

ROTH Capital Partners' 6th Annual
New Industrials Corporate Access Day
December 2018



Safe Harbor Statement



This presentation contains forward-looking statements. Such forward-looking statements include those about American Superconductor Corporation's ("we," "us," "our," "AMSC" or the "Company") strategy, future plans and prospects, including statements regarding diversifying revenue, the expected support to the Navy's plan to electrify the fleet, the expected reduced annualized expenses and improved operating cash flow at demonstrated revenue levels resulting from actions taken in fiscal 2017, Indian , Korean and Global Off-Shore Wind Markets, business drivers, addressable markets, business goals for fiscal 2018, Inox, Doosan, anticipated benefits of and markets for our products and services, project pipelines, business opportunities for major cities, our expected GAAP and non-GAAP financial results for the quarter ending December 31, 2018, our expected cash, cash equivalents and restricted cash balance on December 31, 2018, the expected lower operating cash flow break even level, and other statements containing the words "believes," "anticipates," "plans," "expects," "will" and similar expressions, although not all forward-looking statements contain these identifying words. Each forward-looking statement is subject to risks and uncertainties that could cause actual results to differ materially from those expressed or implied in such statement. Such risks and uncertainties include: we cannot predict if and when DHS will approve the agreement between AMSC and ComEd; dependence on our largest customer, Inox, for a significant portion of our revenues and we cannot predict if and how successful Inox will be in executing on Solar Energy Corporation of India orders under the new central and state auction regime, and any failure by Inox to succeed under this regime, or any delay in Inox's ability to deliver its wind turbines, could result in fewer ECS shipments to Inox; our history of operating losses and negative operating cash flows, which may continue in the future and require additional financing; our operating results may fluctuate significantly and fall below expectations; our financial condition may have an adverse effect on our customer and supplier relationships; dependence on attracting and retaining qualified personnel; risks related to our failure to achieve expected savings from our former Devens, Massachusetts manufacturing facility; not realizing expected sales; reliance on third-party manufacturers, suppliers, subcontractors and collaborators; lower prices for other fuel sources may reduce the demand for wind energy development, which could have a material adverse effect on our ability to grow our Wind business; failure to implement strategies and business goals; problems with product quality or performance; government contracts being subject to audit, modification or termination; reduction in revenue due to lack of congressional funding; risks related to tax reform in the U.S.; additional risks from our reliance on sales in foreign countries; limited success marketing and selling our superconductor and system-level solutions; failure to realize benefits of acquisitions; dependence on the limited commercial use of high temperature superconductor products; failure of a widespread commercial market for our products to develop; dependence of the growth of the wind energy market on government subsidies and economic incentives; the intense competition our products face; risks related to our intellectual property; risks related to our legal proceedings; risks relating to our settlement with Sinovel Wind Group Co. Ltd.; and the important factors identified under the caption "Risk Factors" in our Form 10-K for the fiscal year ended March 31, 2018, and our other reports filed with the U.S. Securities and Exchange Commission. We do not undertake, and specifically disclaim, any obligation to update any forward-looking statements contained in this presentation.

AMSC: Smarter, Cleaner...Better Energy™



- Headquartered in Ayer, MA
- Founded in 1987
- Two market-facing business units – Windtec and Gridtec
- **Resilient solutions** from power generation to transmission and distribution
- **Proprietary products** based on core technologies: smart software/controls and smart materials

Investment Highlights

- Strategically Focused to **Diversify Revenue** in both Wind and Grid Markets
- **Multiple Wind Markets:** Indian Wind Market Showing Signs of Recovery and Product Line Extension in Korea Off-Shore Wind Market
- **Growth in Grid:** AMSC expected to Support Navy's plan to "Electrify the Fleet" with State-of-the-Art Ship Protection System for USS Fort Lauderdale LPD 28; VVO introduced in 2017 for the distribution grid market and VVO units now commissioned and operating on multiple utilities' sites in the U.S.
- **Cost Management:** Actions Taken in Fiscal 2017 Expected to Improve Operating Cash Flow at Demonstrated Revenue Levels

Business Drivers

- **Evolving Electric Grid** – Grid modernization and desire for resilient infrastructure, distributed generation and growth in electric vehicle adoption are expected to drive investment in the grid.
- **Electrification of the Naval Fleet** – First Protection, then Power and Propulsion as the U.S. Navy moves towards all electric power and weapon systems.
- **Global Demand for Renewable Energy** – Increasing adoption of wind power for onshore and offshore. Renewable energy adoption also drives voltage optimization opportunities with utilities.

