of Operations</u>	F-4
<u>Statements of Stockholders' Equity</u>	F-5
<u>Statements of Cash Flows</u>	F-6
<u>Notes to Financial Statements</u>	F-7
<b><u>SELECTED QUARTERLY DATA (Unaudited)</u></b>	F-27

**Table of Contents**

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Board of Directors and Stockholders  
Enova Systems, Inc.  
Torrance, California

We have audited the balance sheet of Enova Systems, Inc. as of December 31, 2006, and the related statements of operations, stockholders' equity and cash flows for the year ended December 31, 2006. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statement is free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statement. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Enova Systems, Inc. as of December 31, 2006, and the results of its operations and its cash flows for the year ended December 31, 2006, in conformity with U.S. generally accepted accounting principles.

As discussed in Note 2 to the consolidated financials statements, the Company changed its method of accounting for stock-based compensation upon adoption of Financial Accounting Standards No. 123(R), Share-Based Payment.

PMB Helin Donovan, LLP

Irvine, California  
March 14, 2007

F-1

---

**Table of Contents**

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Board of Directors and Stockholders  
Enova Systems, Inc.  
Torrance, California

We have audited the balance sheet of Enova Systems, Inc. as of December 31, 2005, and the related statements of operations, stockholders' equity and cash flows for each of the two years in the period ended December 31, 2005. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provided a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Enova Systems, Inc. as of December 31, 2005, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2005, in conformity with U.S. generally accepted accounting principles.

SINGER LEWAK GREENBAUM & GOLDSTEIN LLP

Los Angeles, California  
March 9, 2006

**Table of Contents****ENOVA SYSTEMS, INC.****BALANCE SHEETS  
December 31, 2006 and 2005**

	<b>2006</b>	<b>2005</b>
<b>ASSETS</b>		
<b>Current assets</b>		
Cash and cash equivalents	\$ 5,612,000	\$ 16,187,000
Short term investment	5,000,000	
Accounts receivable, net	358,000	2,173,000
Inventories and supplies, net	1,704,000	1,016,000
Prepaid expenses and other current assets	708,000	182,000
Total current assets	13,382,000	19,558,000
Property and equipment, net	627,000	576,000
Ownership interest in joint venture company	1,647,000	1,649,000
Intangible assets	74,000	190,000
<b>Total assets</b>	<b>\$ 15,730,000</b>	<b>\$ 21,973,000</b>
<b>LIABILITIES AND STOCKHOLDERS EQUITY</b>		
<b>Current liabilities</b>		
Accounts payable	\$ 382,000	\$ 1,396,000
Deferred revenues	399,000	
Accrued payroll and related expense	220,000	195,000
Other accrued expenses	664,000	302,000
Current portion of notes payable	71,000	42,000
Total current liabilities	1,736,000	1,935,000
Accrued interest payable	735,000	1,113,000
Notes payable, net of current portion	1,295,000	2,321,000
Total liabilities	\$ 3,766,000	\$ 5,369,000
<b>Stockholders equity</b>		
Series A convertible preferred stock no par value 30,000,000 shares authorized 2,652,000 and 2,674,000 shares issued and outstanding Liquidating preference at \$0.60 per share, aggregating \$1,591,000 and \$1,604,000	1,679,000	1,679,000
Series B convertible preferred stock no par value 5,000,000 shares authorized 1,185,000 and 1,217,000 shares issued and outstanding Liquidating preference at \$2 per share	2,432,000	2,434,000
Common Stock, no par value 750,000,000 shares authorized 14,816,000 and 14,783,000 shares issued and outstanding	109,460,000	109,323,000

Edgar Filing: ENOVA SYSTEMS INC - Form 10-K

Common stock issuable	36,000	30,000
Stock notes receivable	(1,176,000)	(1,176,000)
Additional paid-in capital	6,955,000	6,900,000
Accumulated deficit	(107,422,000)	(102,586,000)
Total stockholders' equity	11,964,000	16,604,000
<b>Total liabilities and stockholders' equity</b>	<b>\$ 15,730,000</b>	<b>\$ 21,973,000</b>

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

F-3

---

Table of Contents

## ENOVA SYSTEMS, INC.

## STATEMENTS OF OPERATIONS

For the Years Ended December 31, 2006, 2005, 2004

	2006	2005	2004
<b>Net revenues</b>			
Research and development contracts	\$ 439,000	\$ 1,555,000	\$ 1,070,000
Production	1,227,000	4,529,000	1,484,000
Total net revenues	1,666,000	6,084,000	2,554,000
<b>Cost of revenues</b>			
Research and development contracts	1,046,000	1,188,000	499,000
Production	1,854,000	4,813,000	1,627,000
Writedown Ford Think program inventory			113,000
Total cost of revenues	2,900,000	6,001,000	2,239,000
<b>Gross profit (loss)</b>	(1,234,000)	83,000	315,000
<b>Operating expenses</b>			
Research and development	1,363,000	804,000	925,000
Selling, general & administrative	4,178,000	2,870,000	2,325,000
Total operating expenses	5,541,000	3,674,000	3,250,000
<b>Other income and (expense)</b>			
Interest and financing fees, net	550,000	13,000	(255,000)
Equity loss share of joint venture company losses	(3,000)	(118,000)	(192,000)
Debt extinguishment	920,000	1,011,000	
Interest extinguishment	472,000	558,000	
Total other income and (expense)	1,939,000	1,464,000	(447,000)
<b>Loss from operations</b>	(4,836,000)	(2,127,000)	(3,382,000)
<b>Net loss</b>	\$ (4,836,000)	\$ (2,127,000)	\$ (3,382,000)
<b>Basic and diluted loss per share</b>	\$ (0.33)	\$ (0.18)	\$ (0.38)
<b>Weighted-average number of shares outstanding</b>	14,802,443	11,664,320	8,831,893

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





Table of Contents

## ENOVA SYSTEMS, INC.

STATEMENTS OF STOCKHOLDERS EQUITY  
For the Years Ended December 31, 2006, 2005, 2004

<u>Convertible Preferred Stock</u> <u>Amount</u>	<u>Series B</u>		<u>Common Stock</u>		<u>Common Stock</u> <u>Subscribed</u>		<u>Stock</u> <u>Notes</u> <u>Receivable</u>	<u>Additional</u> <u>Paid-In</u> <u>Capital</u>
	<u>Shares</u>	<u>Amount</u>	<u>Shares</u>	<u>Amount</u>	<u>Shares</u>	<u>Amount</u>		
337,000	1,217,000	\$ 2,434,000	8,407,000	\$ 86,054,000	25,000	\$ 60,000	\$ (1,203,000)	\$ 7,031,000
(63,000)			2,000	63,000				
			613,000	3,450,000			27,000	
			8,000	60,000	(25,000)	(60,000)		
			188,000	783,000				
			7,000	39,000				(39,000)
			3,000	16,000	27,000	165,000		(92,000)
774,000	1,217,000	\$ 2,434,000	9,228,000	\$ 90,465,000	27,000	\$ 165,000	\$ (1,176,000)	\$ 6,900,000
(95,000)			1,000	95,000				
			5,473,000	18,361,000				
			56,000	293,000	(27,000)	(165,000)		
			25,000	109,000				
					8,000	30,000		

Edgar Filing: ENOVA SYSTEMS INC - Form 10-K

579,000	1,217,000	\$ 2,434,000	14,783,000	\$ 109,323,000	8,000	\$ 30,000	\$ (1,176,000)	\$ 6,900,000
---------	-----------	--------------	------------	----------------	-------	-----------	----------------	--------------

(32,000)	2,000	1,000	2,000					
----------	-------	-------	-------	--	--	--	--	--

		29,000	125,000	(8,000)	(30,000)			
		3,000	10,000					

55,000

				12,000	36,000			
--	--	--	--	--------	--------	--	--	--

579,000	1,185,000	\$ 2,432,000	14,816,000	\$ 109,460,000	12,000	\$ 36,000	\$ (1,176,000)	\$ 6,955,000
---------	-----------	--------------	------------	----------------	--------	-----------	----------------	--------------

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

F-5

---

**Table of Contents****ENOVA SYSTEMS, INC.****STATEMENTS OF CASH FLOWS**  
**For the Years Ended December 31, 2006, 2005, 2004**

