

The Power of Broadband

Effective deployment of primary and back-up power is critical for the delivery of world-class broadband services. The long-term evolution of the broadband network requires both reliable, intelligent, cost-effective power systems as well as comprehensive energy management. SCTE's leadership with the Energy 2020 initiative is facilitating this critical endeavour.

Key partnerships are actively being formed between MSO's, equipment suppliers and the SCTE. As our industry embarks on this ambitious and essential goal of maximizing energy efficiency from headend to home, it will require on-going cooperation, dedication and commitment.

At Alpha Technologies, we see our role in helping customers meet the goals of Energy 2020 as essential. It's been 40 years since Alpha introduced backup power to the cable TV industry. Since then, networks have become dramatically more sophisticated. Alpha has continued to lead and innovate, developing the industry's most technologically advanced broadband power equipment.

Given that heritage, it should come as no surprise that earlier this year Alpha announced its commitment to helping that same industry meet the goals of SCTE's Energy 2020 initiative. We are well on our way to helping advance the industry's energy strategies. Today, Alpha's headend power equipment meets or exceeds the SCTE 186 standard, and we anticipate that all of our next-generation product will do the same.

When it comes to outside plant, next generation high-efficiency power supplies are already here. Alpha's XM3-HP power supply dramatically improves line efficiency, inverter efficiency and output regulation. Our preventative maintenance service group recently conducted an audit of outside plant sites for one MSO. Of 11,000 sites, 34% used Gen 1 power supplies (1984 design), 54% used Gen 2 (1999 design), and only 12% used current high-efficiency Gen 3 power supplies (2012 design). Energy consumption would be reduced and annual utility savings of \$625,000 could be realized by replacing legacy products with the more efficient Gen 3 power supplies. Imagine the savings when expanded to a larger share of the industry.

High-efficiency critical facility and outside plant power is just part of the equation. Alpha has the unique ability to dedicate the collective resources of all Alpha Group companies, including those that offer alternative energy systems and other efficiency related services.

By leveraging renewable energy engineering services and technologies from Alpha Energy and OutBack Power, we are helping MSO's reduce their dependence on grid-supplied power. While Alpha Energy builds some of our nation's largest utility-grade solar farms, OutBack Power provides the industry's most reliable renewable energy products and energy storage solutions.

Coppervale Enterprises, another Alpha Group company, helps MSO's optimize energy purchasing, consumption and planning. With the potential for broadband power consumption growing from \$1 billion to as much as \$4 billion by 2020, the need for

energy intelligence has never been greater.

Lastly, Alpha's service offerings increase reliability and energy efficiency throughout the broadband network. Our comprehensive preventative maintenance programs ensure MSO's have equipment that runs at peak efficiency, optimizing energy efficiency and extending equipment life.

The SCTE's leadership, combined with MSO and industry leader input, has provided the vision. As partners, the opportunities we take advantage of today will shape our industry for decades to come. Being aware of the possibilities and the consequences of our choices is the first step to a more energy efficient future.

Drew Zogby, President Alpha Technologies, Inc.

Alpha is the global leader for broadband network powering solutions with over 40 years of industry innovation and experience. Alpha has both the technological expertise and the industry-specific know-how to provide not only world class power products, but also the critical support services needed to keep these and other related systems running at optimal levels. From headend to business to home, Alpha powers the broadband industry.