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Analyst and Investor Day
November 11, 2019

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Forward Looking Statement

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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 Navy's plan to electrify the fleet, business drivers, industry trends and technological developments, expected orders by Inox and Doosan, anticipated benefits of and markets for our products and services, project pipelines and proposed projects, business opportunities for major cities, our expected GAAP and non-GAAP financial results for the quarter ending December 31, 2019, our expected cash, cash equivalents, marketable securities and restricted cash balance on December 31, 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: we cannot predict if and when ComEd will begin the proposed second REG project; 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.

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Opening Remarks

Daniel McGahn

President, CEO and Chairman

SuperGrid

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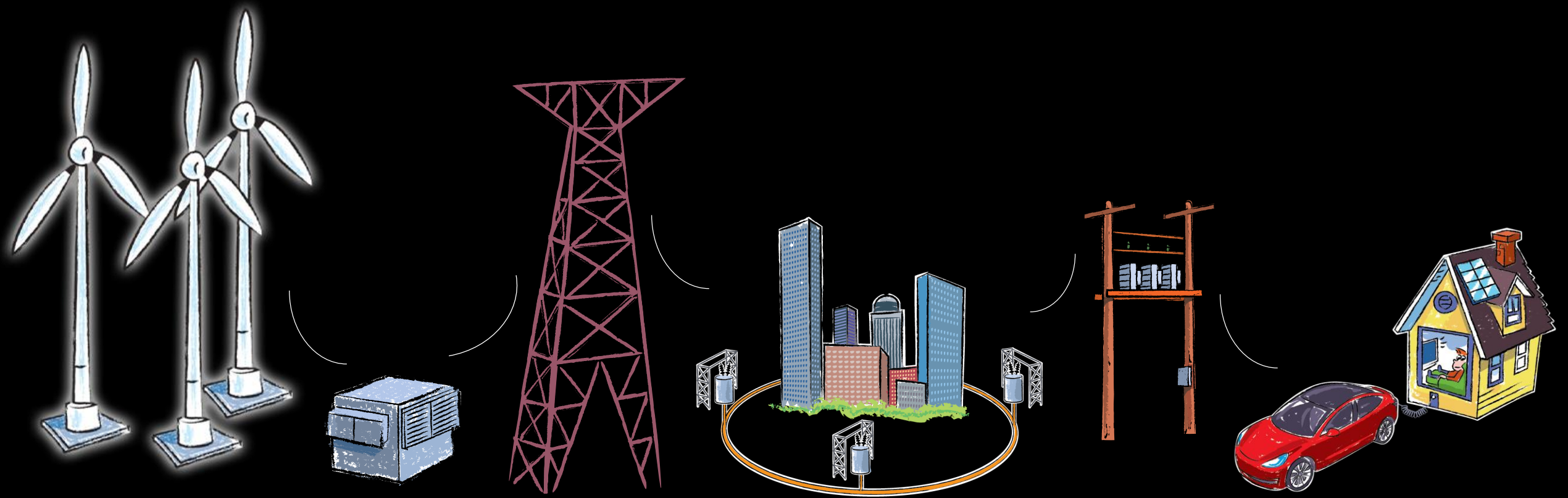
Orchestrating the Rhythm and Harmony of Power