	2006	2005	2004
<b>Cash flows from operating activities</b>			
Net loss	\$ (4,836,000)	\$ (2,127,000)	\$ (3,382,000)
Adjustments to reconcile net loss to net cash used in operating activities			
Debt extinguishment	(920,000)	(1,011,000)	
Interest extinguishment	(472,000)	(558,000)	
Depreciation and amortization	419,000	304,000	377,000
Equity in losses of equity method investee	3,000	118,000	192,000
Issuance of common stock for services	132,000	158,000	89,000
Issuance of common stock for bonuses	10,000	109,000	
Stock option expense	55,000		
(Increase) decrease in			
Accounts receivable	1,815,000	(1,651,000)	281,000
Inventory and supplies	(688,000)	20,000	570,000
Note receivable related party			8,000
Prepaid expenses and other current assets	(526,000)	122,000	(226,000)
Other assets		(2,000)	
Increase (decrease) in			
Accounts payable	(1,014,000)	1,330,000	(702,000)
Accrued expenses	387,000	290,000	(11,000)
Deferred revenues	399,000	(392,000)	392,000
Accrued interest payable	92,000	293,000	256,000
Net cash used in operating activities	(5,144,000)	(2,997,000)	(2,156,000)
<b>Cash flows from investing activities</b>			
Purchases of short-term securities	\$ (5,000,000)	\$	\$
Purchases of property and equipment	(259,000)	(384,000)	(175,000)
Net cash used in investing activities	(5,259,000)	(384,000)	(175,000)
<b>Cash flows from financing activities</b>			
Net increase from line of credit	\$	\$	\$ 109,000
Payment on notes payable and capital lease obligations	(172,000)	(368,000)	(33,000)
Proceeds from notes payable			40,000
Net Proceeds from sales of common stock		18,361,000	2,450,000
Proceeds from exercise of stock options			783,000
Payments on stock notes receivable			27,000
Net cash provided by (used in) financing activities	(172,000)	17,993,000	3,376,000

Edgar Filing: ENOVA SYSTEMS INC - Form 10-K

Net increase (decrease) in cash and cash equivalents	(10,575,000)	14,612,000	1,045,000
Cash and cash equivalents, beginning of year	16,187,000	1,575,000	530,000
Cash and cash equivalents, end of year	\$ 5,612,000	\$ 16,187,000	\$ 1,575,000
Interest paid	\$ 1,400	\$ 2,000	\$ 10,000
Income taxes paid	\$ 800	\$	\$
Conversion of preferred stock to common stock	\$ 2,000	\$ 94,000	\$ 63,000
Acquired investment under common stock purchase	\$	\$	\$ 1,000,000
Offering costs on common stock purchases	\$	\$	\$ 93,000
Common Stock issued for purchase of options	\$	\$	\$ 39,000
Assets acquired through a financing agreement	\$ 95,000	\$	\$

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

F-6

---

**Table of Contents**

**ENOVA SYSTEMS, INC.**

**Notes to Financial Statements**

**December 31, 2006**

**NOTE 1 Organization and Line of Business**

**General**

Enova Systems, Inc., (the Company), is a California corporation that develops drive trains and related components for electric, hybrid electric, and fuel cell systems for mobile and stationary applications. The Company retains development and manufacturing rights to many of the technologies created, whether such research and development is internally or externally funded. The Company develops and sells components in the United States and Asia, and sells components in Europe.

**Liquidity**

The Company has sustained recurring losses and negative cash flows from operations. Over the past year, the Company's growth has been funded through a combination of private equity, bank debt, and lease financing. As of December 31, 2006, the Company had approximately \$5.6 million of cash and \$5 million in short-term investments. At December 31, 2006, the Company had a net working capital of approximately \$11.7 million as compared to \$17.7 million at December 31, 2005, representing a decrease of \$6 million. Additionally, the Company has incurred losses since its inception as infrastructure and development costs were incurred in advance of obtaining customers. The Company believes that it currently has sufficient cash and financing commitments to meet its funding requirements over the next year. However, the Company has experienced and continues to experience recurring operating losses and negative cash flows from operations, as well as an ongoing requirement for substantial additional capital investment. The Company expects that it will need to raise substantial additional capital to accomplish its business plan over the next several years. The Company is striving to expand its presence in the marketplace and achieve operating efficiencies.

**Joint Venture Hyundai-Enova Innovative Technology Center**

In June 2003, the Company and Hyundai Heavy Industries of Korea (HHI) commenced operations of Hyundai-Enova Innovative Technology Center, Inc. (the ITC), a 60/40 joint venture to develop hybrid drive technology. ITC is to be domiciled in Torrance, California. Concurrent with the formation of the joint venture, the Company entered into a stock purchase agreement with HHI.

Pursuant to the stock purchase agreement HHI agreed to make a \$3 million investment in the Company through the purchase of shares of the Company's authorized and unissued common stock pursuant to Regulation D of the Securities Act of 1933. This investment was made in two installments of \$1.5 million each. The first installment was made in June 2003 upon incorporation of the ITC and in consideration for the issuance to HHI by the Company of 23,076,923 shares of common stock at \$0.065 per share.

The second installment was made in September 2004 in consideration for the issuance to HHI by the Company of 11,335,315 shares of common stock at \$0.1323 per share.

The Company invested \$1 million of each installment into the ITC in consideration for the issuance to the Company of a 40% equity interest in the ITC (the balance of the installments, in the amount of \$500,000 each, is to be retained by the Company). HHI acquired a 60% equity interest in ITC by investing \$3 million in the ITC in two installments of

\$1.5 million each, to be made concurrently with the two installment payments to be paid by HHI for the Company's common stock. HHI and the Company have invested an aggregate of \$5 million in the ITC.

**NOTE 2 Summary of Significant Accounting Policies**

**Revenue Recognition**

The Company manufactures proprietary products and other products based on design specifications provided by its customers.

F-7

---

**Table of Contents**

**ENOVA SYSTEMS, INC.**

**Notes to Financial Statements (Continued)**

The Company recognizes revenue only when all of the following criteria have been met:

- Persuasive evidence of an arrangement exists;
- Delivery has occurred or services have been rendered;
- The fee for the arrangement is fixed or determinable; and
- Collectibility is reasonably assured.

*Persuasive Evidence of an Arrangement* The Company documents all terms of an arrangement in a written contract signed by the customer prior to recognizing revenue.

*Delivery Has Occurred or Services Have Been Performed* The Company performs all services or delivers all products prior to recognizing revenue. Professional consulting and engineering services are considered to be performed when the services are complete. Equipment is considered delivered upon delivery to a customer's designated location.

*The Fee for the Arrangement is Fixed or Determinable* Prior to recognizing revenue, a customer's fee is either fixed or determinable under the terms of the written contract. Fees professional consulting services, engineering services and equipment sales are fixed under the terms of the written contract. The customer's fee is negotiated at the outset of the arrangement and is not subject to refund or adjustment during the initial term of the arrangement.

*Collectibility is Reasonably Assured* The Company determines that collectibility is reasonably assured prior to recognizing revenue. Collectibility is assessed on a customer-by-customer basis based on criteria outlined by management. New customers are subject to a credit review process, which evaluates the customer's financial position and ultimately its ability to pay. The Company does not enter into arrangements unless collectibility is reasonably assured at the outset. Existing customers are subject to ongoing credit evaluations based on payment history and other factors. If it is determined during the arrangement that collectibility is not reasonably assured, revenue is recognized on a cash basis. Additionally, in accordance with the Securities and Exchange Commission's Staff Accounting Bulletin No. 104 ( SAB 104 ), amounts received upfront for engineering or development fees under multiple-element arrangements are deferred and recognized over the period of committed services or performance, if such arrangements require the Company to provide on-going services or performance. All amounts received under collaborative research agreements or research and development contracts are nonrefundable, regardless of the success of the underlying research.

Revenues from milestone payments are recognized when earned, as evidenced by written acknowledgment from the customer, provided that (i) the milestone event is substantive and its achievement was not reasonably assured at the inception of the agreement, and (ii) our performance obligations after the milestone achievement will continue to be funded by our collaborator at a comparable level to that before the milestone achievement. If both of these criteria are not met, the milestone payment is recognized over the remaining minimum period of our performance obligations under the agreement.



Pursuant to Emerging Issues Task Force ( EITF ) of the Financial Accounting Standards Board Issue 00-21. EITF Issue 00-21 addressed the accounting for arrangements that may involve the delivery or performance of multiple products, services and/or rights to use assets. Specifically, Issue 00-21 requires the recognition of revenue from milestone payments over the remaining minimum period of performance obligations. As required, we apply the principles of Issue 00-21 to multiple element agreements.

The Company recognizes engineering and construction contract revenues using the percentage-of-completion method, based primarily on contract costs incurred to date compared with total estimated contract costs. Customer-furnished materials, labor, and equipment, and in certain cases subcontractor materials, labor, and equipment, are included in revenues and cost of revenues when management believes that the company is responsible for the ultimate acceptability of the project. Contracts are segmented between types of services, such as engineering and

**Table of Contents**

**ENOVA SYSTEMS, INC.**

**Notes to Financial Statements (Continued)**

construction, and accordingly, gross margin related to each activity is recognized as those separate services are rendered.