Resilient Power Solutions Positioned for Growth



Expanding Annual Total Addressable Market by More Than 300%

		What it is	What it does	Target markets	Business Drivers Annual TAM Expansion	Page
Established Products	Electrical Control System for wind turbines (wtECS™)	Components and controls that act as the “brain” and “nerves” of turbines	Maximizes power generation, ROI of wind power installations	Wind turbine OEMs using AMSC wind turbine designs	Global Demand for Renewable Energy	9
	Transmission Voltage Management (D-VAR®)	Voltage regulation solution, driven by power electronics components	Connects renewable energy to grid; provides reactive power compensation	Electric utilities, renewable plants, industrial facilities	Evolving Electric Grid	10
New Products	Distribution Voltage Optimization (D-VAR® VVO)	Direct connect 15Kv class power quality system for distribution network	Optimally controls voltage, allowing utilities to build distribution networks using distributed generation (DG)	Electric distribution grids incorporating DG	Evolving Electric Grid \$600 Million	11
	Resilient Electric Grid (REG) systems	System that increases electric grid resiliency, reliability, and load serving capacity	Increases reliability of urban grids and provides cost-effective, simplified solution for urban load growth	Urban electric utilities	Evolving Electric Grid \$1+ Billion	12
	Ship Protection Systems (SPS)	Advanced HTS-based systems that enhance operational safety	Degaussing is a magnetic system that interferes with a mine’s ability to detect and damage a ship	Navy Surface fleet	Electrification of the Naval Surface Fleet \$70 - \$120 Million	13

Recent Business Developments



May 2017

Seattle City Light Utility Undertakes Deployment Study of AMSC's REG System

September 2017

Expands **Proprietary Technology** with Acquisition of High Performance Cryo-cooler Co, Infinia Technology Corp.

October 2017

Supplies **VVO Pilot Systems** to Utilities for Real World Distribution Grid Challenges

January 2018

AMSC Announces Order of **5.5MW** Electronic Control Systems for Doosan's Offshore **Wind Turbines**

March 2018

Inox Wind Reaches **950 MW** of Wind Turbine Backlog from Indian SECI 1 thru 4 National Wind Power Auctions

July 2018

AMSC Announces **\$11** million in **D-VAR Orders** For **Renewable** Connectivity and **Industrial Power** Quality Applications

September 2018

United Power Chooses **VVO** for Voltage Optimization Project for its distributed grid in Colorado

July 2017

Delivers Beta Version of Deployable **Mine Countermeasure Payload System** to U.S. Navy

September 2017

Awarded U.S Navy Contract for Insertion of **Ship Protection System** on USS Fort Lauderdale, LPD 28

November 2017

Expands Offshore **Wind Business** with South Korea based Doosan Heavy Industries

February 2018

D-VAR® System Sales Expand into Mexico to Support Renewable Connectivity and into Japan for Industrial Power Quality

May 2018

Alliant Energy Chooses **VVO** for Distribution Grid Voltage Optimization Project in Iowa

July 2018

AMSC signs **\$57.5** million **settlement agreement** with Sinovel to resolve all disputes between the parties

October 2018

AMSC and **ComEd** Agree to Install Resilient Electric Grid System in **Chicago**

 D-VAR® Milestone
 REG Milestone
 Ship Protection Milestone
 Wind Turbine Milestone
 Other Milestone

Fiscal 2018 Business Objectives*



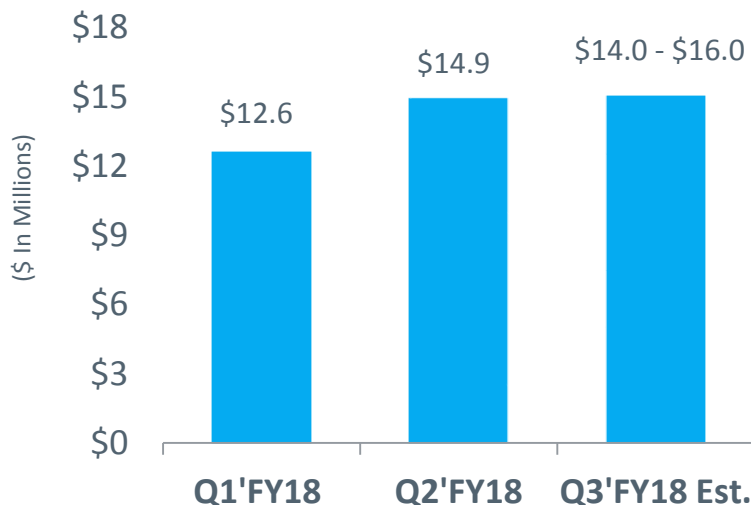
- 1) Grow grid revenue
- 2) Grow wind revenue
- 3) Begin REG system project
- 4) Deliver 5.5 MW ECS units to Doosan for offshore wind
- 5) Complete long lead time order for LPD 28