SuperShip

Protecting and Expanding the Capability of Fleets

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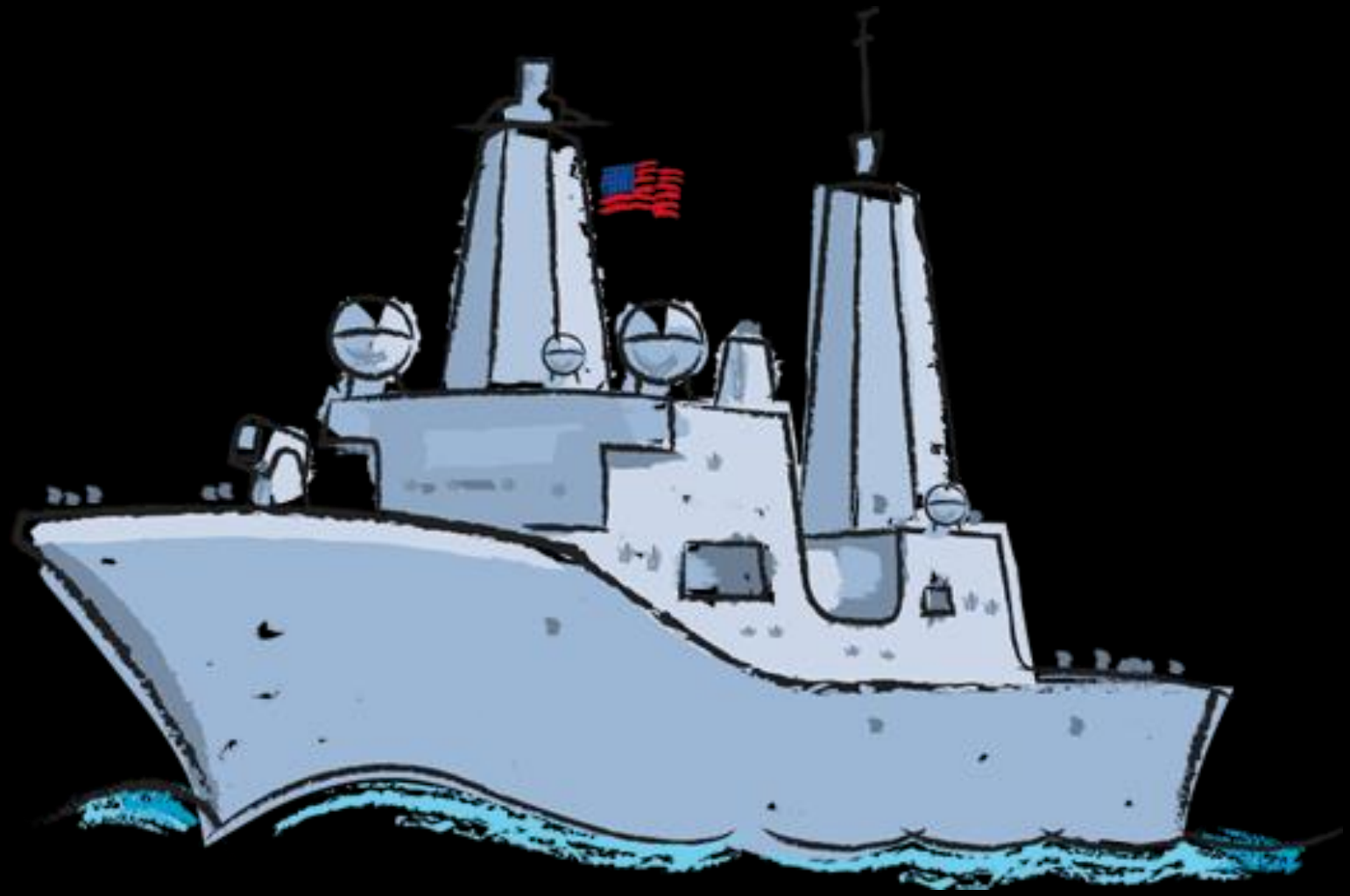

Our Purpose and Values

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What we do

Our Vision

to power the world with smarter, cleaner ...better energy

Our Mission

we listen partner innovate

to make smarter, cleaner energy profitable

Who we are

- **Constantly Collaborating**
- **Always Accountable**
- **Best and Brightest**
- **Listen and Learn**
- **Inherently Innovative**

AMSC Corporate Facts

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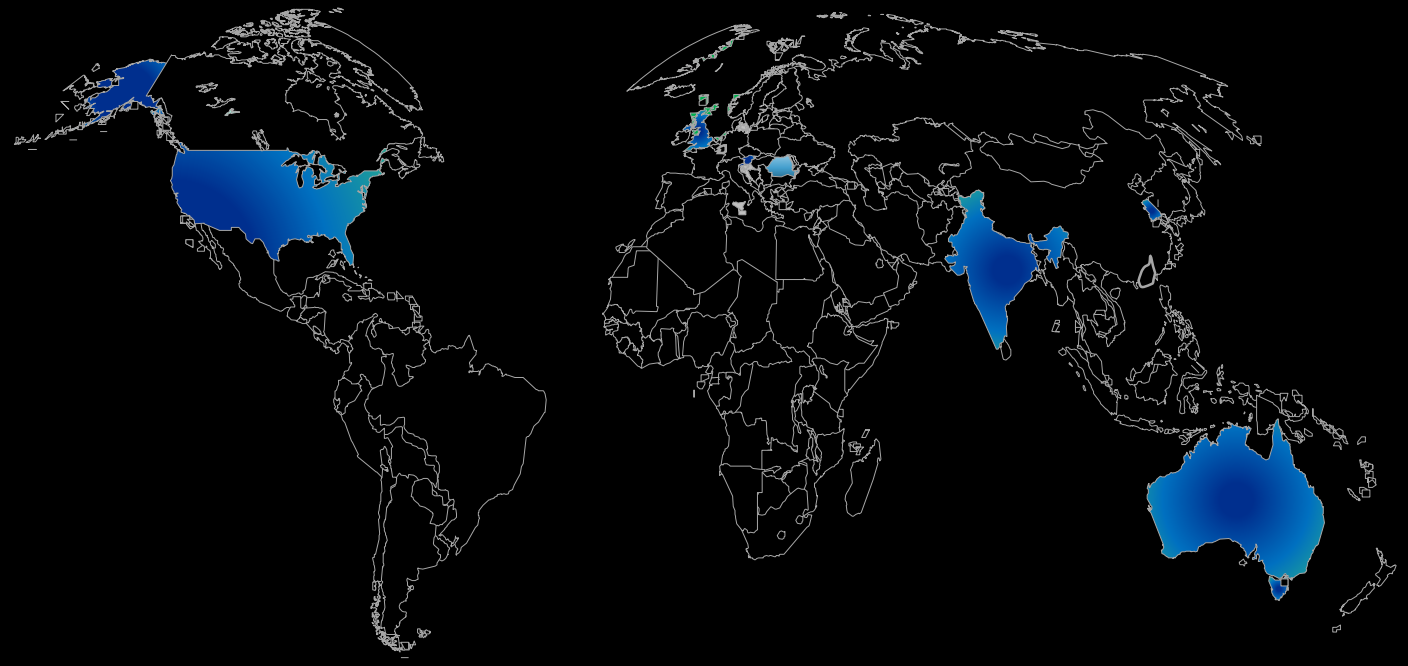
Headquartered in the U.S. with operations in eight countries

