

ACORN ENERGY, INC.  
Form 10-K  
April 15, 2008

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

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**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, 2007**

**Commission file number: 0-19771**

**ACORN ENERGY, INC.**  
**(Exact name of registrant as specified in charter)**

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

**22-2786081**  
**(I.R.S. Employer Identification No.)**

**4 West Rockland Road, Montchanin, Delaware**  
**(Address of principal executive offices)**

**19710**  
**(Zip Code)**

**(302-656-1707)**  
**Registrant's telephone number, including area code**

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**Securities registered pursuant to Section 12(b) of the Act: None**

**Securities registered pursuant to Section 12(g) of the Act:**  
**Common Stock, par value \$.01 per share**  
**(Title of Class)**

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 Exchange 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

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 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, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer  Accelerated filer  Non-accelerated filer  Smaller reporting company

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

As of last day of the second fiscal quarter of 2007, the aggregate market value of the registrant's common stock held by non-affiliates of the registrant was approximately \$48.0 million based on the closing sale price on that date as reported on the Over-the-Counter Bulletin Board.

As of April 14, 2008 there were 11,189,391 shares of Common Stock, \$0.01 par value per share, outstanding.

**DOCUMENTS INCORPORATED BY REFERENCE:**

None.

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Certain statements contained in this report are forward-looking in nature. These statements can be identified by the use of forward-looking terminology such as “believes”, “expects”, “may”, “will”, “should” or “anticipates”, or the negation thereof, or comparable terminology, or by discussions of strategy. You are cautioned that our business and operations are subject to a variety of risks and uncertainties and, consequently, our actual results may materially differ from those projected by any forward-looking statements. Certain of such risks and uncertainties are discussed below under the heading “Item 1A. Risk Factors.”

*AquaShield™* and *OncoPro™* are trademarks of our DSIT Solutions Ltd. subsidiary. *CoaLogix™* is a trademark of our CoaLogix subsidiary.

## PART I

### ITEM 1. BUSINESS

#### OVERVIEW

Acorn Energy is a holding company that specializes in acquiring and accelerating the growth of emerging ventures that promise improvement in the economic and environmental efficiency of the energy sector. We aim to acquire primarily controlling positions in companies led by promising entrepreneurs and we add value by supporting those companies with financing, branding, positioning, and strategy and business development.

Through our majority-owned operating subsidiaries we provide the following services:

- **RT Solutions.** Real time software consulting and development services, provided through our DSIT subsidiary, with a focus on port security for strategic energy installations.
- **SCR Catalyst and Management Services** for coal-fired power plants that use selective catalytic reduction (“SCR”) systems to reduce nitrogen oxide (“NOx”) emissions, provided through CoaLogix and its subsidiary SCR-Tech LLC. These services include SCR catalyst management, cleaning and regeneration as well as consulting services to help power plant operators to optimize efficiency and reduce overall NOx compliance costs.

Our equity affiliates and entities in which we own significant equity interests are engaged in the following activities:

- **Comverge Inc.** Energy intelligence solutions for utilities and energy companies through demand response by Comverge, Inc.
- **Paketeria AG.** Owner and franchiser of a full-service franchise chain in Germany that combines eight services (post and parcels, electricity, eBay dropshop, mobile telephones, copying, printing, photo processing and printer cartridge refilling) in one store.
  - **Local Power, Inc.** Consultation services for Community Choice Aggregation, through Local Power, Inc.
- **GridSense Systems Inc.** Provides remote monitoring and control systems to electric utilities and industrial facilities worldwide.

During 2007, we had operations in two reportable segments: providing catalyst regeneration technologies and management services for SCR systems and RT Solutions which is conducted through our DSIT subsidiary. We no longer consider OncoPro to be a reportable segment as management has intensified its focus on SCR and RT Solutions activities. In addition, OncoPro activities are no longer separately reviewed by the Chief Operating Decision Maker.

**SALES BY ACTIVITY**

The following table shows, for the years indicated, the dollar amount (in thousands) and the percentage of the sales attributable to each of the segments of our operations.

	2005		2006		2007	
	Amount	%	Amount	%	Amount	%
RT Solutions	\$ 2,873	69	\$ 2,797	68%	\$ 3,472	61%
SCR	—	—	—	—	797	14
Other	1,314	31	1,320	32	1,391	25
Total	\$ 4,187	100%	\$ 4,117	100%	\$ 5,660	100%

**SCR Catalyst and Management Services**

Through SCR-Tech, which is 100% owned by our 85% owned CoaLogix subsidiary, we offer a variety of services for coal-fired power plants that use SCR systems to reduce NOx emissions. These services include SCR catalyst management, cleaning and regeneration, as well as consulting services to help power plant operators optimize efficiency and reduce overall NOx compliance costs. In March 2008, CoaLogix announced its CoalVision 360° strategy and the addition of a strategic partner, EnerTech Capital III, which acquired a 15% interest in CoaLogix. We currently own 85% of CoaLogix following EnerTech's investment. CoalVision 360° is CoaLogix's strategy for creating value for its customers and shareholders while fulfilling our industry's obligations to ever tightening clean air laws.

***Products and Services******Industry Background and Market Drivers***

Through SCR-Tech, we provide innovative products and services to address the growing emissions control market for coal-fired power plants. We foresee substantial and growing opportunities in this market, driven by a continued use of coal to meet ever increasing energy demand, combined with increasingly stringent air quality regulations, resulting in a rapidly developing demand for clean coal technologies and a substantial future market for innovative, cost-effective solutions for clean energy production. Coal-fired plants represent approximately 50% of the nation's power generating capacity, and we believe they will continue to play an important role in the U.S. electricity generation market in the years ahead. Department of Energy projections indicate that significant new coal-fired generating capacity will be added in the U.S. over the next 23 years to meet baseload electricity demand, increasing coal's share of the U.S. power market to 57% by 2030.

We believe the future of coal as a primary fuel source for U.S. power production is reasonably assured, driven by growing energy demand, rising world oil and natural gas prices, limited oil and natural gas supplies, and increased focus on energy independence. Coal is the least expensive fossil fuel on an energy-per-BTU basis, and remains one of the most abundantly available fossil fuels in the U.S. Coal-fired power plants, in particular, continue to be a primary target for NOx reduction, and selective catalytic reduction remains the most widely used technology by plant operators to control NOx. With NOx removal efficiencies of up to 95%, SCR systems (also referred to as SCR reactors) are considered to be the most effective NOx reduction solution, and are expected to remain the dominant technology choice for coal-fired power plants to meet increasingly stringent U.S. air quality regulations. Furthermore, since U.S. air quality regulations allow power plant operators to pool their emissions reductions (*e.g.* remove more NOx than required at one unit and settle for lower than otherwise required NOx removal at another), utilities favor the highly efficient SCR technology for their largest generating assets.

SCR technology is based on ceramic catalyst that removes NOx from the power plant exhaust by reducing it with ammonia to elemental nitrogen and water vapor. Over time, ash buildup can cause physical clogging or blinding of the

catalyst, which negatively impacts the performance of both the SCR system and the power generating facility. In addition, various chemical elements present in the flue gas, which act as catalyst poisons, cause a gradual deactivation of the catalyst over time. The result is a decrease in NO<sub>x</sub> removal efficiency, which requires a continual need for some form of catalyst replenishment throughout the operating life of the SCR system.

The average useful life of SCR catalyst is approximately 24,000 hours (equivalent to three years of year-round operation). Until a few years ago, the only solution for restoring activity and NOx reduction performance was to replace spent catalyst with costly new catalyst. Since 2003, SCR-Tech has offered U.S. power plant operators a more cost-effective alternative in the form of catalyst regeneration.

### ***Regulatory Drivers***

The 1990 Clean Air Act Amendments were implemented to improve air quality in the United States. This federal law covers the entire country and is enforced by the U.S. Environmental Protection Agency (“EPA”). Under the Clean Air Act, the EPA limits how much of a pollutant can be in the air anywhere in the United States, with each state responsible for developing individual state implementation plans (“SIPs”) describing how each state will meet the EPA’s set limits for various pollutants. Emissions of NOx are considered to be one of the principal contributors to secondary ground level ozone, or smog, and thus are included in the EPA’s criteria pollutants for which limits have been established. Energy producers and other industries operating large power plants, particularly in the Eastern half of the U.S., have been required to significantly reduce their NOx emissions. Increasingly stringent NOx reduction requirements are the primary driver of our SCR services business today. In addition, growing concerns over mercury and sulfur trioxide (“SO<sub>2</sub>”) and new regulations to control these emissions are on the horizon, which we expect could present additional opportunities for our business.

Below is a summary of current and impending regulations driving our SCR Catalyst and Management Services business:

- **NOx SIP Call** - The primary Clean Air Act program driving SCR-Tech’s business today is the EPA’s NOx SIP Call. This program was designed to mitigate the regional transport of ozone, which is contributing to the poor air quality of downwind states. The NOx SIP Call required energy producers and other industries operating large power plants in the Eastern half of the U.S. to reduce their NOx emissions by at least 85% by 2007. Implementation of the NOx SIP Call has required major NOx reductions during the five-month “ozone season” (May 1-September 30) in 19 Midwestern and Eastern states and the District of Columbia. Compliance with the NOx SIP Call has resulted in a dramatic increase in the number of SCR system installations at coal-fired power plants for the removal of NOx.
- **Clean Air Interstate Rule (CAIR)** - CAIR is a new air quality regulation soon to take effect that is designed to permanently cap and achieve substantial reductions in emissions of sulfur dioxide (“SO<sub>2</sub>”) and NOx across 28 Eastern states and the District of Columbia that we believe will further increase the size of our addressable market. When fully implemented, CAIR is expected to significantly reduce SO<sub>2</sub> and NOx emissions in these states from 2003 levels by 2015 utilizing a cap-and-trade approach. With respect to NOx, this rule builds on the NOx SIP Call with the objective of further mitigating air pollution moving across state boundaries, and proposes to cut NOx emissions from power generating facilities significantly by 2015. Over the next decade we expect the implementation of CAIR to increase NOx trading (resulting in an increase in the amount of SCR catalyst used to control NOx with the objective of generating NOx credits), further increase the number of SCR systems installed today, and also require year-round SCR system operation (with increased NOx reduction required during ozone season) beginning in 2009 to meet the more stringent requirements. Currently, to comply with the NOx SIP Call, the majority of SCR systems are only required to operate during the five-month ozone season when the potential for ozone formation is at its highest. With year-round operation to comply with CAIR, the catalyst used in SCR systems will need to be replenished with new or regenerated catalyst on a much more frequent basis.
- **Clean Air Mercury Rule (CAMR)** - The EPA issued CAMR as the first program ever designed to permanently cap and reduce mercury emissions from coal-fired power plants. When fully implemented, CAMR is expected to reduce utility emissions of mercury significantly between 2010 and 2018. CAMR has the potential to impact SCR catalyst choices in the future. Oxidized mercury is more easily captured in a downstream wet flue gas desulfurization

("FGD") system than elemental mercury. A recent Federal Appeals court ruling indicated that CAMR did not go far enough in the reduction of mercury and therefore new more stringent legislation is being discussed.