Q3'FY18 Guidance (as of November 7, 2018)

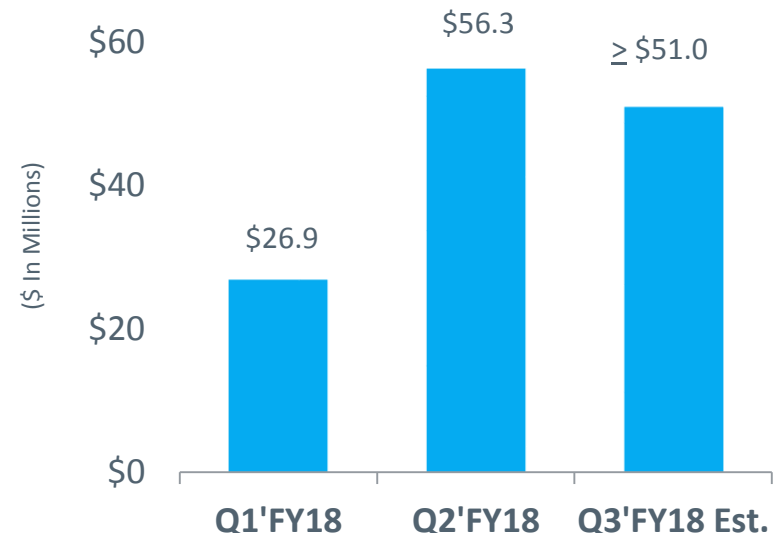
We expect:

- Q3'FY18 Revenues: \$14 million - \$16 million
- Net loss not to exceed \$6 million, or \$0.29 per share
- Non-GAAP net loss not to exceed \$6.3 million, or \$0.31 per share
- Non-GAAP operating cash flow¹ to be from break-even to a burn of \$2 million in Q3'FY18
- Cash, Cash Equivalents and Restricted Cash of no less than \$51.0 million on December 31, 2018

Revenues



Cash*



* Cash, Cash Equivalents & Restricted Cash

¹ For a reconciliation of GAAP to non-GAAP operating cash flow, please see AMSC's Q2'FY18 press release:
<https://ir.amsc.com/news-releases/news-release-details/amsc-reports-second-quarter-fiscal-2018-financial-results-and>



Global Wind Business

Onshore – Inox Wind

- \$200M 2MW **ECS supply contract**.
- Preferred supplier arrangement continues after Inox purchases the specified amount of ECS under the supply contract
- Inox required to purchase majority of 2MW demand for succeeding three years
- \$12M **license agreement** to self-supply limited quantities of 2MW ECS.

Offshore – Doosan Heavy Industries

- First 30MW project operating with 3MW turbines since 2016
- **5.5 MW license agreement and exclusive ECS supply contract** for the South Korean offshore wind market

Indian Wind Market

- Government target of 60GW of installed wind capacity by 2022
- **Top four global wind market**
- Auction tenders replacing fixed feed-in tariff regime

Inox's wind turbines are based on AMSC technology and generate ~6% - 18% more power than comparable turbines, according to Inox

Global Offshore Wind Market

- South Korea represents **entry point for global offshore wind** market
- GlobalData estimates approximately 100GW of global offshore installed wind capacity by 2030

Electrical Control Systems (wtECS™)

Established product in some of world's largest wind markets

What it is

Components and controls that act as the “brain” and “nerves” of turbines that maximize turbine availability, reliability, and power output

What it does

Maximizes power generation and return on investment (ROI) of wind power installations

Target markets

Wind turbine OEMs using AMSC wind turbine designs, primarily India

Nacelle Cabinet: Collects all signals and controls all devices in the hub and nacelle



Tower Base Cabinet: Serves as interface for communication between turbine and operator



Hub Cabinet: Controls angle of rotor blades to maximize power output, protect against effects of inclement weather



Converter Cabinet: Coordinates variable speeds of the wind turbine with the fixed frequency of the grid