Founded in 1987

Proven clean tech leader, industry enabler and job creator

Resilient solutions from power generation to transmission and distribution

Proprietary products based on core technologies: smart software/controls and smart materials



AMSC Proprietary Technology

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Smart Software and Controls

Smart Pitch Control
Smart Converter Control
Smart Turbine Control
Smart Control Card (D-VAR, VVO and ECS)
Power Module (D-VAR and ECS)
DVAR proprietary control interface
DVAR and VVO advanced modeling tools
VVO multi-level controls
ECS, DVAR and VVO Data Park

Smart Materials

High temperature superconductor (HTS) wire
Cryocooler SPS class
Ship System Connector
Computer interface to ship system
Thermal Modeling for SPS and REG
SPS system level patents
REG system level patents

Business Drivers to 2025

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Climate Change and Global Environmental Sustainability

"At 1°C above pre-industrial temperatures, we are seeing fires–even in the Arctic–record floods, superstorms, heatwaves and cold snaps."*
Paris Agreement member countries (185) have submitted measures to limit or reduce their greenhouse gas emissions by 2025 or 2030.

Grid Evolution

Power failures: cost between $18 and $33 billion per year.
External threats: cyber, physical and accidental.
New technologies: over 1 million electric vehicles on U.S. roads.
Changing electricity mix: proliferation of renewables and distributed generation.
Urbanization: 82% of the U.S. population lives in urban areas.

Rising Global Threats and Sustainable Security

Near-peer military modernization, nuclear armament and foreign engagement propels the U.S. Navy to move towards all electric power and weapon systems.

We are living in a world where threats are increasing.

*Future of Sustainability 2019

Presenter's Biographies

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James Doyle

VP, GM Grid
5 years with AMSC

Emerson Electric

University of Massachusetts
Boston University

Michael Messner

VP, GM Wind
12 years with AMSC

Philips

University of Klagenfurt
University of Graz (Austria)

John Ulliman

VP, GM Marine
13 years with AMSC

Northrop Grumman
Huntington Ingalls
Lockheed Martin
General Electric

Purdue University

John Kosiba

SVP, CFO and Treasurer
9 years with AMSC

Amphenol
Hybricon

University of Rhode Island
Boston University

Today's Agenda

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9:00 am	**Opening Remarks** – *Daniel McGahn*
	Power Quality (DVAR & VVO) – *James Doyle*
	Resilient Electric Grid – *Daniel McGahn*
	Wind Turbine Control Systems – *Michael Messner*
10:45 – 11:00 am	**Break**
	Ship Protection Systems – *John Ulliman*
	Financial Overview – *John Kosiba*
	Q&A
12:30 pm	**Lunch**