While our current service offerings do not specifically address a reduction in mercury emissions, we believe that the use of regenerated SCR catalyst could yield an incremental positive impact on the oxidation of mercury. We are currently in a program to further explore and validate this assertion. If we can demonstrate that regenerated catalyst does in fact increase the oxidation of mercury to make it more easily captured in downstream FGD systems, this could further compel customers to regenerate their catalyst.

**SO<sub>2</sub> to SO<sub>3</sub> Conversion** - As a result of a growing industry desire to burn lower cost coal with higher sulfur content, increased attention is now being placed on the conversion of SO<sub>2</sub> to SO<sub>3</sub> as a byproduct of operating SCR systems. When emitted into the atmosphere, SO<sub>3</sub> results in the creation of a sulfuric acid mist, which is both environmentally damaging and costly to power plant operators. Environmental groups and the utility industry are now becoming increasingly concerned with destructive sulfuric acid emissions and their related corrosive effects.

Increased concern about SO<sub>2</sub> to SO<sub>3</sub> oxidation presents an added opportunity for our SCR services business. The use of regenerated catalyst can significantly lower SO<sub>2</sub> oxidation rates. In some cases, SO<sub>2</sub> oxidation rates were measured as low as the conversion rates achieved only through the use of more costly, ultra-low conversion catalyst. Importantly, the regenerated catalyst achieved significant reductions in SO<sub>2</sub> conversion while still maintaining original catalytic activity levels and NO<sub>x</sub> reduction performance. By offering a more cost-effective approach for restoring catalyst NO<sub>x</sub> reduction activity while simultaneously reducing SO<sub>2</sub> to SO<sub>3</sub> oxidation, we believe catalyst regeneration will present a compelling alternative to the purchase of ultra-low conversion catalyst.

## *Customers and Markets*

### *Market Opportunity*

The recent growth in SCR system installations driven by the NO<sub>x</sub> SIP Call has resulted in a large and growing market for SCR catalyst and management services. As the majority of SCR systems in the U.S. currently operate five months out of the year during the ozone season, and have an installed catalyst life of approximately 24,000 hours, many of the units that commenced operation at the beginning of the decade are now, or will soon be, in need of their first catalyst replenishment. Based upon the substantial number of SCR systems that commenced operation between 2000 and 2006, combined with the requirements for year-round operation beginning in 2009 as a result of CAIR, we expect the market for catalyst replenishment to increase dramatically within the next five years.

We expect the U.S. market for catalyst regeneration to more fully develop in the 2008-2009 timeframe as a result of the following factors:

- Most SCR systems will have been running for four to six years during the five months of ozone season, and the initial catalyst installed in these systems will be approaching its 24,000-hour useful life and will need to be replenished.
- In anticipation of the onset of CAIR, power plant operators are now planning for increased NO<sub>x</sub> reduction requirements and year-round SCR operation beginning in January 2009. Accordingly, we expect that utilities will begin to contract for new or regenerated catalyst in 2008 to ensure they will have sufficient catalyst activity to comply with the more stringent standards.

- Some power plant operators have indicated they may commence year-round operation during 2008 to begin generating NOx credits in advance of the stringent regulations imposed by CAIR.
- A number of states, such as North Carolina, Ohio, Pennsylvania, and West Virginia, are providing incentives to power producers to achieve early compliance with CAIR.

We believe the impact of year-round SCR operation beginning in 2009, together with an increase in the amount of catalyst required to comply with tighter regulations and further growth in the number of SCR system installations, will further increase the frequency of catalyst replenishment, resulting in a total addressable market for catalyst cleaning and regeneration estimated in excess of \$100 million by 2011.

By offering customers more economical ways to operate and maintain their SCR units, along with a lower cost regeneration alternative to purchasing new catalyst, we believe SCR-Tech has the potential to play a significant role in the growing U.S. market for SCR catalyst and management services.

### **SCR-Tech's Service Offerings**

#### ***Catalyst Cleaning, Rejuvenation and Regeneration***

We offer proprietary and patented processes based on highly sophisticated and advanced technologies that can improve the NOx removal efficiency and restore the useful life of installed SCR catalyst, providing a compelling economic alternative to catalyst replacement. SCR-Tech's processes are capable of not only physically cleaning and rejuvenating the most severely plugged, blinded or poisoned catalyst, but of also chemically reactivating deactivated catalyst. Depending upon the state of the installed catalyst, SCR-Tech offers several alternatives for restoring its NOx removal efficiency and extending its life.

For lightly plugged or blinded catalyst that has not yet fully deactivated from catalyst poisons, SCR-Tech offers an "in-situ" cleaning process that can be performed on catalyst at the customer's plant site without requiring removal of the catalyst from the SCR unit. For severely plugged or blinded catalyst that may have limited deactivation from catalyst poisons, SCR-Tech offers an off-site cleaning and rejuvenation process that is performed at SCR-Tech's regeneration facility. In this process, the customer removes the catalyst modules from the SCR unit and ships them to SCR-Tech. The cleaning process physically removes the materials plugging the catalyst to improve its NOx removal efficiency while the rejuvenation process removes catalyst poisons to extend its useful life.

For catalyst that has significantly deactivated and that may also be severely plugged or blinded, SCR-Tech offers an off-site regeneration process that restores deactivated SCR catalyst back to its original specifications and catalytic activity, often to activity levels at or greater than its original specifications. SCR-Tech's regeneration process involves removing the deactivated catalyst modules from the SCR unit and shipping them to SCR-Tech's regeneration facility where the catalyst is both cleaned and chemically reactivated.

The regeneration process at SCR-Tech consists primarily of four individual steps: ultrasonic deep cleaning to remove physical and microscopic particle ash; soaking and washing with chemicals to remove poisons that have contributed to catalyst deactivation; regeneration of catalyst activity through chemical reactivation; and heat treatment to seal in the newly added activity.

Once cleaned and regenerated, SCR-Tech returns the catalyst modules to the customer for reinstallation in the SCR unit. Upon reinstallation, the regenerated catalyst demonstrates the same level or an increased level of performance and deactivation rate as the original catalyst.



### ***SCR and Catalyst Management***

The most effective way to operate an SCR system is through a comprehensive catalyst management program. Catalyst management is often viewed as developing a plan for a given SCR system to maintain sufficient catalyst activity necessary to achieve the required NO<sub>x</sub> reduction with an acceptable margin to avoid inadvertent NO<sub>x</sub> or ammonia slip excursions beyond allowable limits.

We provide a broad array of customized SCR and catalyst management services, including guidance on effective SCR and catalyst management strategies, with the objective of assisting plant operators in optimizing the operation and performance of their SCR systems while reducing their operation and maintenance costs and achieving cost-effective NO<sub>x</sub> compliance. These services include ammonia inspection grid inspection and tuning; fuel reviews; flow distribution; test plans; catalyst specification, selection and initial performance testing for guarantee verification; catalyst life cycle forecasting through advanced computer simulation; SCR reactor inspection and catalyst sampling; catalyst activity testing and determination of SO<sub>2</sub>/SO<sub>3</sub> conversion rate in a bench-scale reactor; and development of catalyst exchange strategies.

As part of its catalyst management program, SCR-Tech offers customized catalyst regeneration plans scheduled around planned outages. SCR-Tech provides SCR and catalyst management services for individual plants, on a multi-plant basis, or under a fleet-wide blanket agreement. All SCR and catalyst management services are offered as either a complete package or “a la carte,” allowing the flexibility to select and combine various services on an as-needed basis tailored to the individual SCR system.

### **Experience**

SCR-Tech’s catalyst regeneration technology has been successfully applied in Germany since 1997 by its former parent company and since 2003 in the United States. We have cleaned/regenerated large quantities of SCR catalyst of all types on a worldwide basis to date for all major catalyst manufacturers. This extensive experience has validated our technology’s ability to achieve maximum NO<sub>x</sub> reduction performance while reducing overall NO<sub>x</sub> compliance costs for the power generating facility.

### **Quality Control**

We maintain a comprehensive quality assurance/quality control program for each step in our SCR catalyst and management process including SCR reactor inspection, catalyst sampling, testing, chemical analysis, development of a custom cleaning, rejuvenation and regeneration process, and catalyst treatment, packing and shipping.

Our supervisory personnel in the office, on-site, in the lab and in the production facility seek to ensure that each step in the process is executed under the highest of standards and in compliance with contractual requirements. All of our on-site SCR reactor inspections are performed by a team of experienced professionals with years of experience working on SCR systems.

Our testing, inspection, and laboratory services all complement each other and allow us to provide our customers with a complete picture of their SCR reactor and its operating effects on the balance of the plant.

The combined results of this effort are used to monitor and forecast SCR system and catalyst performance and to accurately forecast the development of the installed NO<sub>x</sub> reduction potential. By comparing the forecast with the required minimum NO<sub>x</sub> reduction potential, the point in time for the need for catalyst regeneration or replacement can be identified allowing for the necessary outage planning well in advance of the actual occurrence.



## **Customers**

Our SCR Catalyst and Management Services business currently serves the U.S. coal-fired power generation market. Our customer base ranges from large investor-owned utilities and independent power producers to smaller municipal power generators.

Since commencing commercial operations in its regeneration facility in March 2003, SCR-Tech has provided services for some of the largest electric utility companies and independent power producers (“IPPs”), and their equipment suppliers, in the U.S. SCR-Tech has made significant progress over the past years in strengthening its relationships within the utility industry, developing new sales channels, and increasing its market penetration.

For the full year of 2007 (including the period prior to our acquisition of SCR-Tech), five customers represented approximately 90% SCR-Tech’s revenue. As part of an ongoing growth and revenue diversification strategy, SCR-Tech continues to actively target SCR operators throughout the United States, and the Eastern U.S. in particular, to further expand its customer base and broaden its reach in the marketplace.

## **Competitive Advantage**

SCR-Tech presently is the only company in North America offering a regeneration process capable of restoring SCR catalyst activity back to at least its original specifications. Our regeneration process currently competes only against new catalyst sales when a replenishment of catalyst activity is required.

SCR-Tech’s regeneration process has several advantages over purchasing new catalyst by (i) offering cost savings, (ii) eliminating or reducing disposal issues, (iii) enhancing catalyst activity and (iv) reducing SO<sub>2</sub> conversion

### ***Cost Savings***

SCR-Tech offers catalyst regeneration for significantly less cost than purchasing new catalyst. As part of our regular course of business, we continuously work on various programs aimed at streamlining our production costs. We believe the outcome of these programs will enable us to achieve sufficient flexibility in our pricing to maintain our cost advantage while remaining competitive with any reductions in new catalyst pricing or with any future regeneration competition that may arise. We believe that the savings that can be generated through regeneration will become increasingly important to cost-conscious power generating companies once SCR units commence year-round operation beginning in 2009, and catalyst replenishment will be required on a more frequent basis.