D-VAR[®] Voltage Management Systems

Established product with solid presence in existing markets

What it is

Voltage control and regulation solutions, driven by power electronics components

What it does

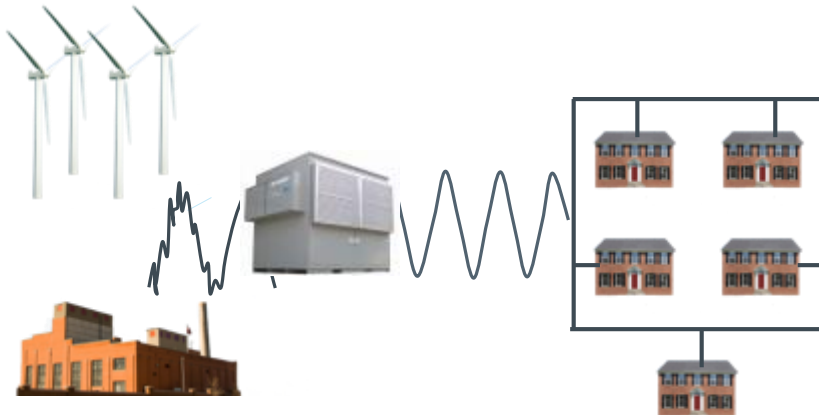
Connects renewable energy to the electric grid and improves the efficiency, stability, and reliability of power supply by providing dynamic reactive power support

Target markets

Electric utilities, renewable plants, industrial facilities in regions with stringent grid codes encouraging renewable energy – North America, Australia, and the U.K.

Renewable & Industrial Application:

Regulates and stabilizes voltage for better network performance and stability



Utility Application:

Provides dynamic voltage support on the grid where needed

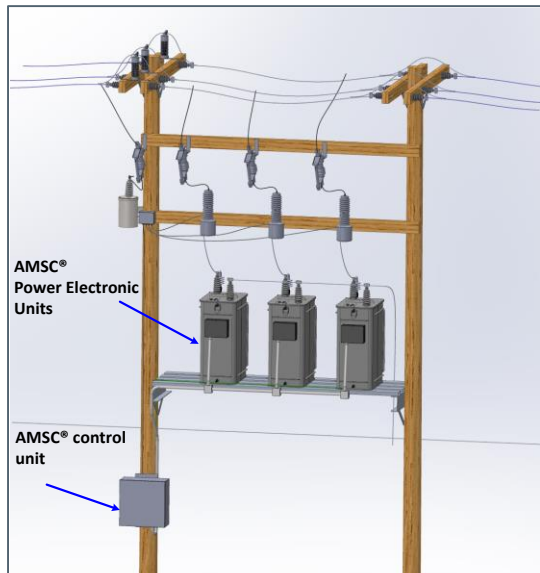


VVO Product Introduction

AMSC enters the utility distribution market

What it is

Direct connect 15Kv class power quality system that is installed on the primary distribution network in communities, business parks, or wherever enhanced power quality is beneficial



What it does

VVO saves utilities time and money by avoiding costly options to strengthen the distribution grid. It optimally controls voltage, allowing utilities to build a plug 'n play network to serve the demands of modern energy consumers

Cloud Pass Increases Voltage Instability in Distribution Networks with Solar Capacity



Target markets

Utility grid modernization:

- Mandated efficiency upgrades
- Mass adoption of rooftop solar
- Community solar
- Utility-owned micro grids
- Any variable load conditions on the distribution grid
- Alternative to voltage regulators

Residential EV Charging Adds to Voltage Instability in Distribution Networks






Resilient Electric Grid (REG) Systems

Five Announced Cities – Chicago, Boston, Washington D.C., San Francisco, Seattle
 Focused on More than One Dozen Utilities across North America

What it is

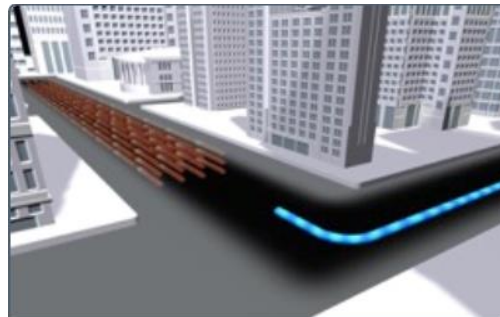
Increases electric grid resiliency, reliability, and capacity by interconnecting substations and maximizing the functionality of existing utility assets

- Today, many urban substations are **not connected** and can only power its section of the city 
- REG's **power dense technology** based on **proprietary smart materials** allows for the inter-connection of substations, controlling the high fault currents that naturally result from such interconnections 
- If one substation is compromised, other substations help **increase capacity** and **reliability** 

What it does

Allows instantaneous power outage recovery potentially doubling to quadrupling a city's reliability and resiliency while minimizing grid investment