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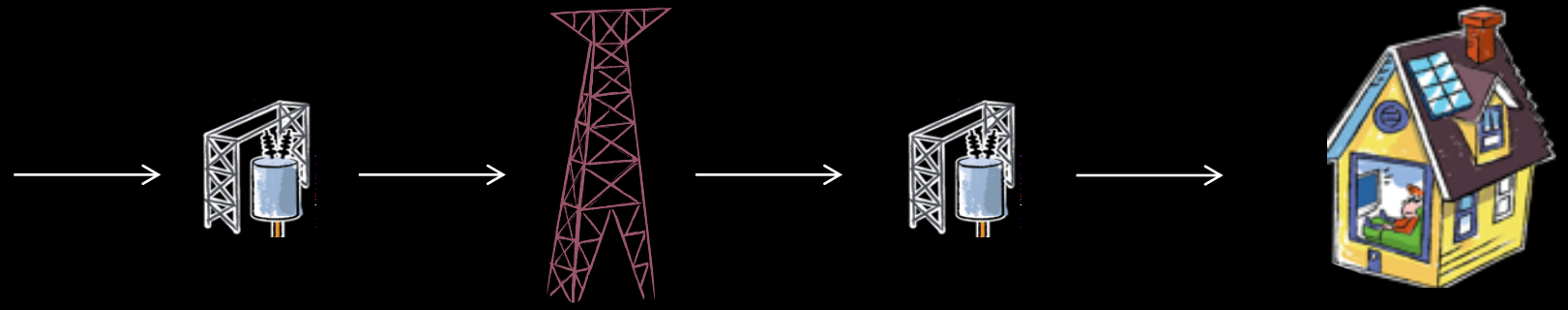
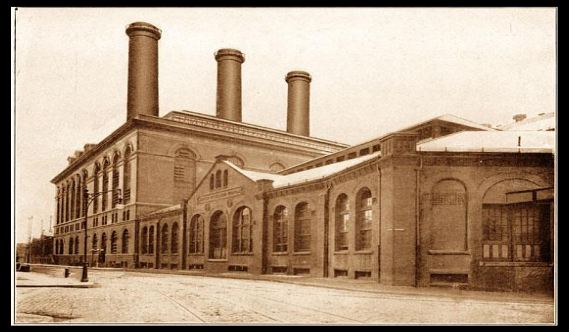
Power Quality

James Doyle



1882



Pearl street station
Coal fired
400 lamps
85 customers

1935

Classical fossil generation
AC power
One dimensional
Transmission to delivery

2025

Where do we go from here?

The Grid is Evolving

From Classical

To Digital

By 2025

100 GW ➡ 155 GW

Global Data Intelligence Report 2019

69 GW ➡ 160 GW

SEIA

Over 6 million EV's

Edison Electric Institute

The Power Mix is Changing

Coal

Natural gas

Nuclear power

Hydro-electric

Wind power

Solar power

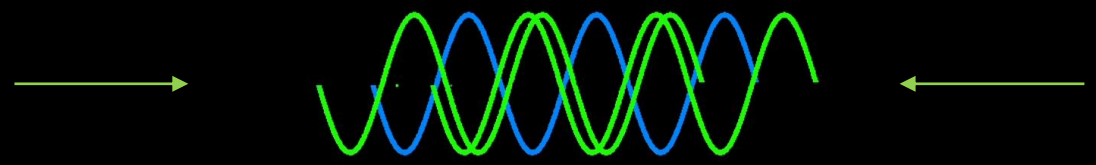
AMSC reactive compensation…

Staying in tune dynamically…

Shortfall or oversupply causes undesirable voltages

Inductive current

Capacitive current



Real unity power

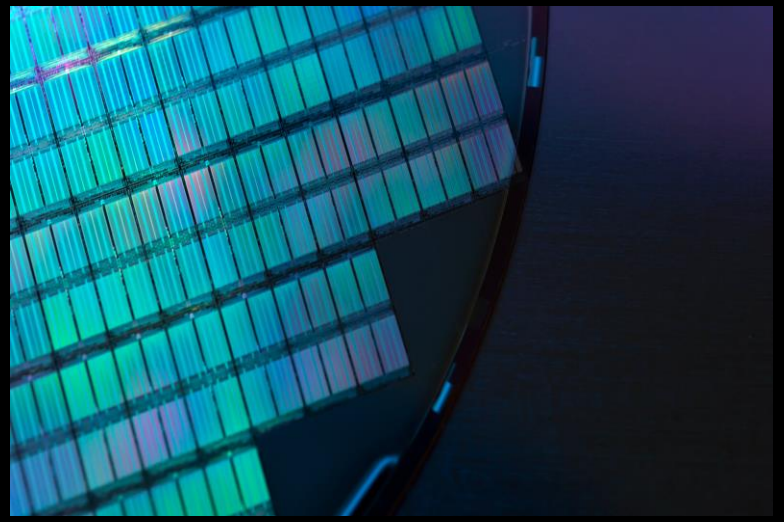
D-VAR Market Drivers

Cleaner

Enabling wind farms to comply with local grid codes

- Wind farm owners have two knobs
- Produce real power or VARS
- Have an economic incentive to create real power
- Grid codes continue to get more stringent

Smarter



Semiconductor fabs and other industrial processes

- Data centric era requires cutting edge DRAM memory technology
- Big data, wireless coms, consumer electronics, auto infotainment, industrial electronics, gaming
- Power losses equate to impacts to bottom line

D-VAR ~1/3rd the cost of traditional reconductoring or cogeneration

VVO Market Drivers

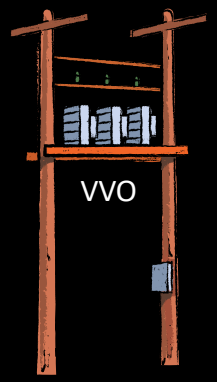
Grid Evolution

VVO allows utilities to own the voltage

New technologies: over 1 million electric vehicles on U.S. roads.
Changing electricity mix: proliferation of renewables and distributed generation.