Changes to total estimated contract costs or losses, if any, are recognized in the period in which they are determined. Claims against customers are recognized as revenue upon settlement. Revenues recognized in excess of amounts billed are classified as current assets under contract work-in-progress. Amounts billed to clients in excess of revenues recognized to date are classified as current liabilities under advance billings on contracts.

Changes in project performance and conditions, estimated profitability, and final contract settlements may result in future revisions to engineering and development contract costs and revenue.

**Deferred Revenue**

At December 31, 2006, and December 31, 2005, deferred revenue totaled \$399,000 and \$0 respectively.

**Comprehensive Income**

The Company utilizes Statement of Financial Accounting Standards ( SFAS ) No. 130, Reporting Comprehensive Income. This statement establishes standards for reporting comprehensive income and its components in a financial statement. Comprehensive income as defined includes all changes in equity (net assets) during a period from non-owner sources. Examples of items to be included in comprehensive income, which are excluded from net income, include foreign currency translation adjustments, minimum pension liability adjustments, and unrealized gains and losses on available-for-sale securities. Comprehensive income is not presented in the Company's financial statements since the Company did not have any changes in equity from non-owner sources.

**Cash and Cash Equivalents**

Short-term, highly liquid investments with an original maturity of three months or less are considered cash equivalents.

**Short-Term Investments**

The Company maintains a portfolio of marketable investment securities. The securities have a maturity of one year or less and include certificates of deposit. These securities are carried at cost which approximates market.

**Accounts Receivable**

Trade accounts receivable are recorded at the invoiced amount and do not bear interest. The allowance for doubtful accounts is the Company's best estimate of the amount of probable credit losses in the Company's existing accounts receivable; however, changes in circumstances relating to accounts receivable may result in a requirement for additional allowances in the future. The Company determines the allowance based on historical write-off experience, current market trends and, for larger accounts, the ability to pay outstanding balances. The Company continually reviews its allowance for doubtful accounts. Past due balances over 90 days and other higher risk amounts are reviewed individually for collectibility. In addition, the Company maintains a general reserve for all invoices by applying a percentage based on the age category. Account balances are charged against the allowance after all

collection efforts have been exhausted and the potential for recovery is considered remote.

**Allowance for Doubtful Accounts**

The Company maintains allowances for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments. A considerable amount of judgment is required in assessing the ultimate realization of accounts receivable including the current credit-worthiness of each customer. If the financial condition of the Company's customers were to deteriorate, resulting in an impairment of their ability to make

**Table of Contents**

**ENOVA SYSTEMS, INC.**

**Notes to Financial Statements (Continued)**

payments, additional allowances may be required. As of December 31, 2006 and 2005, the Company maintained a reserve of \$261,000 and \$266,000 of potentially doubtful accounts receivable respectively. Bad debt expenses totaled \$-, \$267,000, and \$98,000 for the years ended December 31, 2006, 2005, and 2004, respectively.

**Inventories and Supplies**

Inventories and supplies are comprised of materials used in the design and development of electric, hybrid electric, and fuel cell drive systems, and other power and ongoing management and control components for production and ongoing development contracts, and is stated at the lower of cost (first-in, first-out) or market (net realizable value).

**Property and Equipment**

Property and equipment are stated at cost and depreciated over the estimated useful lives of the related assets, which range from three to seven years using the straight-line method for financial statement purposes. The Company uses other depreciation methods (generally, accelerated depreciation methods) for tax purposes where appropriate. Amortization of leasehold improvements is computed using the straight-line method over the shorter of the remaining lease term or the estimated useful lives of the improvements.

Repairs and maintenance are expensed as incurred. Expenditures that increase the value or productive capacity of assets are capitalized. When property and equipment are retired, sold, or otherwise disposed of, the asset's cost and related accumulated depreciation are removed from the accounts and any gain or loss is included in operations.

**Assets Held under Capital Leases**

Assets held under capital leases are recorded at the lower of the net present value of the minimum lease payments or the fair value of the leased asset at the inception of the lease. Amortization expense is computed using the straight-line method over the shorter of the estimated useful lives of the assets or the period of the related lease.

**Impairment of Long-Lived Assets**

The Company assesses the impairment of its long-lived assets periodically in accordance with the provisions of Statement of Financial Accounting Standards ( SFAS ) 144, Accounting for the Impairment and Disposal of Long-Lived Assets .

The Company reviews the carrying value of property and equipment for impairment whenever events and circumstances indicate that the carrying value of an asset may not be recoverable from the estimated future cash flows expected to result from its use and eventual disposition. In cases where undiscounted expected future cash flows are less than the carrying value, an impairment loss is recognized equal to an amount by which the carrying value exceeds the fair value of assets. The factors considered by management in performing this assessment include current operating results, trends, and prospects, as well as the effects of obsolescence, demand, competition, and other economic factors. Long-lived assets that management commits to sell or abandon are reported at the lower of carrying amount or fair value less cost to sell.

**Equity Method Investment**

Investment in ITC, a joint venture (see Note 1,) is accounted for by the equity method. Under the equity method of accounting, an Investee company's accounts are not reflected within the Company's Consolidated Balance Sheets and Statements of Operations; however, the Company's share of the earnings or losses of the Investee company is reflected in the caption Equity loss share of joint venture company losses in the Consolidated Statements of Operations. The Company's carrying value in an equity method joint venture company is reflected in the caption Ownership interests in joint venture in the Company's Consolidated Balance Sheets.

F-10

---

**Table of Contents**

**ENOVA SYSTEMS, INC.**

**Notes to Financial Statements (Continued)**

**Patents**

Patents are measured based on their fair values. Patents are being amortized on a straight-line basis over a period of 20 years and are stated net of accumulated amortization of \$19,000 and \$9,000 at December 31, 2006 and 2005, respectively.

**Development Agreement**

In June 2001, the Company entered into an agreement to develop and manufacture a high power, high voltage conversion module for Ford Motor Company's (Ford) fuel cell vehicle. The purchase price for the five-year agreement was paid through the issuance of warrants, which had a fair value of \$577,000. The fair value was determined using the Black-Scholes option pricing model. This amount was recorded as an intangible asset and is being amortized over the period of its estimated benefit period of 5 years. At December 31, 2006, this agreement has been fully amortized. The amount is stated net of accumulated amortization of \$577,000 and \$472,000 at December 31, 2006 and 2005, respectively.

**Impairment of Intangible Assets**

The Company evaluates the recoverability of identifiable intangible assets whenever events or changes in circumstances indicate that an intangible asset's carrying amount may not be recoverable. Such circumstances could include, but are not limited to: (1) a significant decrease in the market value of an asset, (2) a significant adverse change in the extent or manner in which an asset is used, or (3) an accumulation of costs significantly in excess of the amount originally expected for the asset. The Company measures the carrying amount of the asset against the estimated undiscounted future cash flows associated with it. Should the sum of the expected future net cash flows be less than the carrying value of the asset being evaluated, an impairment loss would be recognized. The impairment loss would be calculated as the amount by which the carrying value of the asset exceeds its fair value. The fair value is measured based on quoted market prices, if available. If quoted market prices are not available, the estimate of fair value is based on various valuation techniques, including the discounted value of estimated future cash flows. The evaluation of asset impairment requires the Company to make assumptions about future cash flows over the life of the asset being evaluated. These assumptions require significant judgment and actual results may differ from assumed and estimated amounts. During the year ended December 31, 2006, 2005 and 2004, the Company did not have any impairment loss related to an intangible asset (see Note 6).

**Fair Value of Financial Instruments**

The carrying amount of financial instruments, including cash and cash equivalents, accounts receivable, accounts payable and accrued expenses, approximate fair value due to the short maturity of these instruments. The carrying value of all other financial instruments is representative of their fair values. The Company's short and long term debt may be less than the carrying value since there is no readily ascertainable market for the debt given the financial position of the Company.

**Stock-Based Compensation**

On January 1, 2006, the Company adopted SFAS 123 (revised 2004), *Share-Based Payment* ( SFAS 123(R) ), which requires the measurement and recognition of compensation expense for all share-based awards made to employees and directors, including employee stock options and shares issued through its employee stock purchase plan, based on estimated fair values. In March 2005, the Securities and Exchange Commission issued Staff Accounting Bulletin 107 ( SAB 107 ) relating to SFAS 123(R). The Company has applied the provisions of SAB 107 in its adoption of SFAS 123(R). The Company adopted SFAS 123(R) using the modified prospective transition method, which requires the application of the accounting standard as of the beginning in 2006. The Company financial statements as of and for the year ended December 31, 2006 reflect the impact of SFAS 123(R).