- Leverages existing grid assets while protecting cities against storms, outages, cyber and physical attacks
- Smaller grid infrastructure in dense, high cost areas
- Enables more distributed generation in urban environments



Target markets

Electric utilities experiencing: load growth, requirements to increase capacity, space constraints, siting challenges and environmental impact

- Pipeline of projects from \$10 - \$400 million each
- Each major city represents \$100+ million of business opportunities
- Annual addressable market \$1+ billion



Ship Protection Systems

Potential to be annuity-like revenue – First Platform Order secured

What it is

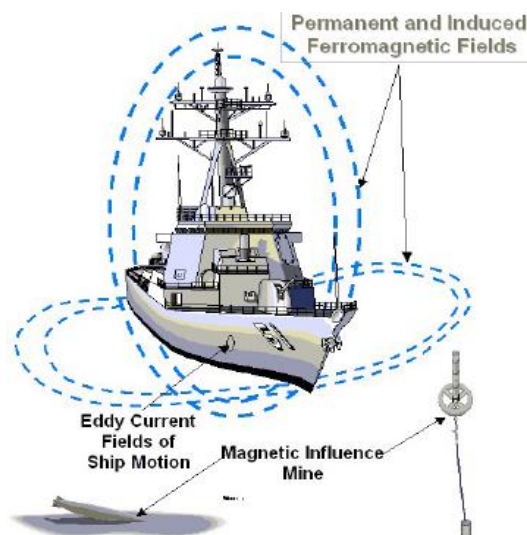
Advanced HTS-based systems that enhance operational safety, are lighter in weight, more compact, and more efficient than conventional copper counterparts

What it does

HTS cables and coils that create a magnetic field that can interfere with a mine's ability to detect and damage a ship. Both permanent and deployable solutions offered

Target markets

U.S. and NATO Navy surface fleets



Current system: Ship's magnetic signature masked by substantial amounts of copper, taking up valuable space and weight

AMSC solution: Ship's magnetic signature masked by much smaller, lighter, and higher performing HTS wire, enabling a more advanced solution with a smaller footprint



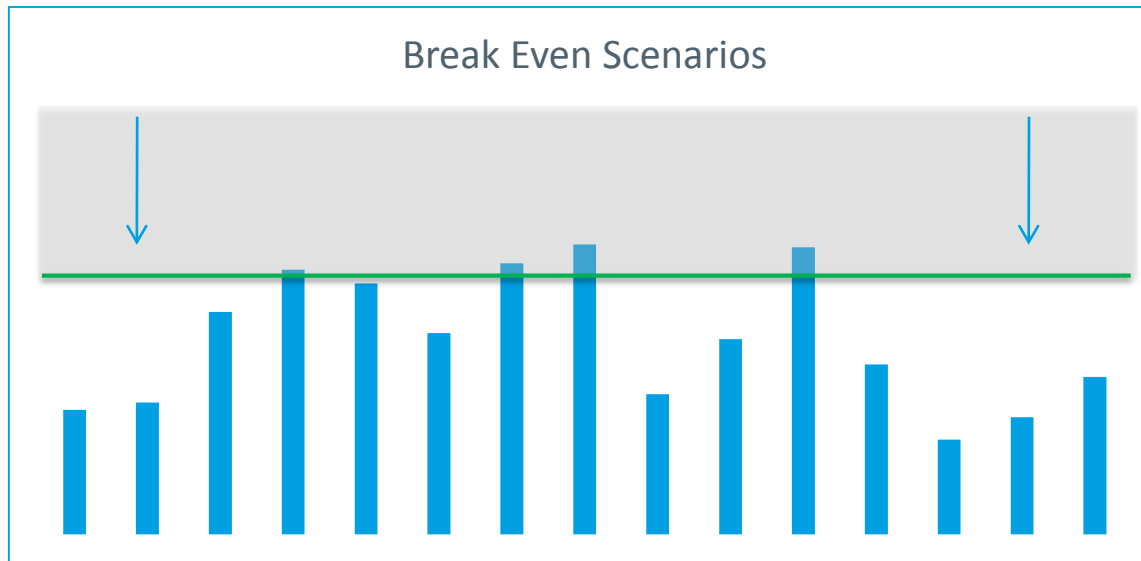
Financial Update

Reduced Operating Cash Flow Break Even

Cost Reduction Efforts



1. Headcount Reduction – April 2017
2. Physical Footprint Reduction – March 2018



We Expect Lower Operating Cash Flow Break Even at Lower Quarterly Revenue Scenarios



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