Conventional generation is retiring and distributed generation is increasing.

Consumers are impacting the direction of power flow.
Distributed Generation adoption rate outpaces utility ability to manage change.



Bi-Directional Distribution

Problem : Voltage spikes/sags due to intermittent DG

Problem : No capability to add additional solar capacity

Solution: VVO system ~1/8th the cost of reconductoring

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Resilient Electric Grid

Daniel McGahn

Why REG?

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Increases resilience, reliability and load growth capacity amid space constraints, siting challenges and concerns over environmental impact.

Modernizes the grid

Interconnects substations

Maximizes existing utility assets

Allows instantaneous power outage recovery

Utilizes AMSC's "smart materials" technology

Makes permitting of major projects much quicker and easier

Networking Our Cities' Substations

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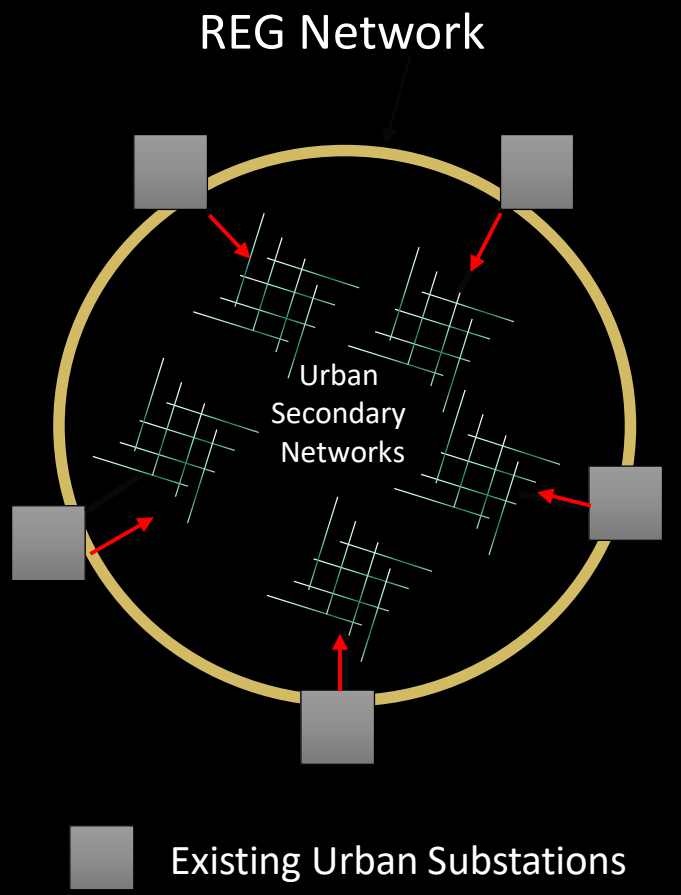
REG Enables the Networking of Urban Substations

REG systems provide resiliency by creating grid redundancy.

REG solutions network urban substations on distribution side, effectively backing up the transmission system.

REG solutions provide high capacity, distribution voltage connections with minimal footprint, civil works and permitting.

Approach is effective even if existing substations have different transmission voltage levels.



REG Solutions to Cities

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Achilles Heel
Only a few critical electrical substations keep the power flowing in one of the most densely populated U.S. cities.

Resiliency of Key Neighborhoods
REG provides substantial improvement to the reliability and resiliency of the grid as this city works to modernize one of the oldest power systems in the U.S.

Climate and Natural Events
REG provides options to modernize and improve grid resiliency in the event of earthquake or equipment failure while minimizing project cost and disruption.

Nowhere to Go
REG can triple to quadruple the reliability that is not feasible with traditional equipment in this dense city.

Vertical and Green
REG provides environmentally friendly options for increasing load growth without disrupting this city's vertical growth.





ComEd

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Project #1 (Contracted)

Incorporates all the features critical to large-scale REG projects.
Doubles current substation reliability.
Provides high-capacity link between substation assets.
Experience and lessons learned to benefit Project #2.

Project #2 (Proposed)

Three substations networked together, triples current reliability and resiliency for all substations.
Far less disruptive to downtown area than conventional transmission upgrades.
Will not require additional high-voltage transformation.
Will not require land acquisition for substation expansion.

REG Market Proof Point

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The value proposition of REG is demonstrably true in a bellwether American city.

Utilities and now regulators are beginning to understand the capability and value of REG.

The Federal Energy Regulatory Commission, or FERC, recently granted ComEd's request to recover its portion of the cost to construct, operate and maintain both projects through its transmission rates.