### ***Elimination/Reduction of Disposal Issues***

Catalyst regeneration not only provides SCR operators a significantly lower cost alternative to catalyst replacement, but also eliminates the costs and environmental liabilities associated with disposing of deactivated catalyst, which must be shipped to a disposal site and may be considered hazardous waste. Even though our cleaning and regeneration services involve the removal of hazardous wastes from catalyst and the use of significant chemical materials, we do not face the same environmental risks or liabilities as a result of the waste water treatment plant serving our production facility, which provides for the appropriate treatment and disposal of all such waste. The shipping costs associated with regenerating catalyst are comparable to those of replacing catalyst. However, the added cost of placing the spent catalyst in a landfill or disposal site can be significant. In addition, avoiding landfill costs can also reduce or eliminate future liabilities associated with hazardous waste.

### ***Enhanced Activity***

Aging of the catalyst reduces the useful activity through channel plugging by ash, and by the blinding of the active sites on a microscopic scale by fuel constituents and other fuel-related poisons that attach to active sites, chemically deactivating or sealing them and rendering these sites impotent. These deteriorating factors reduce the catalyst activity until the useful life has been depleted. At that time, the catalyst must be replenished, either through the purchase of new replacement catalyst or through regeneration. Replacement is a more costly alternative and results in disposing of the basic activity still left in the catalyst. Regeneration, on the other hand, fully restores the useful activity of the spent catalyst, while still taking full advantage of all the basic activity, for significantly less cost than replacement. By increasing the number of catalytic sites available for reaction, SCR-Tech's process has even been demonstrated in certain cases to increase catalytic activity beyond the original level by as much as 25%, providing the potential for significant economic value.

### ***Reduced SO<sub>2</sub> Conversion***

The use of regenerated catalyst has also been demonstrated to significantly lower SO<sub>2</sub> oxidation rates when compared with the conversion rates of new catalyst. Importantly, the regenerated catalyst achieved significant reductions in SO<sub>2</sub> conversion while still maintaining original catalytic activity levels and NO<sub>x</sub> reduction performance.

### **Competition**

SCR-Tech is presently the only company in North America offering a catalyst regeneration process for the North American marketplace that can chemically reactivate and fully restore SCR catalyst activity and NO<sub>x</sub> reduction performance back to original specifications.

Currently, new catalyst remains the primary competition for SCR-Tech's regeneration process when a replenishment of catalyst activity is necessary. While we believe that SCR-Tech's regeneration process offers significant cost and performance advantages over the purchase of replacement catalyst and essentially eliminates the costs and environmental concerns associated with land filling spent catalyst, it is possible that the leading SCR catalyst suppliers and others could eventually develop a solution that may compete with ours. We cannot fully anticipate how catalyst manufacturers may react to growing competitive pressure and increased penetration of regeneration in the U.S. catalyst replacement market. While we know of no catalyst supplier with definitive plans to launch U.S.-based regeneration services in the near-term, we expect some future tactics or market entry by these companies to better compete with SCR-Tech's regeneration process. Furthermore, we are aware of certain companies, including Cormetech and Hitachi, that have indicated an interest in offering catalyst cleaning and regeneration.

We are aware of one company, STEAG LLC ("Steag"), which is entering the U.S. catalyst regeneration market and has announced plans to offer regeneration services beginning in 2008. Steag is currently building a regeneration facility in North Carolina. Steag, based in Charlotte, North Carolina, is a subsidiary of a large German power producer, STEAG GmbH.

We believe the combination of our intellectual property and patent protection, practical experience required to successfully engage in catalyst regeneration, the investment required for a production facility, and the total size of the market create a barrier for a significant number of new entrants to the market. In addition, we believe that our first mover advantage in the regeneration marketplace, combined with our solid reputation as a market leader, established customer base, substantial regeneration experience, and recent technological advances will help us maintain our leading market position as the first company in North America to offer a technically feasible and economically viable regeneration process for SCR catalyst.

Furthermore, we plan to vigorously protect our proprietary technologies and processes and further deter competitors from entering the market through ongoing technology innovations and cost-reduction activities, adding new patents and strengthening our protection of existing patents, and by identifying industry trends and future needs so that we may further tailor our products and services to better meet these needs.

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With respect to cleaning and rejuvenation, we expect SCR-Tech's processes to compete with alternative cleaning and rejuvenation approaches currently in the marketplace. We are aware of at least one company, that offers an on-site SCR catalyst cleaning and washing process that requires the removal of the catalyst from the SCR system. We believe that SCR-Tech's patent-protected cleaning process offers several competitive advantages, including both an off-site process and an "in-situ" process that does not require the removal of the catalyst from the SCR system.

### **Production and Laboratory Facilities**

SCR-Tech's business operations are located in Charlotte, North Carolina in a 98,000 square feet production facility for the cleaning and regeneration of SCR catalyst.

We expect the capacity of our existing production facility to be sufficient to meet market demand through mid-2008. This production facility is designed to allow for a significant increase of its current capacity. We believe that through the implementation of additional shifts and a capital investment of approximately \$1.0 million to \$1.5 million, we can expand our production capabilities to meet our near-term needs. We expect to make this investment in 2008 to accommodate anticipated market growth.

Over the long-term, we expect market demand to increase and we believe a further expansion of our production facility is likely to be required. To accommodate further expansion, we anticipate building a second production facility at our existing site or a new facility at a different location. The timing associated with investing in such a facility expansion will be a function of market growth, and could be as early as late 2008 or 2009. We estimate the cost of such a facility would be approximately \$5.0 million.

One of the most important features of our current site is the existence of a waste water treatment plant serving our production facility. While our cleaning and regeneration services involve the removal of hazardous wastes from catalyst and the use of significant chemical materials, our on-site North Carolina and EPA-approved waste water treatment plant ensures that our operations are in full environmental compliance. Chemicals required for catalyst cleaning and regeneration are widely available through numerous sources.

We maintain an on-site laboratory and we have the opportunity to use various certified laboratories in Europe if necessary. These labs optimize the catalyst cleaning/ regeneration process that is verified independently by third party testing in accordance with VGB Guideline for the Testing of DeNOx Catalyst, the international standard for catalyst testing.

### **Intellectual Property**

We rigorously protect our proprietary technologies and processes and other intellectual property. We seek to maintain our position and reputation as a market leader, and recognize the need to remain technologically advanced relative to competitors and potential competitors, and to distinguish ourselves based on continuous technological innovations. Our strategy is to rapidly identify key intellectual property developed or acquired by us in order to protect it in a timely and effective manner, and to continually use such intellectual property to our competitive advantage in the SCR services marketplace. An objective of our intellectual property strategy is to enable us to be first to market with proprietary technology and to sustain a long term technological lead in the market.

We use a combination of patents (owned or licensed), trade secrets, contracts with our employees, suppliers, partners and customers, copyrights and trademarks to protect the proprietary aspects of our core technologies, technological advances and innovations and know-how. We work actively to maintain protection of our proprietary technologies and processes over time through follow-on patent filings associated with technology and process improvements that we continually develop.



## **DSIT Solutions Ltd.**

DSIT Solutions is a globally-oriented high tech company with top-tier expertise in acoustics and underwater electronics and development capabilities in the areas of Real-Time and Embedded systems. Based on these capabilities, we offer a full range of sonar and acoustic-related solutions to strategic energy installations as well as defense and homeland security markets. In addition, based on our expertise in fields such as signal acquisition and processing applications, communication technologies and command, computerized vision for the semiconductor industry and command, control and communication management (“C<sup>3</sup>”) we provide wide ranging solutions to both military and commercial customers.

## **RT SOLUTIONS**

### *Products and Services*

DSIT’s RT Solutions activities are focused on two areas - naval solutions and other real-time and embedded hardware and software development.

*Naval Solutions.* Our naval solutions include a full range of sonar and acoustic-related solutions to the strategic energy installation, defense and homeland security markets. These solutions include:

- AquaShield™ Diver Detection Sonar (“DDS”) - The ongoing threat of terror attacks since 9/11 has produced an awareness of the need to protect critical marine and coastal infrastructures that has become a growing priority for governments and the private sector alike. Current marine surveillance solutions often ignore the areas of underwater surveillance and underwater site security, tracking above-water activity only, and leaving the area under water vulnerable to intrusion by divers and Swimmer Delivery Vehicles (“SDVs”). Building on our technical and operational experience in sonar and underwater acoustic systems for naval applications, we have developed an innovative, cost-effective Diver Detection Sonar system, the AquaShield™, that provides critical coastal and offshore protection of sites through detecting, tracking, and warning of unauthorized divers and SDVs for effective response. Our AquaShield™ DDS system is comprised of a command center staffed by one person. Underwater sonar units or “nodes” are strategically placed to provide maximum security with up to 360° coverage. The number and configuration of nodes are customized to meet each site’s unique requirements and topology. AquaShield™ DDS systems operate in all weather and water conditions. The system’s flexibility enables rapid deployment and adjustment to specific site conditions. The DDS sensors can be integrated with other sensors into a comprehensive command and control (“C&C”) system to provide a complete tactical picture both above and below the water for more intelligent evaluation of and effective response to threats.
- Harbor Surveillance System (“HSS”) - We have developed an integrated HSS that incorporates DDS sensors with above-water surveillance sensors to create a comprehensive above and below water security system. The system protects coastal and offshore sites such as energy terminals, offshore rigs, nuclear power plants and ports. The system reliably detects, intercepts, and warns of intruders such as divers, swimmers, SDVs, submersibles, small surface vessels and mines. The HSS can include sonar, radar, and electro-optical devices. The system is fully operable in shallow or deep water, daytime or nighttime and in all weather conditions. The system features a high probability of detection, a low false alarm rate and ease of operation and control.
- Mobile Acoustic Range (“MAR”) - Based on their radiated noise, submarines and surface vessels can be detected by passive sonar systems. The MAR accurately measures a vessel’s radiated noise; thus enabling navies and shipyards to monitor and control the radiated noise and to silence their ships and submarines. By continuously tracking the measured vessel and transmitting the data to a measurement ship, the MAR system enables real time radiated noise processing, analysis and display. The system also includes a platform database for measurement results management

and provides playback and post analysis capability. The MAR's flexibility enables rapid deployment and saves the maintenance costs involved in operating a fixed acoustic range. The MAR is a cost-effective solution for measuring the radiated noise of any naval platform. We have sold the system to leading navies and shipyards around the world.

·Generic Sonar Simulator (“GSS”) -We have developed a GSS for the rapid and comprehensive training of anti-submarine warfare (“ASW”), submarine, and mine detection sonar operators. This advanced, low cost, PC-based training simulator is designed for all levels of sonar operators from beginners to the most experienced, including ship ASW/attack teams. The simulator includes all aspects of sonar operation, with emphasis on training in weak target detection in the presence of noise and reverberation, torpedo detection, audio listening and classification.