**Table of Contents**

**ENOVA SYSTEMS, INC.**

**Notes to Financial Statements (Continued)**

In accordance with the modified prospective transition method, The Company financial statements for prior periods do not include the impact of SFAS 123(R).

Stock compensation expense recognized during the period is based on the value of share-based awards that are expected to vest during the period. Stock compensation expense recognized in The Company statement of operations for 2006 includes compensation expense related to share-based awards granted prior to January 1, 2006 that vested during the current period based on the grant date fair value estimated in accordance with the pro forma provisions of SFAS 123. Stock compensation expense in 2006 also includes compensation expense for the share-based awards granted subsequent to January 1, 2006 based on the grant date fair value estimated in accordance with the provisions of SFAS 123(R).

The Company determination of estimated fair value of share-based awards utilizes the Black-Scholes option-pricing model. The Black-Scholes model is affected by The Company stock price as well as assumptions regarding certain highly complex and subjective variables. These variables include, but are not limited to, The Company expected stock price volatility over the term of the awards and actual and projected employee stock option exercise behaviors. Prior to the adoption of SFAS 123(R), The Company accounted for stock-based awards to employees and directors using the intrinsic value method in accordance with Accounting Principles Board Opinion 25, *Accounting for Stock Issued to Employees* ( APB 25 ). Under the intrinsic value method that was used to account for stock-based awards prior to January 1, 2006, which had been allowed under the original provisions of SFAS 123, compensation expense is recorded on the date of grant if the current market price of the underlying stock exceeded the exercise price. Any compensation expense is recorded on a straight-line basis over the vesting period of the grant.

*Stock Based Compensation Issued to Third Parties*

The Company accounts for stock based compensation issued to third parties, including customers, in accordance with the provisions of the Emerging Issues Task Force (EITF) Issue No. 96-18, *Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling Goods or Services*, and EITF 01-9, *Accounting for Consideration Given by a Vendor to a Customer (Including a Reseller of the Vendor's Products)*. Under the provisions of EITF 96-18, if none of the Company's agreements have a disincentive for nonperformance, the Company records a charge for the fair value of the stock and the portion of the warrants earned from the point in time when vesting of the stock or warrants becomes probable. EITF 01-9 requires that the fair value of certain types of warrants issued to customers be recorded as a reduction of revenue to the extent of cumulative revenue recorded from that customer. The Company has not given any stock based consideration to a customer.

**Advertising Expense**

The Company expenses all advertising costs as they are incurred. Advertising expense for the years ended December 31, 2006, 2005, and 2004, was \$2,000, \$9,000, and \$12,000, respectively.

**Research and Development**

In accordance with SFAS No. 2, *Accounting for Research Development Costs* research, development, and engineering costs are expensed in the year incurred. Costs of significantly altering existing technology is expensed as incurred.

**Income Taxes**



The Company utilizes SFAS No. 109, Accounting for Income Taxes, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements or tax returns. Under this method, deferred income taxes are recognized for the tax

F-12

---

**Table of Contents****ENOVA SYSTEMS, INC.****Notes to Financial Statements (Continued)**

consequences in future years of differences between the tax bases of assets and liabilities and their financial reporting amounts at each year-end based on enacted tax laws and statutory tax rates applicable to the periods in which the differences are expected to affect taxable income. Valuation allowances are established, when necessary, to reduce deferred tax assets to the amount expected to be realized.

**Loss Per Share**

The Company utilizes SFAS No. 128, Earnings per Share. Basic loss per share is computed by dividing loss available to common stockholders by the weighted-average number of common shares outstanding. Diluted loss per share is computed similar to basic loss per share except that the denominator is increased to include the number of additional common shares that would have been outstanding if the potential common shares had been issued and if the additional common shares were dilutive. Common equivalent shares are excluded from the computation if their effect is anti-dilutive. The Company's common share equivalents consist of stock options.

The potential shares, which are excluded from the determination of basic and diluted net loss per share as their effect is anti-dilutive, are as follows:

	<b>Year Ended December 31, 2006</b>	<b>Year Ended December 31, 2005</b>	<b>Year Ended December 31, 2004</b>
Options to purchase common stock	162,000	436,000	164,000
Options to purchase common stock    Outside plan			
Warrants to purchase common stock		2,525,000	2,500,000
Potential equivalent shares excluded	162,000	2,961,000	2,664,000

**Commitments and Contingencies**

Certain conditions may exist as of the date the financial statements are issued, which may result in a loss to the Company but which will only be resolved when one or more future events occur or fail to occur. The Company's management and its legal counsel assess such contingent liabilities, and such assessment inherently involves an exercise of judgment. In assessing loss contingencies related to legal proceedings that are pending against the Company or unasserted claims that may result in such proceedings, the Company's legal counsel evaluates the perceived merits of any legal proceedings or unasserted claims as well as the perceived merits of the amount of relief sought or expected to be sought therein. If the assessment of a contingency indicates that it is probable that a material loss has been incurred and the amount of the liability can be estimated, then the estimated liability would be accrued in the Company's financial statements. If the assessment indicates that a potentially material loss contingency is not probable, but is reasonably possible, or is probable but cannot be estimated, then the nature of the contingent liability, together with an estimate of the range of possible loss if determinable and material, would be disclosed.

Loss contingencies considered remote are generally not disclosed unless they involve guarantees, in which case the nature of the guarantee would be disclosed.

**Estimates**

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

**Table of Contents**

**ENOVA SYSTEMS, INC.**

**Notes to Financial Statements (Continued)**

**Concentration of Credit Risk**

Financial instruments which potentially subject the Company to concentrations of credit risk consist of cash and cash equivalents and accounts receivable. The Company places its cash and cash equivalents with high credit, quality financial institutions. At times, such cash and cash equivalents may be in excess of the Federal Deposit Insurance Corporation insurance limit of \$100,000. The Company has not experienced any losses in such accounts and believes it is not exposed to any significant credit risk on cash and cash equivalents. With respect to accounts receivable, the Company routinely assesses the financial strength of its customers and, as a consequence, believes that the receivable credit risk exposure is limited.

**Major Customers**

During the year ended December 31, 2006, the Company conducted business with two customers whose gross sales comprised 39% and 16% of total revenues. As of December 31, 2006, four customers accounted for 36%, 17%, 13%, and 11% of gross accounts receivable, respectively.

In addition, one of the Company's stockholders accounted for 39%, 13%, and 10% of total revenues during the years ended December 31, 2006, 2005, and 2004, respectively. This stockholder holds approximately 5% of the total issued and outstanding common stock as of December 31, 2006.

**Recently Issued Pronouncements**

In February 2006, the FASB issued SFAS No. 155, Accounting for Certain Hybrid Financial Instruments an amendment of FASB Statements No. 133 and 140 ( SFAS 155 ). This statement amends SFAS No. 133, Accounting for Derivative Instruments and Hedging Activities ( SFAS 133 ), and SFAS No. 140, Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities and resolves issues addressed in SFAS 133 Implementation Issue No. D1, Application of Statement 133 to Beneficial Interest in Securitized Financial Assets . The Company is required to apply SFAS 155 to all financial instruments acquired, issued or subject to a remeasurement event beginning January 1, 2007, although early adoption is permitted as of the beginning of an entity's fiscal year. The provisions of SFAS 155 are not expected to have any impact on the financial statements at adoption.

In September 2006, the FASB issued SFAS 157 Fair Value Measurement ( SFAS 157 ) which defines fair value, establishes a framework for measuring fair value and expanded disclosures about fair value measurement. Companies are required to adopt the new standard for fiscal periods beginning after November 15, 2007. The Company is evaluating the impact of this standard and currently does not expect it to have a significant impact on its financial position, results of operations or cash flows.

In September 2006, the SEC staff issued Staff Accounting Bulletin No. 108 (SAB 108), Considering the Effects of Prior Year Misstatements when Quantifying Misstatements in Current Year Financial Statements, which addresses how uncorrected errors in previous years should be considered when quantifying errors in current-year financial statements. SAB 108 requires companies to consider the effect of all carry over and reversing effects of prior-year misstatements when quantifying errors in current-year financial statements and the related financial statement disclosures. SAB 108 must be applied to annual financial statements for the first fiscal year ending after November 15, 2006. The Company's adoption of this standard will not have any impact on its financial position,

results of operations or cash flows.

