

August 2019



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 of the Navy's plan to electrify the fleet, Indian, South Korean and global off-shore wind markets, business drivers, addressable markets, 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 September 30, 2019, our expected cash, cash equivalents and restricted cash balance on September 30, 2019, 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: 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 electrical control system 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; we may be required to issue performance bonds or provide letters of credit; risks related to changes in exchange rates; failure to maintain proper and effective internal control over financial reporting could impair our ability to produce accurate and timely financial statements and may lead investors and other users to lose confidence in our financial data; our financial condition may have an adverse effect on our customer and supplier relationships; government contracts being subject to audit, modification or termination; reduction in revenue due to lack of congressional funding; dependence in wind energy market on the manufacturers that license our designs; dependence on attracting and retaining qualified personnel; difficulties re-establishing our HTS wire production capability in our Ayer, Massachusetts facility; not realizing expected sales; failure or security breach of our information technology infrastructure; failure to comply with evolving data privacy and data protection laws and regulations or to otherwise protect personal data; reliance on third-party manufacturers, suppliers, subcontractors and collaborators; failure to successfully implement our business strategy; problems with product quality or performance; risks from customers outside the U.S that may be either directly or indirectly related to governmental entities and risks associated with anti-bribery laws; limited success marketing and selling our superconductor products and system-level solutions; failure to realize benefits of acquisitions; dependence on the success of the commercial adoption of the REG system, which is currently limited; dependence of the growth of the wind energy market on government subsidies, economic incentives and legislative programs; our reliance on sales in emerging markets; changes in India's political, social, regulatory and economic environment may affect our financial performance; the intense competition our products face; risks related to operations in foreign countries; 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; adverse changes in domestic and global economic conditions could adversely affect our operating results; risks related to our intellectual property; risks related to our technologies; risks relating to our legal proceedings; risks related to our common stock; and the important factors identified under the caption "Risk Factors" in our Form 10-K for the fiscal year ended March 31, 2019, 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 *San Antonio*-class LPD 28 and LPD 30; 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 have improved 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.

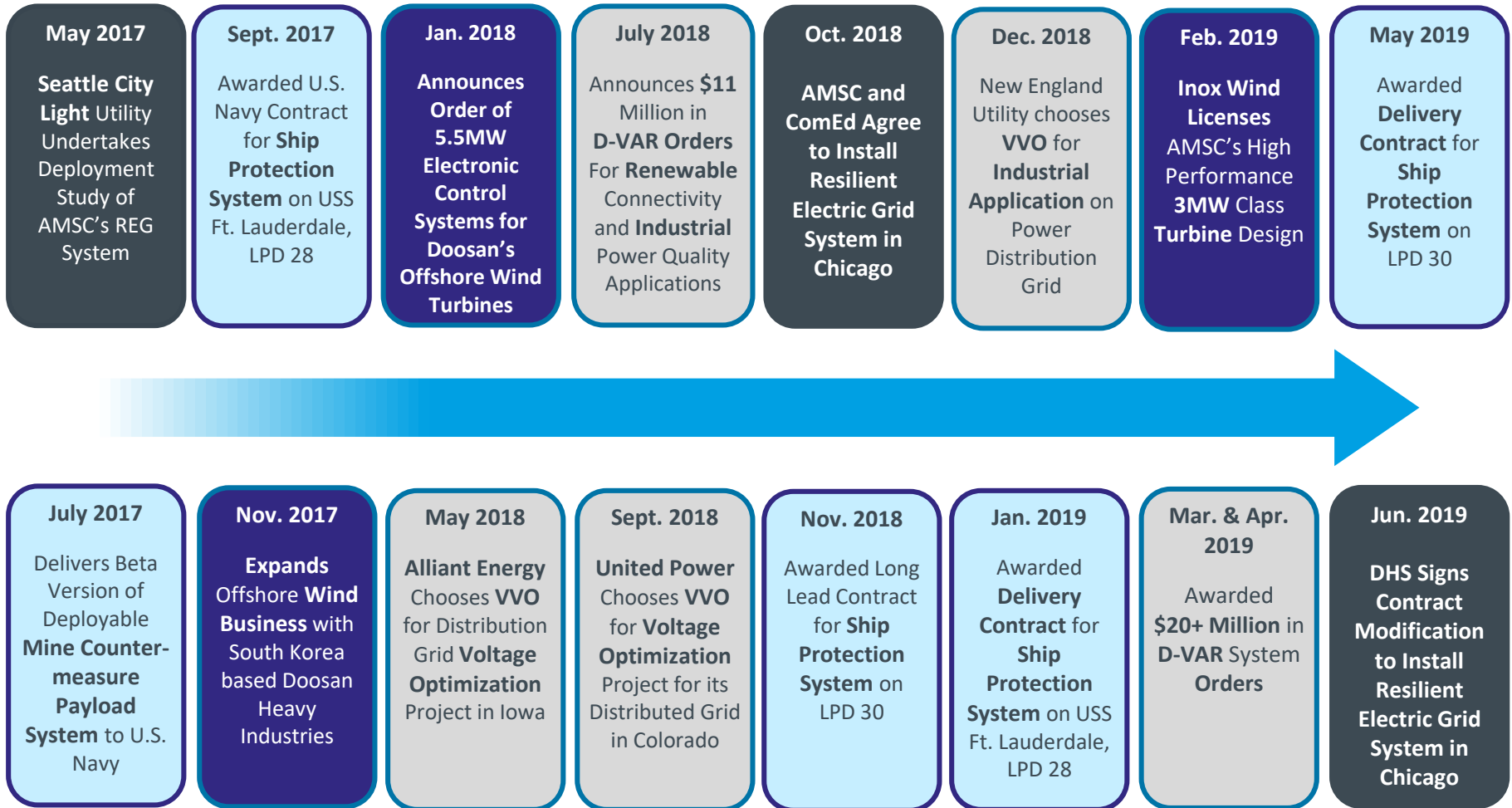
Resilient Power Solutions Positioned for Growth