The GSS operating principles are designed for ease-of-use, simulation accuracy, and simplified instruction. The system offers a range of sophisticated features. The GSS can be easily adapted to simulate any sonar system. The benefits of the GSS include:

- its low cost which enables the purchase of multiple systems
- allowing on-site training at navy bases and schools and eliminating the need for actual sonar system units
- trainees experiencing video and audio that are identical to actual environments with real targets
- the system can be extended to include two platforms, each having its own sonar team, or several sonar systems and teams onboard the platform

·Underwater Acoustic Signal Analysis system - DSIT’s Underwater Acoustic Signal Analysis system processes and analyzes all types of acoustic signals radiated by various sources and received by naval sonar systems (submarine, surface and air platforms, fixed bottom moored sonar systems, etc.).

#### *Other Real-Time and Embedded Solutions*

Additional areas of development and production in real-time and embedded hardware and software include:

- C & C applications - DSIT specializes in Weapon/ C&C Operating Consoles for unique air and naval applications, designed through synergistic interaction with the end-user. Weapon/C&C Consoles utilize Human-Machine Interface (“HMI”) prototyping supported on a variety of platforms as an integral part of the HMI definition and refinement process. Weapon/C&C Console specific applications driven by HMI include signal processing and data fusion and tracking.
- Computerized vision for the semiconductor industry - The semiconductor industry employs optical inspection systems in order to detect defects that occur during wafer manufacture. These optical systems are based on a wide range of sophisticated algorithms that utilize image and signal processing techniques in order to detect defects of different types. DSIT has been cooperating with global leaders of state-of-the-art wafer inspection systems in developing cutting edge technologies for almost a decade. We develop and manufacture hardware and embedded software for computerized vision systems and we supply this multi-disciplinary field in the integration of digital and analog technologies, image processing and intricate FPGA logic development.

- Modems and data links - DSIT's PCMCIA Soft Modem card is a state of the art modem and an example of the advanced technology we have achieved in performance and miniaturization of complex technologies. The design simplicity and flexibility allows customers to easily define and create a range of applications, and to design the card into a variety of OEM products, using the same, or slightly modified, hardware. The on-board processor enables and manages transfer of data over radio networks using different radio systems.
- Bluetooth solutions - Bluetooth is a powerful, low cost, wireless technology that is revolutionizing the personal connectivity market. It enables short-range wireless links that seamlessly connect all types of mobile and other devices offering anywhere/anytime connectivity between devices, and with the Internet. We offer Bluetooth wireless data and voice solutions for OEMs, including hardware and software development, integration and production
- VOIP/ROIP applications - VoIP/RoIP technology converts voice or radio signals to digital format, thus allowing transmission of the digital data over the IP networks. DSIT has developed and produced advanced Radio over IP gateways, including hardware and embedded software for tactical military system communications. We have also developed VoIP gateway software for a pioneering VoIP system developer.

DSIT has initiated discussions towards strategic alliances for marketing its sonar technology. We hope some of these discussions will come to fruition before the end of 2008.

#### *Customers and Markets*

All of this segment's operations in 2005, 2006 and 2007 and most of its sales took place in Israel. We expect to generate significant revenues from naval solutions outside of Israel in 2008. We have created significant relationships with some of Israel's largest companies in its defense and electronics industries. DSIT is continuing to invest considerable effort to penetrate European, Asian and other markets in order to broaden its geographic sales base with respect to our sonar technology solutions. In 2007, we had our first sale of our AquaShield™ DDS. This sale is believed to be the first in the world of a system designed and operated to protect a strategic coastal energy installation. We believe that in 2008 and 2009, increased awareness as to the susceptibility of strategic coastal energy installations worldwide will result in increased sales of our AquaShield™ DDS. Three customers accounted for 74% of segment sales in 2007 (39%, 19% and 16%, respectively) while in 2006 two customers accounted for 61% (31%, and 30%, respectively) of segment sales. (See Risks Related to the RT Solutions segments - "We Are Substantially Dependent On A Small Number Of Customers And The Loss Of One Or More Of These Customers May Cause Revenues And Cash Flow To Decline" for more information.)

#### *Competitive Advantage*

DSIT's staff includes some of the top authorities in the field of sonar and acoustics. We believe that their knowledge, expertise and experience as well as our long track record of cooperation and delivery of high quality sonar solutions to the Israeli Navy and other customers world-wide combined with our agility and flexibility as a small company to tailor solutions to the unique requirements of the customer provides us with an advantage over our competitors.

#### *Competition*

Our RT Solutions activity faces competition from numerous competitors, large and small, operating in the Israeli and worldwide markets, some with substantially greater financial and marketing resources. We believe that our wide range of experience and long-term relationships with large businesses as well as the strategic partnerships that we are developing will enable us to compete successfully and obtain future business.

### *Facilities*

Our DSIT activities are conducted in approximately 18,000 square feet of office space in the Tel Aviv metropolitan area under a lease that expires in August 2009. We believe that DSIT's current premises are sufficient to handle the anticipated increase in sales for the near future.

### **DEMAND RESPONSE SOLUTIONS - COMVERGE INC.**

We own approximately 8.1% of Comverge Inc., a Nasdaq listed company, engaged in the business of providing demand response solutions

Comverge is a clean energy company providing peaking and base load capacity to electric utilities, grid operators and associated electricity markets. As an alternative to the traditional method of providing capacity by building a new power plant, Comverge delivers their capacity through implementation of demand management solutions that decrease energy consumption. The capacity Comverge delivers is more environmentally friendly and less expensive than conventional alternatives and has the benefit of increasing overall system reliability. Comverge's solutions are designed, built and operated for the benefit of their customers, which include electric utilities and grid operators that serve residential, commercial and industrial consumers. Comverge provides capacity to its customers either through long-term contracts where it actively manage electrical demand or by selling their demand response systems to utilities that operate them. Comverge owned or managed approximately 1,324 megawatts of capacity as of December 31, 2007.

Comverge's clean energy solutions enable their electric utility industry customers to address issues they confront on a daily basis, such as rising demand, decreasing supply, higher commodity prices, greater emphasis on the reduction of green house gases and emerging mandates to use energy efficiency solutions to address these issues. Comverge's solutions provide their customers with benefits beyond those relating to environmental and pricing concerns. Comverge's energy efficiency offerings allow utilities to reduce base load capacity which helps to improve system reliability. Comverge's demand response solutions enable their customers to reduce demand for electricity during peak hours, when strain on the system is greatest.

We currently remain Comverge's single largest stockholder, even after our recent sale of Comverge shares. We own 1,763,665 shares of Comverge's common stock with a market value at December 31, 2007 of approximately \$55.5 million. As at April 9, 2008, the market value of our shares in Comverge was approximately \$19.7 million.

### **GRIDSENSE SYSTEMS INC.**

On January 2, 2008, we completed a transaction in which we acquired 15,714,285 shares and 15,714,285 warrants for \$1.1 million in GridSense Systems Inc. ("GridSense"). The 15,714,285 shares acquired by us represent 24.52% of GridSense's issued and outstanding shares. If we exercise all of the 15,714,285 warrants acquired in the placement, we will own 31,428,570 GridSense common shares, representing 39.37% of GridSense's issued and outstanding shares.

GridSense is an industry leader in providing remote monitoring and control systems to electric utilities and industrial facilities worldwide. GridSense's offerings, developed in collaboration with utilities, provide superior power quality/reliability monitoring and demand-side management capabilities. Electric companies deploy these systems primarily in metropolitan, suburban, and rural electricity grids for the detection, prevention, and mitigation of disturbances and irregularities in the supply of electricity. Through its wholly owned subsidiaries in Australia, CHK GridSense Pty Ltd. and GridSense Inc in the U.S., GridSense has been serving a growing base of customers for over 25 years, in Australasia, North America, and Western Europe. GridSense is a reporting issuer in British Columbia and Alberta and trades on the TSX Venture Exchange under the symbol "GSN". As of March 20, 2008, the market value of our shares in GridSense was approximately C\$1.3 million.





## **LOCAL POWER INC.**

On July 31, 2007, we acquired ten percent of Local Power Inc. (“LPI”), a California-based, full-service energy services bureau that helps American cities and counties accelerate the development of competitively-priced, utility-scale, privately-operated clean energy projects. LPI was formed recently by a pioneer in the restructuring of the \$325 billion U.S. retail electricity market. We also have the right, until January 31, 2009, to purchase an additional 41% stake in LPI, bringing our potential total ownership position to 51% percent.

LPI provides consultation services and energy intelligence tools to enable cities to develop renewable electricity resources on a massive scale while utilizing the local utility’s distribution infrastructure. LPI’s founder, Paul Fenn, created Community Choice Aggregation (“CCA”), a revolutionary method by which cities can dramatically accelerate deployment of local green power infrastructure in order to diversify their electric power away from fossil fuel to renewable energy and achieve more stable, competitive rates for their communities. There are approximately one million consumers currently benefiting from low cost electricity delivered under CCA laws in two states. The two major markets, the Cape Light Compact on Cape Cod and the Northeast Ohio Public Energy Council in Greater Cleveland, are widely considered to be the only exceptions to the failure of electricity deregulation in the US. In 2002, Fenn authored a CCA law in California, where San Francisco now leads a major movement among municipalities and counties to implement CCA.

LPI is building a recurring revenue business with its highly scalable energy service bureau model, assisting cities to adopt, implement and manage CCA networks. CCA offers numerous benefits - city governments become strategic investors in renewable power, local jobs are promoted, rates are stabilized, and the service is popular with environmentally conscious politicians and voters.

## **SUPER SERVICES MARKET - PAKETERIA AG**

We own a 31% equity interest in Paketeria AG, a company registered in Germany and headquartered in Berlin that innovated the “Super Services Market”, a retail concept that promotes savings in logistics and transport, two of the largest consumers of fuel worldwide. Paketeria’s stores and franchises are located throughout Germany with a concentration in the area in and around Berlin. We initially invested in Paketeria in August 2006, followed by a second investment in October 2006. In September 2007, in conjunction with a private placement by Paketeria in which it raised approximately \$2.5 million, we converted approximately \$1.2 million of debt and accrued interest due to us from Paketeria into equity in the company. During the first quarter of 2008 we advanced approximately \$750,000 to Paketeria for working capital purposes. These advances are to be repaid by December 31, 2008.

Paketeria’s network of owned and franchised stores has doubled since our initial investment in August 2006. Paketeria provides green services by delivering mail by bicycle and offering recycling services such as eBay merchandising and toner cartridge refilling. The stores also provide office supplies, photo processing, photocopy, and Internet pharmacy services in Germany. Paketeria was established to take advantage of the privatization and subsequent substantial reduction in retail outlets of the German post office, which has stranded many communities without convenient access to postal services.

On December 21, 2007, Paketeria’s shares were listed under the symbol “AOSTYL” on the Open Market (Freiverkehr) of the Frankfurt Stock Exchange and became eligible for trading. In connection with the listing, all the Paketeria shareholders (including the Company) placed in escrow and authorized a German investment bank to sell up to 10% of their shares (129,600 shares) for a period of six months following the initial listing date at an initial minimum ask price of €77.00 per share. The proceeds of any sales of shares by the investment bank are to be held in escrow under the terms of an escrow agreement for a period up to six months from the listing date after which the bank is to transfer 50% of the proceeds (net of transaction fees and commissions) of the sale of the shares of the shareholders (a minimum of €2.5 million) to the shareholders and the remaining 50% the proceeds of the sale of the shares (a minimum

of €2.5 million) are to be used to subscribe for new shares of the company. In connection with the listing and the escrow arrangements the Paketeria shareholders agreed to lock up certain of their shares for up to one year from the listing date. Under the lock-up agreement, shareholders may not offer, pledge, allot, sell or otherwise transfer or dispose of directly or indirectly any shares of Paketeria.