In June 2006, the FASB issued Interpretation No. 48 (FIN 48), Accounting for Uncertainty in Income Taxes. FIN 48 prescribes detailed guidance for the financial statement recognition, measurement and disclosure of uncertain tax positions recognized in an enterprise's financial statements in accordance with FASB Statement No. 109, Accounting for Income Taxes. Tax positions must meet a more-likely-than-not recognition threshold at the effective date to be recognized upon the adoption of FIN 48 and in subsequent periods. FIN 48 will be effective for fiscal years beginning after December 15, 2006 (our fiscal year 2007) and the provisions of FIN 48 will be applied

**Table of Contents****ENOVA SYSTEMS, INC.****Notes to Financial Statements (Continued)**

to all tax positions under Statement No. 109 upon initial adoption. The cumulative effect of applying the provisions of this interpretation will be reported as an adjustment to the opening balance of retained earnings for that fiscal year. The Company does not expect the adoption of FIN 48 to have a material impact on its financial position, results of operations or cash flow.

In February 2007, the FASB issued SFAS No. 159, The Fair Value Option for Financial Assets and Financial Liabilities Including an amendment of FASB Statement No. 115 ( SFAS 159 ). SFAS 159 expands the use of fair value accounting but does not affect existing standards which require assets or liabilities to be carried at fair value. Under SFAS 159, a company may elect to use fair value to measure accounts and loans receivable, available-for-sale and held-to-maturity securities, equity method investments, accounts payable, guarantees and issued debt. Other eligible items include firm commitments for financial instruments that otherwise would not be recognized at inception and non-cash warranty obligations where a warrantor is permitted to pay a third party to provide the warranty goods or services. If the use of fair value is elected, any upfront costs and fees related to the item must be recognized in earnings and cannot be deferred, e.g., debt issue costs. The fair value election is irrevocable and generally made on an instrument-by-instrument basis, even if a company has similar instruments that it elects not to measure based on fair value. At the adoption date, unrealized gains and losses on existing items for which fair value has been elected are reported as a cumulative adjustment to beginning retained earnings. Subsequent to the adoption of SFAS 159, changes in fair value are recognized in earnings. SFAS 159 is effective for fiscal years beginning after November 15, 2007 and is required to be adopted by the Company in the first quarter of fiscal 2009. Enova is currently is determining whether fair value accounting is appropriate for any of its eligible items and cannot estimate the impact, if any, which SFAS 159 will have on its consolidated results of operations and financial condition.

**NOTE 3 Inventory**

Inventories, consisting of material, material overhead, labor, and manufacturing overhead, are stated at the lower of cost (first-in, first-out) or market and consist of the following at December 31:

	<b>2006</b>	<b>2005</b>
Raw materials	\$ 1,285,000	\$ 1,072,000
Work-in-process	\$ 482,000	24,000
Reserve for obsolescence	(63,000)	(80,000)
	<b>\$ 1,704,000</b>	<b>\$ 1,016,000</b>

For the year ended December, 31 2006 and 2005, the Company wrote off \$17,000 and \$376,000 respectively, for obsolete or slow moving inventory. In 2005, the Company charged off \$376,000 for slow moving inventory. In 2004, the Company wrote down \$113,000 related to the Ford Think inventory.

**Table of Contents****ENOVA SYSTEMS, INC.****Notes to Financial Statements (Continued)****NOTE 4 Property and Equipment**

Property and equipment at December 31, 2006 and 2005 consisted of the following:

	<b>2006</b>	<b>2005</b>
Computers	\$ 464,000	\$ 296,000
Machinery and equipment	1,061,000	975,000
Furniture and office equipment	246,000	242,000
Demonstration vehicles and buses	421,000	324,000
Software	94,000	94,000
Leasehold improvements	70,000	70,000
	2,356,000	2,001,000
Less accumulated depreciation and amortization	(1,729,000)	(1,425,000)
<b>Total</b>	<b>\$ 627,000</b>	<b>\$ 576,000</b>

Depreciation and amortization expense was \$304,000, \$304,000, and \$377,000 for the years ended December 31, 2006, 2005, and 2004, respectively.

**NOTE 5 Equity Method Investment ITC**

The Company has invested an aggregate of \$2,000,000 into ITC. In 2004, the Company invested \$1 million of the proceeds received from a sale of common stock to HHI into a joint venture formed with HHI in 2003 (see Note 1). The Company's share of income and losses is 40% as stated in the agreement. During the year ended December 31, 2006, the Company recorded \$3,000 as its proportionate share of losses in the joint venture.

The following is the condensed financial position and results of operations of ITC, as of and for the year ended December 31, 2006:

Financial position	
Current assets	\$ 4,100,000
Property and equipment, net	12,000
Liabilities	(0)
<b>Equity</b>	<b>\$ 4,112,000</b>
Operations	
Net revenues	\$ 259,000

Expenses	(458,000)
Interest income	192,000
<b>Net loss</b>	<b>\$ (7,000)</b>
<b>Company's proportionate share of net loss</b>	<b>\$ (3,000)</b>

**NOTE 6 Intangible Assets**

Intangible assets consist of legal fees directly associated with patent licensing. The Company has been granted three patents. These patents have been capitalized and are being amortized over their estimated useful lives.

In June 2001, a strategic relationship with Ford Motor Company was entered into to develop and manufacture a high power, high voltage conversion module for Ford's fuel cell vehicle. Warrants were issued to Ford Motor Company in exchange for Ford's commitment to enter into a five-year agreement. The issuance of the warrants was

F-16

---



**Table of Contents****ENOVA SYSTEMS, INC.****Notes to Financial Statements (Continued)**

recorded as a non-current asset (Value Participation Agreement) at its fair market value of \$577,000, which was determined using the Black-Scholes option pricing model, and is being amortized on a straight-line basis over the life of the contract.

The following table illustrates the types and carrying values of the Company's other assets:

	<b>2006</b>	<b>2005</b>
Patents	\$ 93,000	\$ 93,000
Valuation Participation Agreement	577,000	577,000
	670,000	670,000
Less accumulated amortization	(596,000)	(481,000)
<b>Total</b>	<b>\$ 74,000</b>	<b>\$ 190,000</b>

Amortization expense charged to operations was \$115,000 for 2006, \$108,000 for 2005 and \$108,000 for 2004.

**NOTE 7 Notes Payable**

In December 2005, the Company was informed by the Credit Managers Association of California that \$1,011,000 of principal and \$447,000 accrued interest under the secured note payable had been disclaimed and extinguished by the beneficiaries of such principal amount. The Company has recognized a gain on the extinguishment of the principal and associated accrued interest of \$1,458,000 in relation to this extinguishment. The Company evaluated this transaction under the guidance set forth in SFAS 140 Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities and noted that the extinguishment of these liabilities was consistent with the guidance.

In October 2005, the Company agreed to a settlement on an unsecured 10% note payable. In exchange for immediate payment of the full principal balance of \$120,000, the beneficiary of the note agreed to forgive the entire accrued interest balance of \$111,000. The Company has recognized a gain on the extinguishment of the associated accrued interest. The Company evaluated this transaction under the guidance set forth in SFAS 140 Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities and noted that the extinguishment of these liabilities was consistent with the guidance.

In January and February of 2006, the Company settled \$1,083,000 of principal and \$472,000 of accrued interest under the secured note payable to the Credit Managers Association of California (CMAC). In consideration for the settlement, the Company paid the beneficiaries \$163,000. The Company evaluated this transaction under the guidance set forth in SFAS 140 Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities and noted that the extinguishment of these liabilities was consistent with the guidance.

**Table of Contents****ENOVA SYSTEMS, INC.****Notes to Financial Statements (Continued)**

Notes payable at December 31, consisted of the following:

	<b>2006</b>	<b>2005</b>
Secured note payable to Credit Managers Association of California, bearing interest at prime plus 3% (currently 10.75%) and through maturity. Principal and unpaid interest due in April 2016. A sinking fund escrow is required to be funded with 10% of future equity financing, as defined in the agreement.	\$ 1,238,000	\$ 2,321,000
Secured note payable to a financial institution in the original amount of \$95,000, bearing interest at 6.21%, payable in 36 installments.	\$ 88,000	
Secured note payable to a Coca Cola Enterprises in the original amount of \$40,000, bearing interest at 10% per annum. Principal and unpaid interest due now	\$ 40,000	\$ 40,000
Secured note payable to a financial institution in the original amount of \$33,000, bearing interest at 8% per annum, payable in 36 equal monthly installments		2,000
	1,366,000	2,363,000
Less current portion	(71,000)	(42,000)
<b>Long-term portion</b>	<b>\$ 1,295,000</b>	<b>\$ 2,321,000</b>

Future minimum principal payments of notes payable at December 31, 2006 consisted of the following:

**Year Ending  
December 31,**

2007	\$ 71,000
2008	33,000
2009	24,000
2010	
2011	
Thereafter	1,238,000
<b>Total</b>	<b>\$ 1,366,000</b>

**NOTE 8 Deferred Revenues**

The Company has entered into a development contract with a federally funded consortium called the Hawaii Center for Advanced Transportation Technologies (HCATT). The consortium develops vehicles used by the United States Air Force. The Company has been developing vehicles for HCATT for 4 years under several different contracts. This

specific development contract commenced on March 30, 2006, and was valued at \$955,000. The Company is recording revenues for this contract on the basis of the percentage of completion method, with different deliverables divided into separate units of accounting based on relative fair values, as prescribed in SOP 81-1- Accounting for Performance of Construction Type and Certain Production Type Contracts . The Company recognized \$273,000 in revenue from HCATT during the year ended December 31, 2006. At December 31, 2006, the Company had deferred \$166,000 in revenue from HCATT.