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	8
	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	9
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	10
	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	11
	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	12

Recent Business Developments

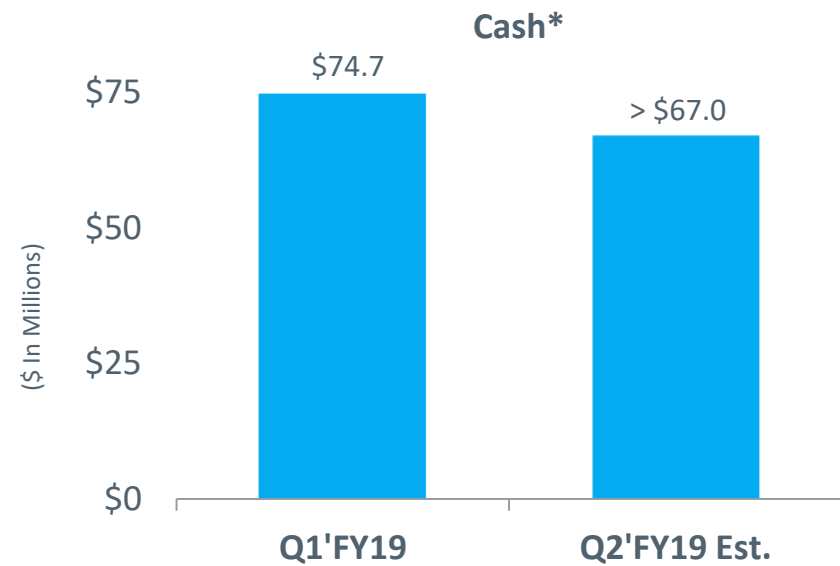
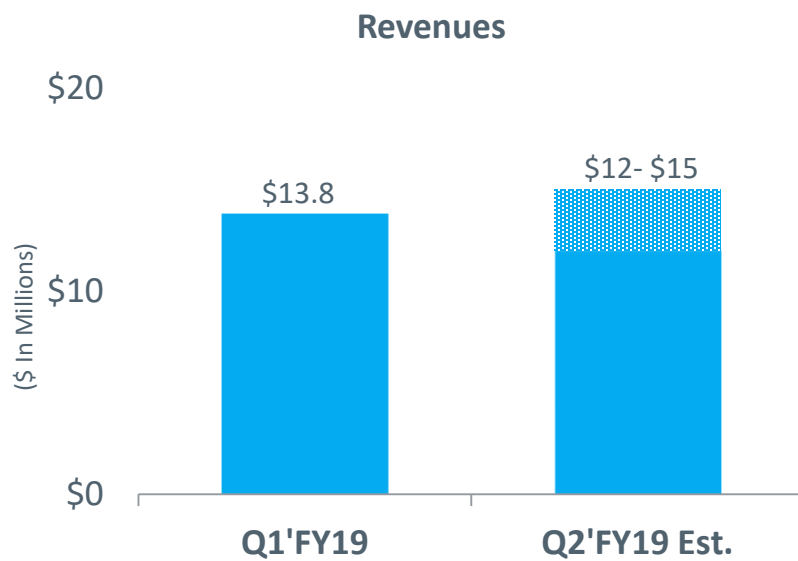