There is currently a limited market for Paketeria's shares on this market. From the listing date to March 20 2008, 884 shares of Paketeria were sold by the German investment bank responsible for the initial listing.

## **BACKLOG**

As of December 31, 2007, total our backlog of work to be completed was \$9.1 million, of which \$7.1 million of which related to our RT Solutions segment and \$2.0 million which relates to our SCR segment. We estimate that we will perform approximately \$5.7 million of our backlog in 2008 (\$3.7 million from our RT Solutions segment and \$2.0 million from our SCR segment).

## **EMPLOYEES**

At December 31, 2007, we employed a total of 86 people. Our employees are located in the United States (23 employees of whom 20 are employed at SCR-Tech and three of whom are employed at Acorn) and in Israel (63 employees at DSIT). We have 60 employees in production, engineering and technical support (12 employees in SCR Tech and 48 employees in DSIT), three employees in marketing and sales (one employee in SCR-Tech and two employees in DSIT), and 23 employees in management, administration and finance (five employees in SCR-Tech, 23 employees in Israel and three employees in Acorn). We consider our relationship with our employees to be satisfactory.

We have no collective bargaining agreements with any of our employees. However, with regard to our Israeli activities, certain provisions of the collective bargaining agreements between the Israeli Histadrut (General Federation of Labor in Israel) and the Israeli Coordination Bureau of Economic Organizations (including the Industrialists Association) are applicable by order of the Israeli Ministry of Labor. These provisions mainly concern the length of the workday, contributions to a pension fund, insurance for work-related accidents, procedures for dismissing employees, determination of severance pay and other conditions of employment. We generally provide our Israeli employees with benefits and working conditions beyond the required minimums. Israeli law generally requires severance pay upon the retirement or death of an employee or termination of employment without due cause. Furthermore, Israeli employees and employers are required to pay specified amounts to the National Insurance Institute, which administers Israel's social security programs. The payments to the National Insurance Institute include health tax and are approximately 5% of wages (up to a specified amount), of which the employee contributes approximately 70% and the employer approximately 30%.

## **SEGMENT INFORMATION**

For additional financial information regarding our operating segments, foreign and domestic operations and sales, see "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" and Note 20 to our Consolidated Financial Statements included in this Annual Report.

### **ITEM 1A.**

### **RISK FACTORS**

We may from time to time make written or oral statements that contain forward-looking information. However, our actual results may differ materially from our expectations, statements or projections. The following risks and uncertainties could cause actual results to differ from our expectations, statements or projections.

## GENERAL FACTORS

*We have a history of operating losses and have used increasing amounts of cash available for operations.*

We have a history of operating losses, and have used increasing amounts of cash to fund our operating activities over the years. In 2005, 2006 and 2007, we had operating losses of \$2.3 million, \$3.6 million and \$4.4 million, respectively. Cash used in operations in 2005, 2006 and 2007 was \$1.7 million, \$1.6 million and \$2.6 million, respectively.

Despite selling a significant portion of our Comverge investment in December 2007 and receiving proceeds (net of transaction costs) of approximately \$28.4 million and raising approximately \$6.9 million (approximately \$6.0 million net of transaction costs) in 2007 from the private placement of our Convertible Debentures, we have utilized a significant portion of those funds in our recent acquisition and investment activity.

As described under the caption "Recent Developments" in "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations," the market value of our investment in Comverge has fallen significantly since December 31, 2007 (to approximately \$21.9 million as of March 20, 2008). In addition, we continue to aggressively pursue additional investments. While we currently have enough cash on hand to fund our operations for the next 12 months, we may need additional funds to fund the investment and acquisition activity we wish to undertake. We do not know if such funds will be available if needed on terms that we consider acceptable. Should the market value of our Comverge shares remain at their depressed level or continue to drop, we may have to limit or adjust our investment/acquisition strategy or sell some of our Comverge shares or other assets in order to continue to pursue our corporate goals.

*We depend on key management for the success of our business.*

Our success is largely dependent on the skills, experience and efforts of our senior management team and other key personnel. In particular, our success depends on the continued efforts of John A. Moore, our CEO, William J. McMahon, CEO of CoaLogix/SCR-Tech, Benny Sela, CEO of DSIT and other key employees. The loss of the services of any key employee could materially harm our business, financial condition, future results and cash flow. Although to date we have been successful in retaining the services of senior management and have entered into employment agreements with them, members of our senior management may terminate their employment agreements without cause and with notice periods ranging up to 90 days. We may also not be able to locate or employ on acceptable terms qualified replacements for our senior management or key employees if their services were no longer available.

*Loss of the services of a few key employees could harm our operations.*

We depend on our key management, technical employees and sales personnel. The loss of certain managers could diminish our ability to develop and maintain relationships with customers and potential customers. The loss of certain technical personnel could harm our ability to meet development and implementation schedules. The loss of key sales personnel could have a negative effect on sales to certain current customers. Most of our significant employees are bound by confidentiality and non-competition agreements. Our future success also depends on our continuing ability to identify, hire, train and retain other highly qualified technical and managerial personnel. If we fail to attract or retain highly qualified technical and managerial personnel in the future, our business could be disrupted.

*A failure to integrate our new management may adversely affect us.*

In November 2007, we acquired SCR-Tech and its entire management team. Any failure to effectively integrate SCR-Tech's new management into our controls, systems and procedures could materially adversely affect our

business, results of operations and financial condition.

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*Compliance with changing regulation of corporate governance, public disclosure and financial accounting standards may result in additional expenses and affect our reported results of operations.*

Keeping informed of, and in compliance with, changing laws, regulations and standards relating to corporate governance, public disclosure and accounting standards, including the Sarbanes-Oxley Act, as well as new and proposed SEC regulations and accounting standards, has required an increased amount of management attention and external resources. Compliance with such requirements may result in increased general and administrative expenses and an increased allocation of management time and attention to compliance activities.

*We may not be able to successfully integrate companies which we may invest in or acquire in the future, which could materially and adversely affect our business, financial condition, future results and cash flow.*

Our strategy is to continue to expand in the future, including through acquisitions. Integrating acquisitions is often costly, and we may not be able to successfully integrate our acquired companies with our existing operations without substantial costs, delays or other adverse operational or financial consequences. Integrating our acquired companies involves a number of risks that could materially and adversely affect our business, including:

- failure of the acquired companies to achieve the results we expect;
- inability to retain key personnel of the acquired companies;
- dilution of existing stockholders;
- potential disruption of our ongoing business activities and distraction of our management;
- difficulties in retaining business relationships with suppliers and customers of the acquired companies;
- difficulties in coordinating and integrating overall business strategies, sales and marketing, and research and development efforts; and
- the difficulty of establishing and maintaining uniform standards, controls, procedures and policies, including accounting controls and procedures.

If any of our acquired companies suffers customer dissatisfaction or performance problems, the same could adversely affect the reputation of our group of companies and could materially and adversely affect our business, financial condition, future results and cash flow.

Moreover, any significant acquisition could require substantial use of our capital and may require significant debt or equity financing. We cannot provide any assurance as to the availability or terms of any such financing or its effect on our liquidity and capital resources.

*We incur substantial costs as a result of being a public company.*

As a public company, we incur significant legal, accounting, and other expenses in connection with our reporting requirements. Both the Sarbanes-Oxley Act of 2002 and the rules subsequently implemented by the Securities and Exchange Commission and NASDAQ, have required changes in corporate governance practices of public companies. These new rules and regulations have already increased our legal and financial compliance costs and the amount of time and effort we devote to compliance activities. We expect these rules and regulations to further increase our legal and financial compliance costs and to make compliance and other activities more time-consuming and costly. Further, due to increased regulations, it may be more difficult for us to attract and retain qualified persons to serve on our

board of directors or as executive officers. We have attempted to address some of these attraction and retention issues by offering contractual indemnification agreements to our directors and executive officers, but this may not be sufficient. We continue to regularly monitor and evaluate developments with respect to these new rules with our legal counsel, but we cannot predict or estimate the amount of additional costs we may incur or the timing of such costs.

## **RISKS RELATED TO SCR-TECH**

*SCR-Tech has incurred significant net losses since inception and may never achieve sustained profitability.*

SCR-Tech has incurred net losses of \$2.6 million, \$2.5 million and \$0.1 million for the years ended December 31, 2007, 2006 and 2005, respectively. As of December 31, 2007, it had an accumulated deficit of approximately \$9.7 million. We believe that SCR-Tech will be profitable in 2008; however, we can provide no assurance that SCR-Tech will generate sufficient revenues to allow it to become profitable or to sustain profitability.

*SCR-Tech has a limited operating history*

SCR-Tech has completed only a limited number of SCR cleaning and regeneration projects since it commenced commercial operations in March 2003. Thus SCR-Tech does not have a long-term operational history sufficient to allow us to determine whether it can successfully operate its business under differing environments and conditions or at any level of sustained profitability.

*The size of the market for SCR-Tech's business is uncertain.*

SCR-Tech offers SCR catalyst cleaning, rejuvenation and regeneration, as well as SCR system management and consulting services. The size and growth rate for this market will ultimately be determined by a number of factors, including environmental regulations and their enforcement, the growth in the use of SCR systems to reduce NOx and other pollutants, the length of operation of SCR systems without the need for cleaning, the differences, if any, in the accounting and rate-base effect of using regenerated SCR catalyst as compared to new SCR catalyst as adopted or approved by applicable federal and state regulatory authorities, rejuvenation or regeneration, the expansion of warranty coverage from SCR catalyst OEMs, the cost of new SCR catalyst, and other factors, most of which are beyond the control of SCR-Tech. There is limited historical evidence in the United States as to the cycle of replacement, cleaning and regeneration of SCR catalyst so as to accurately estimate the potential growth of the business. In addition, the number of times a catalyst can be regenerated is unknown, which also may affect the demand for regeneration in lieu of purchasing new catalyst. Any delay in the development of the market could significantly and adversely affect the value of SCR-Tech.

*SCR-Tech will be subject to vigorous competition with very large competitors that have substantially greater resources and operating histories.*

We are aware of one company, STEAG LLC ("Steag"), which is entering the U.S. catalyst regeneration market and we expect it to offer regeneration services in 2008. Steag is currently building a regeneration facility in North Carolina. Steag, based in Charlotte, North Carolina, is a subsidiary of a German power producer, STEAG GmbH ("Steag GmbH"). Steag GmbH is very large and has substantially greater resources than SCR-Tech or us. Competition from Steag may have a material adverse effect on our operations, including a potential reduction in operating margins and a loss of potential business.