Additionally, the company has entered into several production and development contracts with various customers. The Company has evaluated these contracts, ascertained the specific revenue generating activities of each contract, and established the units of accounting for each activity. Revenue on these units of accounting is not recognized until a) there is persuasive evidence of the existence of a contract, b) the service has been rendered and delivery has occurred, c) there is a fixed and determinable price, and d) collectibility is reasonable assured. This

**Table of Contents****ENOVA SYSTEMS, INC.****Notes to Financial Statements (Continued)**

treatment is consistent with the guidance prescribed in SEC Staff Accounting Bulletin 104 Revenue Recognition and FASB Emerging Issues Task Force Issue 00-21 Revenue Arrangements with Multiple Deliverables. At December 31, 2006, the Company had deferred \$233,000 in revenue related to these contracts.

**NOTE 9 Commitments and Contingencies****Leases**

The Company leases its operating and office facilities in Torrance, California and in Hawaii for various terms under long-term, non-cancelable operating lease agreements. The leases expire at various dates through February 2008. The facilities lease requires monthly payments of \$15,360. In the normal course of business, it is expected that these leases will be renewed or replaced by leases on other properties. The leases provide for increases in future minimum annual rental payments. Also, the agreements generally require the Company to pay executory costs (real estate taxes, insurance, and repairs), which are approximately \$4,000 per month. Rent expense was \$221,000, \$259,000, and \$140,000 for the years ended December 31, 2006, 2005, and 2004, respectively.

Future minimum lease payments under these non-cancelable operating and capital lease obligations at December 31, 2006 were as follows:

<b>Year Ending December 31</b>	<b>Operating Leases</b>
2007	\$ 279,000
2008	80,000
2009	38,000
2010	39,000
2011 and thereafter	
<b>Total</b>	<b>\$ 436,000</b>

**Employment Contracts**

The Company has employment agreements with its executive officers, the terms of which expire at various times through January 2011. Such agreements, which have been revised from time to time, provide for minimum salary levels, adjusted annually for certain changes, as well as for incentive bonuses that are payable if specified management goals are attained. The aggregate commitment for future salaries at December 31, 2006, excluding bonuses, was approximately \$1,875,000.

**NOTE 10 Stockholders Equity****Common Stock**

During the year ended December 31, 2006, the Company issued 32,000 shares of common stock to directors as compensation totaling \$135,000.

**Common Stock Issuable**

At December 31, 2006, the Company was committed to issue 12,000 shares of common stock totaling \$36,000 as compensation to its directors.

**Series A Preferred Stock**

Series A preferred stock is currently unregistered and convertible into common stock on a one-to-one basis at the election of the holder or automatically upon the occurrence of certain events including: sale of stock in an underwritten public offering; registration of the underlying conversion stock; or the merger, consolidation, or sale

**Table of Contents**

**ENOVA SYSTEMS, INC.**

**Notes to Financial Statements (Continued)**

of more than 50% of the Company. Holders of Series A preferred stock have the same voting rights as common stockholders. The stock has a liquidation preference of \$0.60 per share plus any accrued and unpaid dividends in the event of voluntary or involuntary liquidation of the Company. Dividends are non-cumulative and payable at the annual rate of \$0.036 per share if, when, and as declared by, the Board of Directors. No dividends have been declared on the Series A preferred stock.

Substantially all of the stock notes receivable stem from a Board of Directors plan for the sale of shares of Series A preferred stock in 1993 to certain officers and directors (Participants). In general, the Participants could purchase the preferred stock for a combination of cash, promissory notes payable to the Company, and conversion of debt and deferred compensation due to the Participants. All shares issued under this plan were pledged to the Company as security for the notes. The notes provided for interest at 8% per annum payable annually, with the full principal amount and any unpaid interest due on January 31, 1997. The notes remain outstanding. The likelihood of collecting the interest on these notes is remote; therefore, accrued interest has not been recorded since the fiscal year ended July 31, 1997.

**Series B Preferred Stock**

Series B preferred stock is currently unregistered and each share is convertible into shares of common stock on a two-for-one basis at the election of the holder or automatically upon the occurrence of certain events including: sale of stock in an underwritten public offering, if the offering results in net proceeds of \$10,000,000, and the per share price of common stock is at least \$2.00; and the merger, consolidation, or sale of common stock or sale of substantially all of the Company's assets in which gross proceeds received are at least \$10,000,000. The Series B preferred stock has certain liquidation and dividend rights prior and in preference to the rights of the common stock and Series A preferred stock. The stock has a liquidation preference of \$2.00 per share together with an amount equal to, generally, \$0.14 per share compounded annually at 7% per year from the filing date, less any dividends paid. Dividends on the Series B preferred stock are non-cumulative and payable at the annual rate of \$0.14 per share if, when, and as declared by, the Board of Directors. No dividends have been declared on the Series B preferred stock.

**Stock Options and Warrants**

During 2004, the stockholders of the Company approved an increase of 20,000,000 shares for the 1996 Stock Option Plan (the Plan) for incentive and non-statutory stock options during the period of the Plan, which expires in 2006. The Plan now reserves 65,000,000 shares under the plan. Options under the 1996 Plan expire over a period not to exceed ten years.

During the year ended December 31, 2006, the Company did not issue any shares of common stock from the exercise of options. The agreement with Ford Motor Company (see Note 6) included issuing warrants to Ford to purchase 4.6% of the fully diluted common stock of the Company over a 66 month period. The number of shares to be acquired will be adjusted from time to time for increases in the Company's fully diluted common stock. The vesting of these warrants is dependent upon Ford meeting specific purchase requirements.

The fair value of the warrants granted to Ford were estimated on the date of grant using the Black-Scholes option-pricing model with the following assumptions: dividend yield of 0%, expected volatility of 102%, risk-free interest rate of 4.76% and an expected life of the warrants of 66 months. Warrants issued and vested under this agreement totaled 2,500,000 at an exercise price of \$0.29 per share during the year ended December 31, 2001. No

warrants were vested under this program during 2006 and 2005. As of June 30, 2004, Ford was no longer eligible for further vesting of its warrants per the terms of the Value Participation Agreement. On December 15, 2006, these warrants expired.

**Table of Contents****ENOVA SYSTEMS, INC.****Notes to Financial Statements (Continued)****NOTE 11 Stock Options*****Stock Option Program Description***

For the year ended December 31, 2006, the Company had two equity compensation plans, the 1996 Stock Option Plan (the 1996 Plan ) and the 2006 equity compensation plan (the 2006 Plan ). The 1996 Plan has expired for the purposes of issuing new grants. However, the 1996 Plan will continue to govern awards previously granted under that plan. The 2006 Plan has been approved by the Company's Shareholders.

Equity compensation grants are designed to reward employees and executives for their long term contributions to the Company and to provide incentives for them to remain with the Company. The number and frequency of equity compensation grants are based on competitive practices, operating results of the company, and government regulations.

The maximum number of shares issuable over the term of the 1996 Plan was limited to 65 million shares. Options granted under the 1996 Plan typically have had an exercise price of 100% of the fair market value of the underlying stock on the grant date and expired no later than ten years from the grant date. The 2006 Plan has a total of 3,000,000 shares reserved for issuance, none of which have been granted.

Options issued to executives and senior management initially vest based on the Company achieving certain revenue milestones (performance target) for the years ended December 31, 2005 and 2006. In 2005, these milestones were met and the executive options were vested. In 2006, these milestones were not met and the options expired. This includes 48,000 options granted under the executive plan in 2006. Options issued to employees will vest in equal installments over 36 months. All of the granted options will remain in effect for a period of 10 years or until 90 days after the employment of the optionee terminates.

Diluted shares outstanding would include the dilutive effect of in-the-money options. As of December 31, 2006, and on December 31, 2005, the Company did not have any in-the-money options, and therefore, there was no dilutive effect relating to stock options outstanding on the 1996 plan.