REG systems provide value to both the Distribution and Transmission networks, the REG capability in this case is more analogous to conventional transmission assets.

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Wind Turbine Control Systems

Michael Messner

Wind Business Drivers to 2025

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The Climate Revolution

Climate activists are raising awareness for urgent action on carbon reduction driving demand for clean sources of energy.

Onshore Wind Power Demand in Developing Countries

Increasing adoption of wind power in developing countries enhances energy security, provides local jobs and reduces carbon emissions.

Global Offshore Wind Power Demand

Offshore wind turbines are more efficient than their onshore counterparts because wind speed and direction over the water are more consistent. Offshore wind does not interfere with land use such as agriculture, construction and recreation.

India

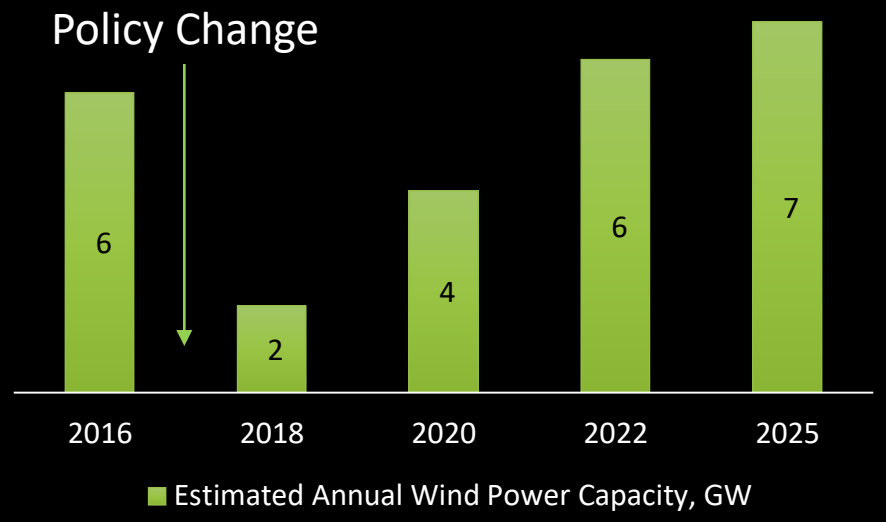
Onshore Wind Power

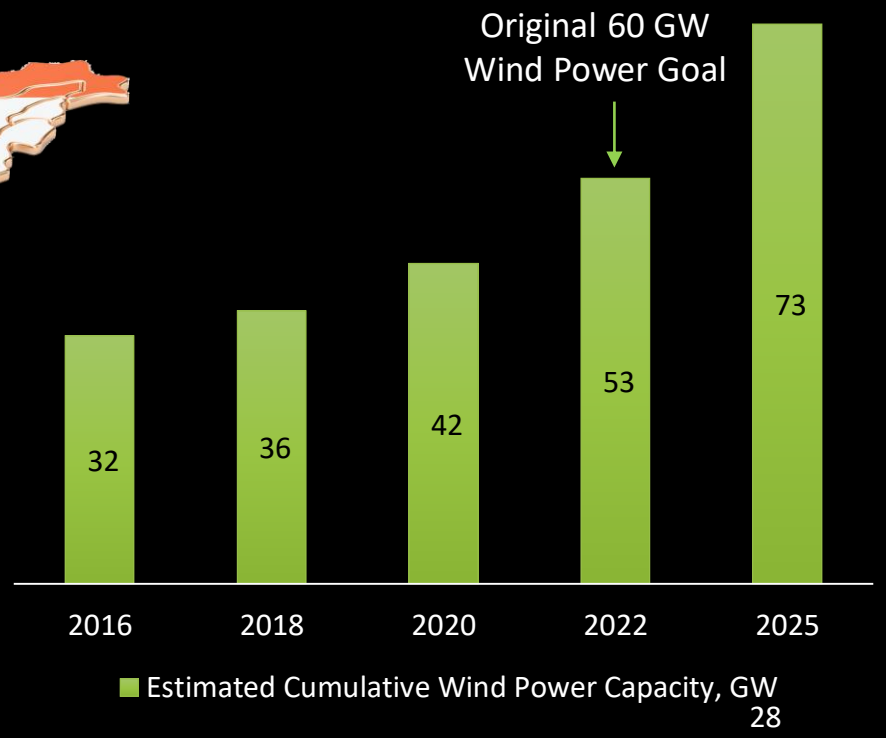
3rd Fastest growing economy in 2018

3rd Largest carbon emitting country since 2016

2017 Policy change

SECI 1-8 ~10 GW of wind power auctioned





Paris Agreement

India is world player engaged in massive push to reduce dependency on fossil fuels and focus on renewable energy.