We are also aware of at least one other company, Enerfab, Inc. that provides SCR catalyst management, rejuvenation and cleaning services. We are aware of certain companies, including Cormetech and Hitachi, who have indicated an interest in offering catalyst cleaning and regeneration. There also are a number of SCR catalyst manufacturers with substantial parent companies that may seek to maintain market share by significantly reducing prices which will put pressure on our operating margins. These companies include Cormetech Inc. (owned by Mitsubishi Heavy Industries and Corning, Inc.), Argillon GmbH (formerly Siemens), BASF/ CERAM, Haldor-Topsoe, Inc. and Hitachi America. Further, if the SCR catalyst regeneration market expands as we expect, additional competitors could emerge. In addition, if our intellectual property protection is weakened, competition could more easily develop.





*If we are unable to protect our intellectual property, or our intellectual property protection efforts are unsuccessful, others may duplicate our technology.*

We rely on a combination of patents, trademarks, copyrights, trade secret laws and restrictions on disclosure to protect our intellectual property rights. Our ability to compete effectively will depend, in part, on our ability to protect our proprietary technology, systems designs and manufacturing processes. The ability of others to use our intellectual property could allow them to duplicate the benefits of our products and reduce our competitive advantage. We do not know whether any of our pending patent applications will issue or, in the case of patents issued, that the claims allowed are or will be sufficiently broad to protect our technology or processes. Further, a patent issued covering one use of our technology may not be broad enough to cover uses of that technology in other business areas. In this regard, a significant portion of the patents relied upon by SCR-Tech were acquired from third parties. Even if all our patent applications are issued and are sufficiently broad, they may be challenged or invalidated. We could incur substantial costs in prosecuting patent and other intellectual property infringement suits and defending the validity of our patents and other intellectual property. While we have attempted to safeguard and maintain our property rights, we do not know whether we have been or will be completely successful in doing so. These actions could place our patents, trademarks and other intellectual property rights at risk and could result in the loss of patent, trademark or other intellectual property rights protection for the products, systems and services on which our business strategy partly depends.

We rely, to a significant degree, on contractual provisions to protect our trade secrets and proprietary knowledge. These trade secrets cannot be protected by patent protection. These agreements may be breached, and we may not have adequate remedies for any breach. Our trade secrets may also be known without breach of such agreements or may be independently developed by competitors.

*Third parties may claim that we are infringing their intellectual property, and we could suffer significant litigation or licensing expenses or be prevented from selling products and services if these claims are successful. We also may incur significant expenses in affirmatively protecting our intellectual property rights.*

Our competitors may independently develop or patent technologies or processes that are equivalent or superior to ours. In recent years, there has been significant litigation involving patents and other intellectual property rights in many technology-related industries and we believe our industry has a significant amount of patent activity. Third parties may claim that the technology or intellectual property that we incorporate into or use to develop, manufacture or provide our current and future products, systems or services infringe, induce or contribute to the infringement of their intellectual property rights, and we may be found to infringe, induce or contribute to the infringement of those intellectual property rights and may be required to obtain a license to use those rights. We may also be required to engage in costly efforts to design our products, systems and services around the intellectual property rights of others. The intellectual property rights of others may cover some of our technology, products, systems and services. In addition, the scope and validity of any particular third party patent may be subject to significant uncertainty.

Litigation regarding patents or other intellectual property rights is costly and time consuming, and could divert the attention of our management and key personnel from our business operations. The complexity of the technology involved and the uncertainty of intellectual property litigation increase these risks. Claims of intellectual property infringement might also require us to enter into costly royalty or license agreements or to indemnify our customers. However, we may not be able to obtain royalty or license agreements on terms acceptable to us or at all. Any inability on our part to obtain needed licenses could delay or prevent the development, manufacture and sale of our products, systems or services. We may also be subject to significant damages or injunctions against development, manufacture and sale of our products, systems or services.

We also may be required to incur significant time and expense in pursuing claims against companies we believe are infringing our intellectual property rights. The complexity of our technology and the nature of intellectual property litigation would make it expensive and potentially difficult to prove that a competitor is in fact infringing on our intellectual property rights, but we may nonetheless find it necessary to commence such litigation to protect our rights and future business opportunities. We can offer no assurance as to the outcome of any such litigation if it were to occur.

*SCR-Tech's business is subject to customer concentration.*

SCR-Tech offers SCR catalyst cleaning, rejuvenation and regeneration, as well as SCR system management and consulting services to coal-fired power plants. Some of the utilities operating these plants are exceptionally large and operate a number of such power plants. Thus, one or more large utilities could provide a very large order or orders to SCR-Tech which likely would result in one or more such utilities providing most of the orders and revenues for SCR-Tech for a particular quarterly or annual period. During fiscal 2007, four customers represented more than 90% of our revenue. During fiscal 2006, one customer represented approximately 34% of our revenue and five customers represented approximately 92% of our revenue for such period. Although such large orders could prove extremely beneficial to SCR-Tech by providing a large and consistent source of orders and revenues without the expense of marketing to a number of smaller customers, SCR-Tech could become highly dependent on a small number of large utilities for its business. In such event, the loss of a particular customer would have a much greater adverse effect on SCR-Tech than the loss of a smaller customer. This also may result in significant swings in orders and revenues on a quarterly basis. SCR-Tech cannot at this time determine the likelihood or extent of such future customer concentration.

*Risk of changes in government regulation.*

Our business is significantly dependent on the nature and level of government regulation of emissions. Without government regulation of coal-fired power generation, SCR catalyst would not be used by utilities, there would be no need for utilities to acquire, clean or regenerate SCR catalyst, and SCR-Tech would have no business purpose. Further, changes in or adverse interpretations of governmental accounting or rate-based emissions regulations also could have a material adverse effect on our business. Although government regulation of emissions has become increasingly stringent in recent years, the growing costs associated with such regulations may limit the level of increase and scope of emissions requirements, which could limit the potential growth of our target markets. Any easing of governmental emissions requirements or the growth rate of such requirements could have a material adverse effect on our business.

*SCR-Tech's business is subject to potential seasonality.*

Because some utilities and IPPs currently operate their SCR units only during the "ozone season" (May 1 — September 30), SCR-Tech's business may be more limited than if SCR units were required to operate on a continual basis. The NOx SIP Call was configured to impose a summer ozone season NOx limitation in more than 19 states and the District of Columbia. During this period, utilities and IPPs seek to operate their SCR catalyst at maximum capacity so as to reduce NOx emissions. During non-ozone season periods, most operators currently have limited (if any) requirements to run their SCR systems. Unless and until such regulations are tightened, much of SCR-Tech's business may be concentrated during the ozone season each year. This will likely result in less business than if SCR units were required to be operated throughout the year and may also result in quarters of relatively higher cash flow and earnings and quarters where cash flow and earnings may be minimal. These potential fluctuations in revenues and cash flow during a year may be significant and could materially impact our quarterly earnings and cash flow. This may have a material adverse effect on the perception of our business and the market price for our common stock.



*SCR-Tech does not own its regeneration facilities and it is subject to risks inherent in leasing the site of its operations.*

SCR-Tech does not own its regeneration site; instead it leases it from Clariant Corporation. Although we believe the lease terms are favorable, the dependence on Clariant and the site could subject SCR-Tech to increased risk in the event Clariant experiences financial setbacks or loses its right to operate the site. This risk is heightened because the site is a Federal Superfund site (under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (“CERCLA”)), which increases the risks that the site ultimately could be shut down or that Clariant will be financially unable to continue its ownership of the site. It may be difficult to relocate to another site on a timely or cost-effective basis, and SCR-Tech’s business could be negatively impacted by any problems with continuing to conduct its operations at its current site.

*SCR-Tech could be subject to environmental risks as a result of the operation of its business and the location of its facilities.*

The operation of SCR-Tech’s business and the nature of its assets create various environmental risks. SCR-Tech leases its site for operations at a property listed on the National Priority List as a Federal Superfund site. Five CERCLA Areas (those areas of concern identified under the CERCLA program) are identified on the property, and while SCR-Tech does not lease any property identified as a CERCLA Area, one such CERCLA Area has resulted in contamination of groundwater flowing underneath one of the buildings leased by SCR-Tech. Although SCR-Tech has indemnification from Clariant Corporation for any environmental liability arising prior to the operation of SCR-Tech’s business at the site, we can provide no assurance that such indemnification will be sufficient or that SCR-Tech would be protected from an environmental claim from the nature of the site. In addition, the operation of SCR-Tech’s business involves removal of hazardous wastes from catalyst and the use of significant chemical materials. As a result, SCR-Tech could be subject to potential liability resulting from such operations. To date, neither Acorn nor SCR-Tech has been identified as a potential responsible party to such environmental risks, nor have any amounts been recorded to accrue for these potential exposures.

*We likely will be required to make significant capital expenditures to expand SCR-Tech’s production facilities or for other purposes; we may require additional capital for such purposes.*

SCR-Tech does not own its regeneration site; instead it leases it from Clariant Corporation, the U.S. subsidiary of a Switzerland-based public company. We believe this site is sufficient to meet SCR-Tech’s anticipated production requirements through mid 2008. However, in order to meet anticipated demand for increased orders for SCR regeneration services in 2008, we expect to incur capital expenditure costs of \$1.0 million to \$1.5 million in 2008. In addition, we believe we will need to incur approximately \$5.0 million of additional capital expenditures commencing in 2008 to construct a second regeneration plant to meet anticipated demand for regeneration services in 2009. Although we believe SCR-Tech’s present site allows for building additional regeneration facilities, including a doubling of capacity in the current facility, such construction could require significantly more capital expenditures than anticipated. Moreover, because of necessary permitting and time for construction, we can provide no assurance that SCR-Tech could meet the demands from an unanticipated rapid increase in orders in a timely manner. Any failure to timely fulfill such orders could have an adverse impact on SCR-Tech’s business.

Although we believe our available non-restricted cash of approximately \$19.6 at December 31, 2007 is sufficient to fund any currently anticipated capital requirements for SCR-Tech and to otherwise fund our current operations through 2008, we can provide no assurance that we will not require additional capital. Moreover, if we incur the expected capital expenditures to expand the capacity of SCR-Tech, but the market does not develop as we expect or increased competition results in loss of significant business, we may not generate additional revenue from such expenses. This could adversely impact our financial position. Moreover, other unanticipated expenses for SCR-Tech, such as litigation or other costs for protecting intellectual property rights or as a result of a significant corporate transaction could result in the need for additional capital. These additional funding requirements may be significant,

and funds may not be available when required or may be available only on terms unsatisfactory to us.

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Beyond December 31, 2008, our cash requirements will depend on many factors, including but not limited to the market acceptance of our product and service offerings, the ability of SCR-Tech to generate significant cash flow, the rate of expansion of our sales and marketing activities, the rate of expansion of our production capacity, our ability to manage selling, general and administrative expenditures and the timing and extent of SCR-Tech related research and development projects.

In addition, we continue to actively pursue business opportunities, including but not limited to, mergers, acquisitions or other strategic arrangements. Such strategic opportunities could require the use of additional cash, reducing our available capital prior to December 31, 2008, or could require additional equity or debt financing. The nature and amount of any such financing or the use of any capital in any such transaction cannot be predicted and will depend on the terms and conditions of the particular transaction.