Activity under the 1996 Plan is as follows:

	<b>Shares Available for Grant</b>	<b>Number of Shares Granted</b>	<b>Weighted Average Exercise Price</b>	<b>Aggregate Price</b>
Balance at December 31, 2004	64,836,000	164,000	5.40	885,600
Increase in plan				
Options granted	(332,000)	332,000	4.39	1,457,000
Options exercised				
Options cancelled	30,000	(30,000)	7.64	(229,200)



Edgar Filing: ENOVA SYSTEMS INC - Form 10-K

Options expired	8,000	(8,000)	7.64	(61,120)
Balance at December 31, 2005	64,542,000	458,000	4.48	2,052,760
Increase in plan				
Options granted	(46,000)	46,000	4.60	211,600
Options exercised				
Options cancelled	4,000	(4,000)	6.11	(24,440)
Options expired	338,000	(338,000)	4.90	(1,656,200)
Balance at December 31, 2006	64,848,000	162,000	4.43	718,000
Activity under the 2006 Plan is as follows:				
Balance at December 31, 2006	3,000,000			

F-21

---

Table of Contents**ENOVA SYSTEMS, INC.****Notes to Financial Statements (Continued)*****Current year ended December 31, 2006***

In conjunction with the adoption of SFAS 123(R), the Company elected to attribute the value of share-based compensation to expense using the straight-line method, which was previously used for its pro forma information required under SFAS 123. Share-based compensation expense related to stock options was \$55,000 for the year ended December 31, 2006, and was recorded in the financial statements as a component of selling, general and administrative expense.

Share-based compensation expense reduced the Company's results of operations for the year ended December 31, 2006 as follows:

	<b>Twelve Months Ended December 31, 2006</b>
Income from continuing operations before income taxes	\$ 55,000
Income from continuing operations after income taxes	\$ 55,000
Cash flows from operations	\$ 55,000
Cash flows from financing activities	
Basic and Diluted EPS	

During the year ended December 31, 2006, the Company granted 46,000 performance based options to executives and senior management. These options vested based on the same 2006 revenue milestones that were established under the original executive equity compensation plan grant in 2005. At the time of the 2006 executive grant, it had become apparent that the 2006 performance target was unlikely. Consequently, these options were deemed by the Company to have zero value. As noted above, these options expired when the revenue milestone for 2006 was not met.

As of December 31, 2006, the total compensation cost related to non-vested awards not yet recognized is \$96,000. The weighted average period over which the future compensation cost is expected to be recognized is 21 months. The aggregate intrinsic value of total awards outstanding is zero. Stock-based compensation expense recognized during the period is based on the value of the portion of share-based payment awards that is ultimately expected to vest during the period. Stock-based compensation expense recognized in the Company's Consolidated Statement of Operations for the year ended December 31, 2006 included compensation expense for share-based payment awards granted prior to, but not yet vested as of December 31, 2005 based on the grant date fair value estimated in accordance with the pro forma provisions of SFAS 123 and compensation expense for the share-based payment awards granted subsequent to December 31, 2005 based on the grant date fair value estimated in accordance with the provisions of SFAS 123(R).

As stock-based compensation expense recognized in the Statement of Operations for the twelve months of Fiscal 2006 has been based on awards ultimately expected to vest, it has been reduced for estimated forfeitures. SFAS 123(R) requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. For the year ended December 31, 2006, the Company applied estimated average forfeiture rates of approximately 3% for non-officer grants, based on historical forfeiture experience. The

estimated pricing term of option grants for the year ended

For 2006, the expected life was 5.0 years for non-officer grants. Officer and senior management grants are vested based on revenue milestones. Under the current grant, milestones were set for the 2005 and 2006 fiscal years. Options granted for the 2006 fiscal year did not vest based on the revenue milestones. In the Company's pro forma information required under SFAS 123 for the periods prior to fiscal 2006, the Company accounted for forfeitures as they occurred.

SFAS 123(R) requires the cash flows resulting from the tax benefits resulting from tax deductions in excess of the compensation cost recognized for those options to be classified as financing cash flows. Due to the Company's

**Table of Contents****ENOVA SYSTEMS, INC.****Notes to Financial Statements (Continued)**

loss position, there were no such tax benefits for the years ended December 31, 2005 and 2006. Prior to the adoption of SFAS 123(R), those benefits would have been reported as operating cash flows had the Company received any tax benefits related to stock option exercises.

The fair value of stock-based awards to officers and employees is calculated using the Black-Scholes option pricing model, even though this model was developed to estimate the fair value of freely tradable, fully transferable options without vesting restrictions, which differ significantly from the Company's stock options. The Black-Scholes model also requires subjective assumptions, including future stock price volatility and expected time to exercise, which greatly affect the calculated values. The expected term of options granted is derived from historical data on employee exercises and post-vesting employment termination behavior. The risk-free rate selected to value any particular grant is based on the bond equivalent yields that corresponds to the pricing term of the grant effective as of the date of the grant. The expected volatility is based on the historical volatility of the Company's stock price. These factors could change in the future, affecting the determination of stock-based compensation expense in future periods.

The following is a summary of changes to outstanding stock options during the fiscal year ended December 31, 2006:

	<b>Number of Share Options</b>	<b>Weighted Average Exercise Price</b>	<b>Weighted Average Remaining Contractual Term</b>	<b>Aggregate Intrinsic Value</b>
Outstanding at December 31, 2005	458,000	4.48	6.8	
Granted	46,000	4.60	10	
Exercised				
Forfeited or expired	(342,000)	4.91		
Outstanding at December 31, 2006	162,000	4.43	7.96	
Vested and expected to vest at December 31, 2006	153,000	4.43	7.89	
Options exercisable at December 31, 2006	119,000	4.42	8.03	

At December 31, 2006, there were 64,860,000 shares available for grant under the employee stock option plan. The weighted-average remaining contractual life of the options outstanding at December 31, 2006 was 8.75 years. The exercise prices of the options outstanding at December 31, 2006 ranged from \$4.35 to \$4.50. The weighted-average remaining contractual life of the options outstanding at December 31, 2005 was 7 years. The exercise prices of the options outstanding at December 31, 2005 ranged from \$4.35 to \$8.10. Options exercisable were 119,000 and 255,000, at December 31, 2006 and December 31, 2005, respectively.

The table below presents information related to stock option activity for the fiscal ended December 31, 2006 and 2005 (in thousands):

	<b>Fiscal Year Ended December 31</b>	
	<b>2006</b>	<b>2005</b>
Total intrinsic value of stock options exercised	\$	\$
Cash received from stock option exercises	\$	\$
Gross income tax benefit from the exercise of stock options	\$	\$

The aggregate intrinsic value of \$0 as of December 31, 2006 is based on Enova's closing stock price of \$3.09 on that date and represents the total pretax intrinsic value, which would have been received by the option holders had all option holders exercised their options as of that date. The total intrinsic value of options exercised during the

F-23

---

**Table of Contents****ENOVA SYSTEMS, INC.****Notes to Financial Statements (Continued)**

twelve months ended December 31, 2006 was nil as no options were exercised. The total number of in-the-money options exercisable as of December 31, 2006 was 0.

**Valuation and Expense Information under SFAS 123**

Prior to the adoption of Statement of Financial Accounting Standards No. 123(R) Share Based Payments (SFAS 123(R)), at March 31, 2006, the Company would not have recognized compensation expense for employee share-based awards, when the price of such awards equaled the market price of the underlying stock on the date of the grant. The Company previously had adopted the provisions of Statement of SFAS 123 as amended by SFAS 148, Accounting for Stock Based Compensation, Transition and Disclosure (SFAS 148) through disclosure only.

The fair values of all stock options granted during the fiscal year ended December 31, 2005 and 2004 were estimated on the date of grant using the Black-Scholes option-pricing model with the following assumptions:

	<b>2005</b>	<b>2004</b>
Expected life (in years)	5	5
Average risk-free interest rate	4%	4%
Expected volatility	75%	73%
Expected dividend yield	0%	0%

Stock Based Compensation disclosures prior to the adoption of SFAS 123(R) are as follows:

	<b>2005</b>	<b>2004</b>
Loss applicable to common stockholders	\$ (2,127,000)	\$ (3,382,000)
Compensation under APB Opinion 25		
Stock-based employee compensation expense determined under fair value presentation for all options	(222,000)	(94,000)
Pro forma net loss	\$ (2,349,000)	\$ (3,476,000)
Basic and diluted loss per common share		
As reported	\$ (0.18)	\$ (0.38)
Pro forma	\$ (0.20)	\$ (0.39)

The estimated fair value of grants of stock options and warrants to nonemployees of the Company is charged to expense, if applicable, in the financial statements. These options vest in the same manner as the employee options granted under each of the option plans as described above.