Source: Global Data Intelligence Report 2019

South Korea

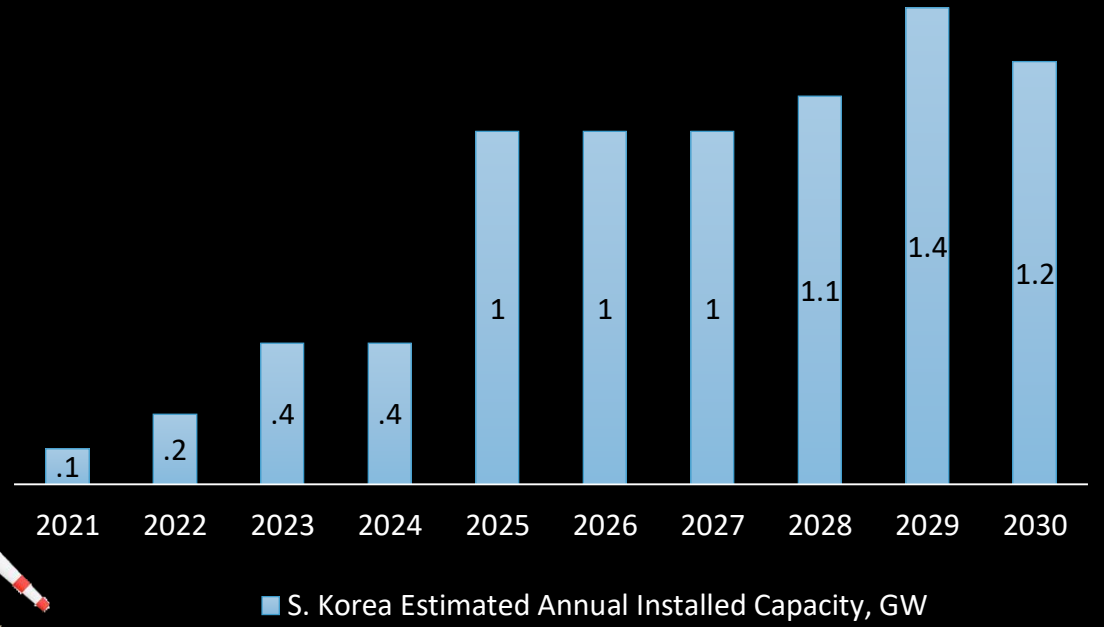
Offshore Wind Power

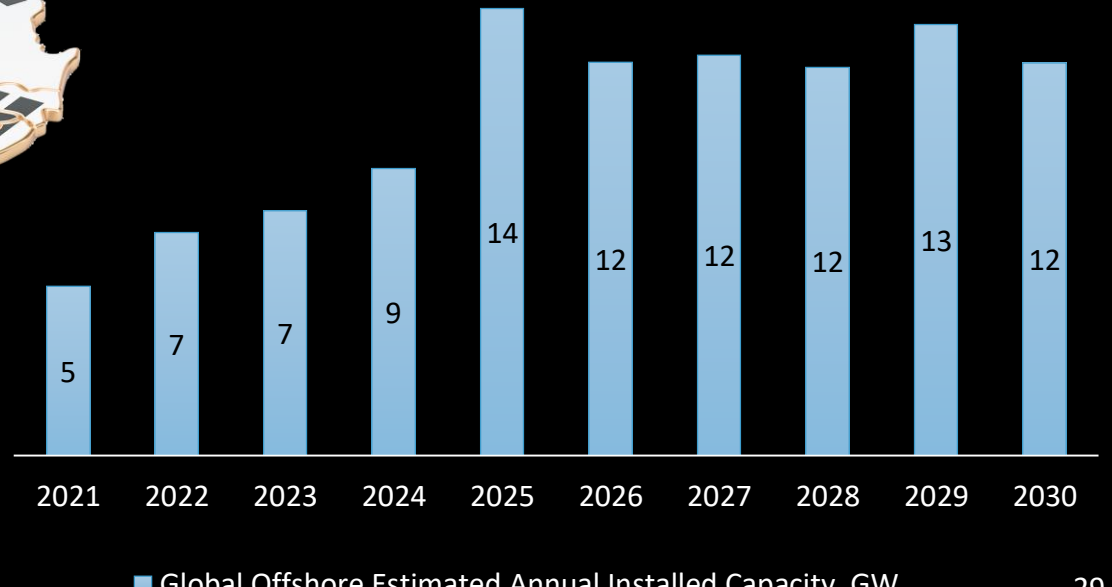
8th Biggest global energy consumer

Imports ~98% of its energy supply

7th Biggest global carbon dioxide emitter since 2016

Renewable Target of 20% by 2030





South Korea

Represents entry point for AMSC's global offshore wind market.