*Certain of SCR-Tech's capital equipment is unique to our business and would be difficult and expensive to repair or replace.*

Certain of the capital equipment used in the services performed by SCR-Tech has been developed and made specifically for us and would be difficult to repair or replace if it were to become damaged or stop working. In addition, certain of our equipment is not readily available from multiple vendors. Consequently, any damage to or breakdown of our equipment at a time when we are regenerating large amounts of SCR catalyst at SCR-Tech may have a material adverse impact on our business.

*SCR-Tech may be subject to warranty claims from its customers.*

SCR-Tech typically provides limited warranties to its customers relating to the level of success of its catalyst cleaning and regeneration services. In the event SCR-Tech is unable to perform a complete regeneration of an SCR catalyst, SCR-Tech may be required to re-perform a regeneration or repay a portion of the fees earned for the regeneration efforts. SCR-Tech also may be required to provide warranties with respect to its other SCR catalyst services provided to its customers. Since SCR-Tech has only a limited operating history in North America, it is not possible to determine the amount or extent of any potential warranty claims that SCR-Tech may incur. There is a risk that any such claims could be substantial and could affect the profitability of SCR-Tech and the financial condition of the Company. The Company does maintain a limited warranty claim liability; however, should the amount of any potential warranty claims be incurred at levels higher than the warranty liability, the profitability and financial condition of the Company could be impacted.

*SCR-Tech is dependent on third parties to perform certain testing required to confirm the success of its regeneration.*

In connection with the regeneration of SCR catalyst, SCR-Tech generally must have an independent company provide testing services to determine the level of success of regeneration. Currently there are a limited number of companies providing this service. If SCR-Tech is unable to obtain this service on a cost-effective basis, SCR-Tech may not be able to perform its regeneration services.

*Significant price increases in key materials may reduce SCR-Tech's gross margins and profitability of SCR-Tech's regeneration of SCR Catalyst.*

The prices of various chemicals used to regenerate SCR Catalyst can be volatile. If the long-term costs of these materials were to increase significantly, we would attempt to reduce material usage or find substitute materials. If these efforts were not successful or if these cost increases could not be reflected in our price to customers, then our gross margins and profitability of regenerating SCR Catalyst would be reduced and our ability to operate SCR-Tech profitably could be compromised.





*Risks of purchasing used SCR catalyst.*

SCR-Tech's primary business involves the cleaning and regenerating of customer-owned SCR catalyst. In certain instances, however, SCR-Tech may purchase used or "spent" catalyst from utilities for regeneration, as when, for example, a utility wishes to avoid the costs and potential hazardous waste issues associated with the disposal of used or "spent" catalyst. SCR-Tech may purchase SCR catalyst for a nominal sum and then regenerate such catalyst for immediate sale, or may purchase spent SCR catalyst on an opportunistic basis for future regeneration and sale. The purchase of spent SCR catalyst involves potential risks to SCR-Tech. For example, spent SCR catalyst includes significant hazardous waste, and unlike the regeneration of customer-owned SCR catalyst, the purchase of spent SCR catalyst requires SCR-Tech to take ownership or "title" to the SCR catalyst, which may potentially increase SCR-Tech's environmental risk exposure. Furthermore, if SCR-Tech cannot find a customer to purchase the regenerated catalyst, then SCR-Tech must either store the spent catalyst, subject to the inherent risk of holding catalyst which has not been regenerated and contains hazardous waste, or incur significant costs to dispose of the spent catalyst in a manner which complies with the strict requirements of applicable environmental laws. In addition, the sale of SCR catalyst may expose SCR-Tech to risks not inherent in the cleaning and regeneration of SCR catalyst, including product liability claims. It is unclear as to the amount of SCR catalyst which SCR-Tech may purchase, but it is possible such purchases ultimately may be substantial, and may significantly increase the risk profile of SCR-Tech's business.

*Many of the risks of our business have only limited insurance coverage and many of our business risks are uninsurable.*

Our business operations are subject to potential environmental, product liability, employee and other risks. Although we have insurance to cover some of these risks, the amount of this insurance is limited and includes numerous exceptions and limitations to coverage. Further, no insurance is available to cover certain types of risks, such as acts of God, war, terrorism, major economic and business disruptions and similar events. In the event we were to suffer a significant environmental, product liability, employee or other claim in excess of our insurance or a loss or damages relating to an uninsurable risk, our financial condition could be negatively impacted. In addition, the cost of our insurance has increased substantially in recent years and may prove to be prohibitively expensive, thus making it impractical to obtain insurance. This may result in the need to abandon certain business activities or subject ourselves to the risks of uninsured operations.

## **RISKS RELATED TO DSIT SOLUTIONS**

*Failure to accurately forecast costs of fixed-priced contracts could reduce our margins.*

When working on a fixed-price basis, we undertake to deliver software or integrated hardware/software solutions to a customer's specifications or requirements for a particular project. The profits from these projects are primarily determined by our success in correctly estimating and thereafter controlling project costs. Costs may in fact vary substantially as a result of various factors, including underestimating costs, difficulties with new technologies and economic and other changes that may occur during the term of the contract. If, for any reason, our costs are substantially higher than expected, we may incur losses on fixed-price contracts.

*Hostilities in the Middle East region may slow down the Israeli hi-tech market and may harm our Israeli operations; our Israeli operations may be negatively affected by the obligations of our personnel to perform military service.*

Our software consulting and development services segment is currently conducted in Israel. Accordingly, political, economic and military conditions in Israel may directly affect DSIT. Any increase in hostilities in the Middle East involving Israel could weaken the Israeli hi-tech market, which may result in a significant deterioration of the results of our Israeli operations. In addition, an increase in hostilities in Israel could cause serious disruption to our Israeli operations if acts associated with such hostilities result in any serious damage to our offices or those of our customers

or harm to our personnel.

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Many of our employees in Israel are obligated to perform military reserve duty. In the event of severe unrest or other conflict, one or more of our key employees could be required to serve in the military for extended periods of time. In the past, there have been numerous call-ups of military reservists to active duty, and it is possible that there will be additional call-ups in the future. Our Israeli operations could be disrupted as a result of such call-ups for military service.

*Exchange rate fluctuations could increase the cost of our Israeli operations.*

A majority of DSIT's sales are based on contracts or orders which are in U.S dollars or Euros or are in New Israeli Shekels ("NIS") linked to the U.S. dollar. At the same time, most of DSIT's expenses are denominated in NIS (primarily labor costs) and are not linked to any foreign currency. While the dollar value of the revenues of our operations in Israel will increase if the dollar is devalued in relation to the NIS, the net effect of such devaluation is that DSIT's costs in dollar terms increase more than our revenues. The weakening of the dollar relative to the NIS has a net negative impact on DSIT's operations. During the period from January 1, 2008 to March 20, 2008, the dollar lost 11.6% of its value relative to the NIS. DSIT is currently considering ways to control its exposures to exchange rate fluctuations, however, we can provide no assurance that such controls will be implemented successfully.

*One of our major customers has a history of operating deficits and may implement cost-cutting measures that may have a material adverse effect on us.*

In 2007, 19% of DSIT's sales (17% in both 2006 and 2005, respectively) were related to the Clalit Health Fund ("Clalit"). Clalit is Israel's largest HMO organization and has a history of running at a deficit, which in the past has required numerous cost cutting plans and periodic assistance from the Israeli government. Should Clalit have to institute additional cost cutting measures in the future, which may include restructuring of its terms of payment, this could have a material adverse effect on the performance of DSIT.

*We are substantially dependent on a small number of customers and the loss of one or more of these customers may cause revenues and cash flow to decline*

In 2007, 65% of DSIT's sales (63% and 53% in 2006 and 2005, respectively) were concentrated in four customers (Israel Defense Ministry, Applied Materials Israel Ltd., RAFAEL Armament Development Authority Ltd. and Clalit). A significant reduction of orders from any of these customers could have a material adverse effect on the performance of DSIT.

*We are dependent on meeting milestones to provide cash flow for operations.*

In August 2005, we sold our outsourcing business, which in the past provided our Israeli operations with a steady cash flow stream, and, in conjunction with bank lines of credit, helped to finance our Israeli operations. Our present operations, as we are currently structured, place a greater reliance on our meeting project milestones in order to generate cash flow to finance our operations. Should we encounter difficulties in meeting significant project milestones, resulting cash flow difficulties could have a material adverse effect on our operations.

*If we are unable to keep pace with rapid technological change, our results of operations, financial condition and cash flows may suffer.*

Some of our solutions are characterized by rapidly changing technologies and industry standards and technological obsolescence. Our competitiveness and future success depends on our ability to keep pace with changing technologies and industry standards on a timely and cost-effective basis. A fundamental shift in technologies could have a material adverse effect on our competitive position. Our failure to react to changes in existing technologies could materially delay our development of new products, which could result in technological obsolescence, decreased revenues, and/or

a loss of market share to competitors. To the extent that we fail to keep pace with technological change, our revenues and financial condition could be materially adversely affected.

*We must at times provide significant guarantees in order to secure projects.*

Some of the projects we perform require significant performance and/or bank guarantees. In DSIT's current state, it may not always be able to supply such guarantees without financial assistance from Acorn. If Acorn needs to provide financial guarantees for DSIT, Acorn may not have sufficient funds available to it invest in other emerging ventures or take advantage of opportunities available to us in a timely manner.

## **RISKS RELATED TO OUR PAKETERIA INVESTMENT**

*Paketeria's business plan is predicated on projected rapid growth in its network of franchised stores. If Paketeria fails to effectively manage this growth, its business and operating results could be harmed. Additionally they could be forced to incur significant expenditures to address the additional operational and control requirements of this growth.*

Paketeria's business plan is predicated on projected rapid growth in its operations, which will place significant demands on its management, operational and financial infrastructure. If Paketeria does not effectively manage this growth, the quality of its services could suffer, which could negatively affect its operating results. To effectively manage this growth, Paketeria will need to continue to improve its operational, financial, and management controls and its reporting systems and procedures. These system enhancements and improvements could require Paketeria to make significant capital expenditures and an allocation of valuable management resources. If the improvements are not implemented successfully, Paketeria's ability to manage growth may be impaired and could force it to make significant additional expenditures to address these issues, expenditures that could harm its financial position.

*Paketeria needs to raise funds to finance its planned activities.*

Though Paketeria has successfully raised approximately \$2.5 million in a private placement in 2007 and has recently registered on the Frankfurt Stock Exchange, Paketeria does not currently have enough cash to finance its planned activities in 2008 as it is continuing to raise funds from its offering on the Frankfurt Stock Exchange. We have agreed to lend Paketeria up to €1 million to bridge its finances during the period of its selling shares on the Frankfurt Exchange (Up through March 20, 2008, we have loaned approximately \$750,000 to Paketeria). In the event that Paketeria is unable to sell shares on the Frankfurt exchange and raise funds from new investors, our investment and loans may be at risk (See "Recent Developments"). In the event that Paketeria is unable to obtain additional financing for its operations, we may be required to advance additional funds to Paketeria to maintain its viability and to protect our investment.