Milestones: Voltage Management Ship Protection Wind Controls REG

Q2'FY19 Guidance (as of August 6, 2019)

We expect:

- Q2'FY19 Revenues: \$12 million - \$15 million
- Net loss not to exceed \$8.5 million, or \$0.41 per share
- Operating cash flow¹ to be a burn of \$5 million to \$7 million
- Cash, Cash Equivalents and Restricted Cash of no less than \$67.0 million on September 30, 2019



* Cash, Cash Equivalents & Restricted Cash

¹Note that guidance for operating cash flow does not include any tax payments or other costs related to the final settlement payment from Sinovel.



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
- Obtained 5.5 MW type certification in July 2019

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



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



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



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

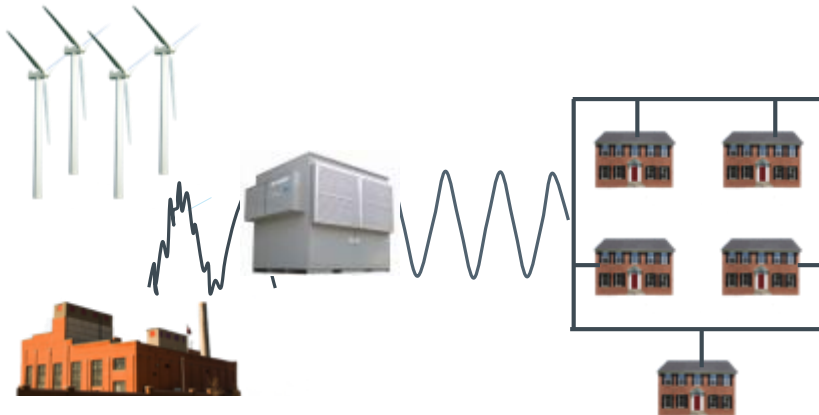
Connects renewable energy to the electric grid and improves the efficiency, stability, and reliability of power supply by providing dynamic reactive power support