Total options under the Plan at December 31, 2005, comprised the following:

<b>Option</b>	<b>Number Outstanding as of</b>	<b>Weighted Average Remaining Contractual life</b>	<b>Number Exercisable as of</b>
<b>Exercise Price</b>	<b>December 31 2005</b>	<b>(Years)</b>	<b>December 31 2005</b>
4.48	458,000	6.8	262,000

Total options under the Plan at December 31, 2006, comprised the following:

<b>Option</b>	<b>Number Outstanding as of</b>	<b>Weighted Average Remaining Contractual Life</b>	<b>Number Exercisable as of</b>
<b>Exercise Price</b>	<b>December 31 2006</b>	<b>(Years)</b>	<b>December 31 2006</b>
4.43	162,000	7.98	119,000

F-24

---

**Table of Contents****ENOVA SYSTEMS, INC.****Notes to Financial Statements (Continued)****NOTE 12 Income Taxes**

Significant components of the Company's deferred tax assets and liabilities for federal and state income taxes as of December 31, 2006 and 2005 consisted of the following:

	<b>2006</b>	<b>2005</b>
Deferred tax assets		
Federal tax loss carry-forward	\$ 34,650,000	\$ 33,135,000
State tax loss carry-forward	1,548,000	1,154,000
Basis difference	1,610,000	1,610,000
Other, net	(114,000)	(648,000)
	37,694,000	35,251,000
Less valuation allowance	(37,694,000)	(35,251,000)
<b>Net deferred tax assets</b>	<b>\$</b>	<b>\$</b>

Deferred taxes arise from temporary differences in the recognition of certain expenses for tax and financial reporting purposes. At December 31, 2006 and 2005, management determined that realization of these benefits is not assured and has provided a valuation allowance for the entire amount of such benefits. As of December 31 2006, the Company had net operating loss carry forwards for federal and state income tax purposes of approximately \$101,911,000 and \$17,515,000, respectively. The net operating loss carry forwards began expiring in 2003.

The provision for income taxes differs from the amount computed by applying the U.S. federal statutory tax rate (34% in 2006 and 2005) to income taxes as follows:

	<b>December 31, 2006</b>	<b>December 31, 2005</b>	<b>December 31, 2004</b>
Tax benefit computed at 34%	\$ 1,644,000	\$ 723,000	\$ 1,150,000
Change in valuation allowance	(2,444,000)	(1,302,000)	214,000
Change in carryovers and tax attributes	800,000	579,000	(1,364,000)
Net tax benefit	\$	\$	\$

**NOTE 13 Related Party Transactions**

During 2006, the Company purchased approximately \$404,000 in components, materials and services from HHI. The Company had an outstanding payable balance owed to HHI of \$138,000 at December 31, 2006. During 2005, the



Company purchased approximately \$2,516,000 in components, materials and services from HHI. The outstanding balance owed to HHI at December 31, 2005 was approximately \$1,317,000.

A relative of the Company's CEO, is a majority owner of a website consulting firm, which provides services (branding) to the Company. The Company paid consulting fees and expenses to this firm in the amount of approximately \$149,000 in 2006 and \$0 in 2005.

**NOTE 14 Employee Benefit Plan**

The Company has a 401(k) profit sharing plan covering substantially all employees. Eligible employees may elect to contribute a percentage of their annual compensation, as defined, to the plan. The Company may also elect to make discretionary contributions. For the years ended December 31, 2006, 2005, and 2004 the Company did not make any contributions to the plan.

**Table of Contents****ENOVA SYSTEMS, INC.****Notes to Financial Statements (Continued)****NOTE 15 Geographic Area Data**

The Company operates as a single reportable segment and attributes revenues to countries based upon the location of the entity originating the sale. Revenues by geographic area are as follows:

	<b>2006</b>	<b>2005</b>	<b>2004</b>
United States	\$ 579,000	\$ 971,000	\$ 1,465,000
Italy	5,000	152,000	30,000
Korea	753,000	758,000	258,000
Japan	43,000	3,038,000	176,000
China	68,000	234,000	256,000
Malaysia	21,000	91,000	
Ireland	115,000		166,000
Canada		120,000	
United Kingdom	72,000	720,000	203,000
Norway	10,000		
<b>Total</b>	<b>\$ 1,666,000</b>	<b>\$ 6,084,000</b>	<b>\$ 2,554,000</b>

**NOTE 16 Subsequent Events**

In February of 2007, Mr. Jarett Fenton, CPA, assumed the role of Chief Financial Officer, replacing Ms. Corinne Bertrand, CPA. Prior to accepting employment, Mr. Fenton served as a consultant to the Company. In 2006 and 2007, he received \$79,000 and \$18,000 in consulting fees, respectively.



Edgar Filing: ENOVA SYSTEMS INC - Form 10-K

Other income and (expense)				
Interest and financing fees, net	118,000	59,000	102,000	95,000
Equity in losses shares of joint venture company losses		(7,000)	39,000	(45,000)
Debt extinguishment				1,011,000
Interest extinguishment			448,000	558,000
Total other income(expense)	118,000	52,000	589,000	1,619,000
Net income (loss)	(1,641,000)	(782,000)	(1,222,000)	(5,000)
Basic loss per share	(0.11)	(0.06)	(0.08)	(0.00)
Weighted average number of shares outstanding	14,800,000	13,373,000	14,802,000	11,664,000

F-27

---

**Table of Contents****EXHIBIT INDEX**

<b>Exhibit #</b>	<b>Description</b>
3.1	Amended and Restated Articles of Incorporation of the Registrant*
3.2	Amended and Restated Bylaws of the Registrant*
10.1	Form of Indemnification Agreement (filed as Exhibit 10.26 to our Quarterly Report on Form 10-Q for the quarter ended June 30, 2005, as filed on August 15, 2005, and incorporated herein by reference)
10.2	Form of Security Agreement made as of May 31, 1995, between Enova and Credit Managers Association of California, Trustee (filed as Exhibit 10.85 to our Quarterly Report on Form 10-Q for the quarter ended April 30, 1996, as filed on June 14, 1996, and incorporated herein by reference).
10.3	Stock Purchase Agreement and Technology License Agreement dated February 27, 1997, by and between Enova and Hyundai Motor Company and Hyundai Electronics Industries Co., Ltd. (filed as Exhibit 10.98 to our Quarterly Report on Form 10-Q for fiscal quarter ended January 31, 1997, as filed on March 14, 1997, and incorporated herein by reference).
10.4	Agreement (redacted) between Enova and Eco Power Technology, dated June 12, 2001, to produce and sell power drive systems (filed as Exhibit 10.19 to Amendment No. 6 to our Registration Statement on Form S-1, No. 333-85308, and incorporated herein by reference).
10.5	Agreement (redacted) between Enova and Tomoe Electro-Mechanical Engineering and Manufacturing, Inc., dated November 19, 2001, to produce and sell power drive systems (filed as Exhibit 10.20 to Amendment No. 6 to our Registration Statement on Form S-1, No. 333-85308, and incorporated herein by reference).
10.6	Agreement (redacted) between Enova and Moriah Corporation, dated January 22, 2002, to produce and sell power drive systems (filed as Exhibit 10.21 to Amendment No. 6 to our Registration Statement on Form S-1, No. 333-85308, and incorporated herein by reference).
10.7	Joint Venture Agreement (redacted) to form advanced research and development corporation, dated as of March 18, 2003, by and between Enova and Hyundai Heavy Industries Co. Ltd. (filed as Exhibit 10.24 to our Quarterly Report on Form 10-Q for Three Months ended March 31, 2003 and incorporated herein by reference).
10.8	Warrant and Common Stock Purchase Agreement dated June 3, 2006 between Enova and Eruca Limited (filed as Exhibit 10.24 to our Quarterly Report on Form 10-Q for the period ended June 30, 2005 and incorporated herein by reference)
10.9	Form of Warrant Agreement dated June 3, 2005 between Enova and Eruca Limited (filed as Exhibit 10.25 to our Quarterly Report on Form 10-Q for the period ended June 30, 2005 and incorporated herein by reference)
10.10	Waiver and Termination of Shareholders Agreement dated July 16, 2005 between Enova and Jagen Pty, Ltd (filed as Exhibit 10.27 to our Quarterly Report on Form 10-Q for the period ended September 30, 2006 and incorporated herein by reference)
10.11	Form of Employment Agreement dated May 1, 2005 between Registrant and Edwin Riddell, Chief Executive Officer and President of the Registrant (Filed as Exhibit 10.22 to our Quarterly Report on Form 10-Q for the period ended March 31, 2005 and incorporated herein by reference)
23.1	Consent of Singer Lewak Greenbaum and Goldstein LLP
23.2	Consent of PMB Helin Donovan
31.1*	Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act Of 2002
31.2*	Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32*	Certification Pursuant to 18 U.S.C. Section 1350

\* Filed herewith.