## **RISKS RELATED TO OUR SECURITIES**

*Our share price may decline due to the large number of shares of our Common Stock eligible for future sale in the public market including the shares of the selling security holders.*

A substantial number of shares of our Common Stock are, or could upon exercise of options or warrants, become eligible for sale in the public market as described below. Sales of a substantial number of shares of our Common Stock in the public market, or the possibility of these sales, may adversely affect our stock price.

As of December 31, 2007, 11,134,795 shares of our Common Stock were issued and outstanding. As of December 31, 2007 we had 986,506 warrants outstanding and exercisable with a weighted average exercise price of \$3.89 and 1,396,998 options outstanding and exercisable with a weighted average exercise price of \$2.96 per share, which if exercised for cash would result in the issuance of an additional 2,383,504 shares of Common Stock. Of the options and warrants noted above, there were 1,246,998 options and 986,506 warrants which are in-the-money at December 31, 2007.



*The market price of our Common Stock will likely be affected by fluctuations in the market price of the common stock of Comverge.*

A significant portion of the assets set forth on our balance sheet is comprised of the fair market value of our investment in Comverge shares. As described below under "Recent Developments," the share price of Comverge's common stock has fallen significantly since December 31, 2007. Due to the substantial position we hold in Comverge, the market price of our Common Stock is likely to be affected by fluctuations in the market price of the common stock of Comverge.

*We may be deemed to be an investment company under the Investment Company Act of 1940; if we were deemed to be an investment company we could be forced to sell our shares in Comverge at prices lower than we might otherwise obtain.*

Under the Investment Company Act of 1940, as amended, and the rules thereunder we would be deemed to be an investment company if it is determined that the value of investment securities we own account for more than 45% of the total value of our assets. The Investment Company Act and the rules thereunder exclude from the definition of investment securities shares in companies which are majority-owned or "controlled primarily" by the issuer.

We believe that until the Comverge initial public offering in April 2007, we had primary control over Comverge for purposes of application of the Investment Company Act and our Comverge holdings were therefore excluded from the definition of investment securities. However, as a result of the offering, our voting agreement with the other major Comverge shareholders was terminated. It is therefore likely that as of the closing of the initial public offering, Comverge was no longer controlled primarily by us for Investment Company Act purposes. If that were the case, then as of June 30, 2007, we would no longer be excluded from the definition of an Investment Company since the value of our investment securities would be in excess of 45% of our assets.

Were we to have been deemed an investment company as a result of the Comverge IPO, we believe that we would be eligible for relief from the application of the Investment Company Act as a transient investment company under Rule 3a-2. Under Rule 3a-2, we would not be subject to the Investment Company Act provided that we have a bona fide intent to be engaged primarily, as soon as is reasonably possible (in any event within a one year period), in a business other than that of investing, reinvesting, owning, holding or trading in securities.

Our management and Board of Directors has formulated its plans for compliance with Rule 3a-2. These include the acquisition of one or more wholly-owned, majority-owned, or primarily-controlled operating businesses. Steps in effectuating these plans may include the sale and or distribution to our shareholders of all or a portion of our Comverge shares, and/or a merger or other acquisition transaction. Our acquisition of SCR-Tech and our sale of 1,022,356 of our Comverge shares are significant steps in successfully implementing our plan.

To the extent that effectuating our plan to remain exempt from the Investment Company Act requires us to sell significant additional number of Comverge shares, we may be forced to sell a significant portion of our Comverge shares during a relatively short time period could result in our selling Comverge shares sooner than we otherwise would have, at prices lower than we might otherwise have obtained. While we could request an order from the SEC to give us additional time beyond the year period allowed by Rule 3a-2 to sell and/or distribute Comverge shares and take any other action necessary to come into compliance with the Act, there is no assurance that such an order would be granted.

If we are unable to come into compliance with the Investment Company Act during the one year period (or any extension thereof granted to us by the SEC), we would be in violation of the Investment Company Act. Companies which fall under the Act are subject to substantial regulation concerning management, operations, transactions with affiliated persons, portfolio composition, including restrictions with respect to diversification and industry concentration, and other matters. We would be required to file reports with the SEC regarding various aspects of our business. The cost of such compliance would result in the Company incurring additional annual expenses. In addition, compliance with the Investment Company Act may not be consistent with the Company's current strategy of holding primarily controlling interest in companies in which it holds interests.

#### **ITEM 1B. UNRESOLVED STAFF COMMENTS**

None.

#### **ITEM 2. PROPERTIES**

Our corporate activities are conducted in office space in Wilmington, Delaware. The annual rent is approximately \$18,000 under a lease that expires in June 2010.

SCR-Tech leases approximately 98,000 square feet of office, production, laboratory and warehouse space in Charlotte, North Carolina. The annual rent is approximately \$273,000. This lease expires on December 31, 2012, with two options to renew for five years each.

Our RT Solutions activities are conducted in approximately 18,000 square feet of office space in the Tel Aviv, Israel metropolitan area under a lease that expires in August 2009. The annual rent is approximately \$280,000.

As part of the 2006 sale of our Databit computer hardware subsidiary, we assigned all of the US leases to Databit and no longer have rental expense for facilities in New Jersey. The landlords of the properties have not yet consented to the assignments and we therefore continue to be contingently liable on these leases. Databit has agreed to indemnify us for any liability in connection with these leases.

#### **ITEM 3. LEGAL PROCEEDINGS**

None.

#### **ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS**

At our Annual Meeting of Stockholders on December 5, 2007, John A. Moore, George Morgenstern, Richard J. Giacco, Joseph Musanti, Richard S. Rimer, Scott B. Ungerer and Samuel M. Zentman were elected as directors, each for a term of one year to serve until the next annual meeting of stockholders and until their successors have been elected and qualified. The results of the voting were as follows:

NOMINEE	FOR	WITHHELD
John A. Moore	7,270,944	387,787
George Morgenstern	6,528,032	1,130,699
Richard J. Giacco	7,651,644	7,087
Joseph Musanti	7,651,644	7,087
Richard S. Rimer	7,609,344	49,387
Scott B. Ungerer	7,651,644	7,087
Samuel M. Zentman	7,608,344	49,387





**PART II****ITEM MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS  
5. AND ISSUER PURCHASES OF EQUITY SECURITIES**

Our Common Stock is currently traded on the NASDAQ Global Market under the symbol "ACFN". Prior to December 17, 2007, our Common Stock traded on OTC Bulletin Board ("OTCBB"). The following table sets forth, for the periods indicated, the high and low reported sales prices per share of our Common Stock on NASDAQ and the OTCBB (as applicable).

	High	Low
2006:		
First Quarter	\$ 2.80	\$ 1.43
Second Quarter	3.20	2.50
Third Quarter	3.39	2.85
Fourth Quarter	\$ 3.47	\$ 3.14
2007:		
First Quarter	\$ 4.97	\$ 3.40
Second Quarter	5.28	3.65
Third Quarter	5.59	3.80
Fourth Quarter	\$ 5.99	\$ 4.10

As of April 11, 2008, the last reported sales price of our Common Stock on the Nasdaq Global Market was \$4.43, there were 83 record holders of our Common Stock and we estimate that there were approximately 1,100 beneficial owners of our Common Stock.

We paid no dividends in 2006 or 2007 and do not intend to pay any dividends in 2008.

**ITEM 6. SELECTED FINANCIAL DATA**

The selected consolidated statement of operations data for the years ended December 31, 2005, 2006 and 2007 and consolidated balance sheet data as of December 31, 2006 and 2007 has been derived from our audited Consolidated Financial Statements included in this Annual Report. The selected consolidated statement of operations data for the years ended December 31, 2003 and 2004 and the selected consolidated balance sheet data as of December 31, 2003, 2004 and 2005 has been derived from our unaudited consolidated financial statements not included herein.

This data should be read in conjunction with our Consolidated Financial Statements and related notes included herein and “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

*Selected Consolidated Statement of Operations Data:*

	For the Years Ended December 31,				
	2003*	2004	2005	2006	2007
	(unaudited)				
	(in thousands, except per share data)				
Sales	\$ 8,874	\$ 3,364	\$ 4,187	\$ 4,117	\$ 5,660
Cost of sales	6,833	2,491	2,945	2,763	4,248
Gross profit	2,041	873	1,242	1,354	1,412
Research and development expenses	153	30	53	324	415
Selling, marketing, general and administrative expenses	7,422	3,374	3,464	4,658	5,390
Operating loss	(5,534)	(2,531)	(2,275)	(3,628)	(4,393)
Finance expense, net	(534)	(33)	(12)	(30)	(1,585)
Gain on Comverge IPO	—	—	—	—	16,169
Gain on sale of shares in Comverge	—	705	—	—	23,124
Loss on Paketeria private placement	—	—	—	—	(37)
Other income, net	—	148	—	330	—
Income (loss) from operations before taxes on income	(6,068)	(1,711)	(2,287)	(3,328)	33,278
Income tax benefit (expense)	48	(27)	37	(183)	445
Income (loss) from operations of the Company and its consolidated subsidiaries	(6,020)	(1,738)	(2,250)	(3,511)	33,723
Share of losses in Comverge	(1,752)	(1,242)	(380)	(210)	—
Share of losses in Paketeria	—	—	—	(424)	(1,206)
Minority interests, net of tax	264	(90)	(73)	—	—
Income (loss) from continuing operations	(7,508)	(3,070)	(2,703)	(4,145)	32,517
Gain (loss) on sale of discontinued operations and contract settlement (in 2006), net of income taxes	—	—	541	(2,069)	—
Income (loss) from discontinued operations, net of income taxes	1,226	1,898	844	78	—
Net income (loss)	\$ (6,282)	\$ (1,172)	\$ (1,318)	\$ (6,136)	\$ 32,517
Basic net income (loss) per share:					
Income (loss) from continuing operations	\$ (0.97)	\$ (0.39)	\$ (0.26)	\$ (0.48)	\$ 3.30
Discontinued operations	0.16	0.24	0.10	(0.23)	—
Net income (loss) per share	\$ (0.81)	\$ (0.15)	\$ (0.16)	\$ (0.71)	\$ 3.30
Weighted average number of shares outstanding	7,738	7,976	8,117	8,689	9,848
Diluted net income (loss) per share:					
	\$ (0.97)	\$ (0.39)	\$ (0.26)	\$ (0.48)	\$ 2.80

Income (loss) from continuing operations					
Discontinued operations	0.16	0.24	0.10	(0.23)	—
Net income (loss) per share	\$ (0.81)	\$ (0.15)	\$ (0.16)	\$ (0.71)	\$ 2.80
Weighted average number of shares outstanding	7,738	7,976	8,117	8,689	12,177

\* The selected consolidated statements of operations data for the year ended December 31, 2003 have been restated for the discontinued operations of our US-based computer VAR business and our Israel and US-based consulting businesses and are unaudited.

*Selected Consolidated Balance Sheet Data:*

2003	2004	As of December 31, 2005	2006	2007
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