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

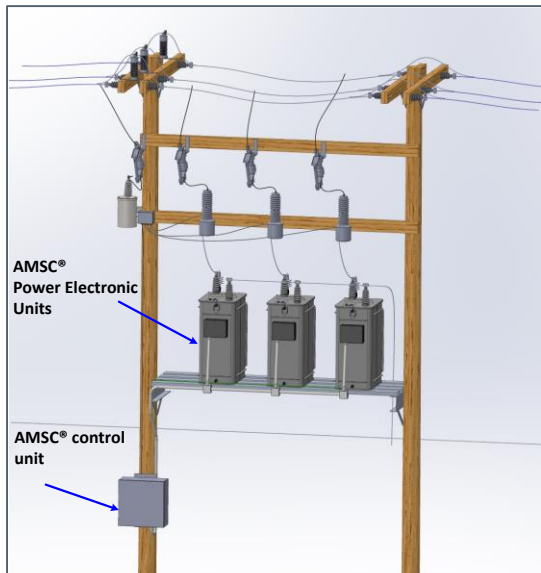


VVO Product Introduction

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

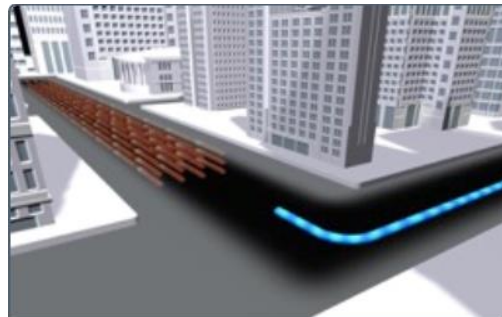
Increases electric grid resiliency, reliability, and capacity by interconnecting substations and maximizing the functionality of existing utility assets

- 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

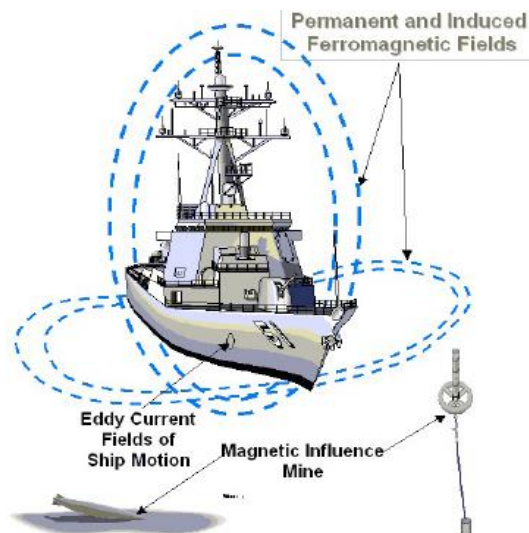
Advanced HTS-based systems that enhance operational safety, are lighter in weight, more compact, and more efficient than conventional copper counterparts

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



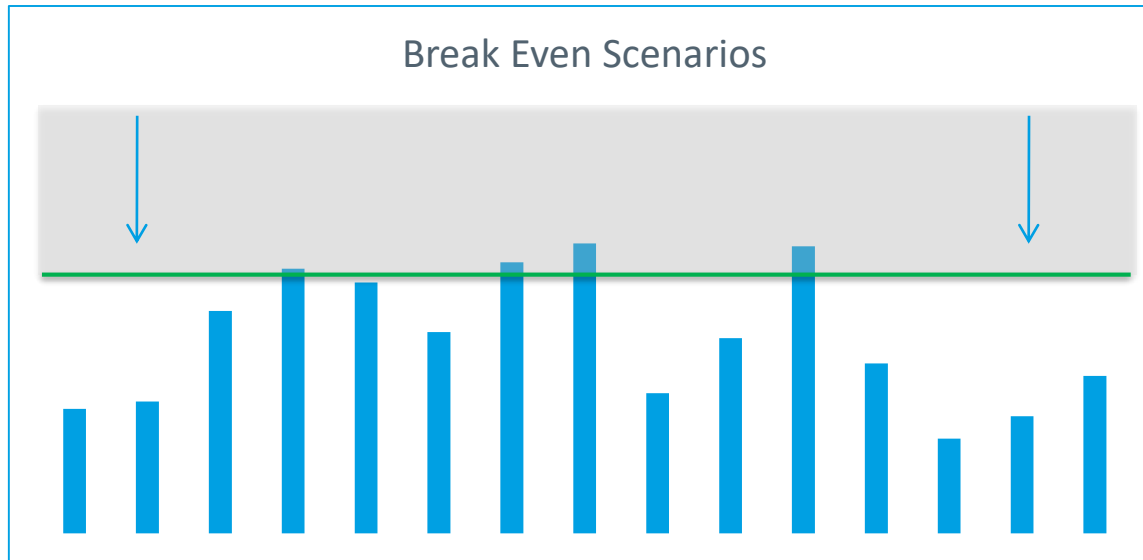
Financial Update

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



Appendix





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