Source: Global Data Intelligence Report 2019

Unique Solutions

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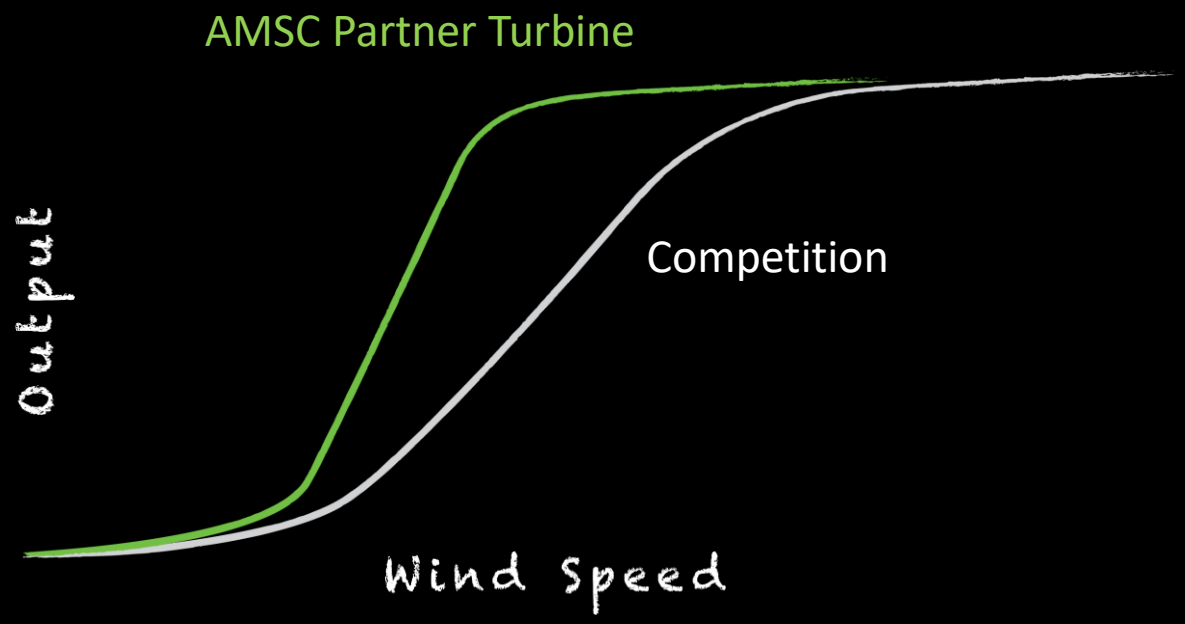
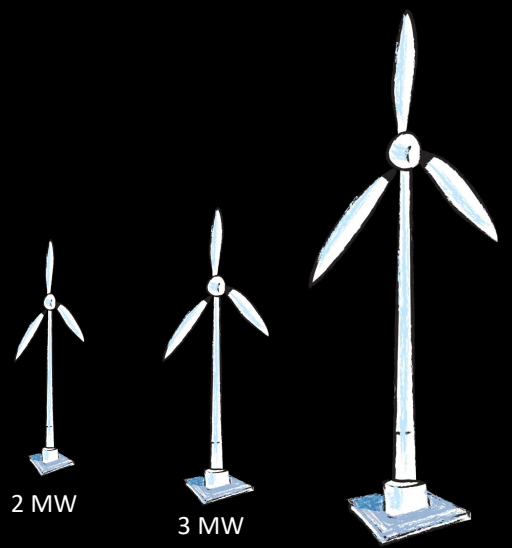
Onshore and offshore wind turbine technology.

Mechanical, electrical design and software development.

Product portfolio from 2 to 10+ MW wind turbine designs.

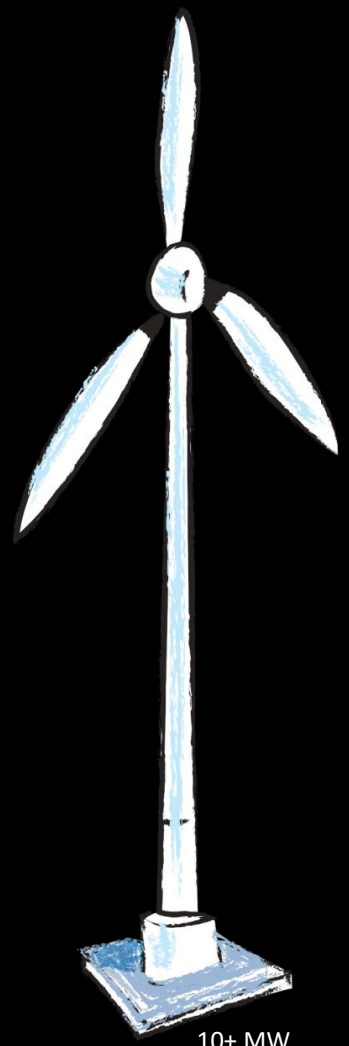


ECS Represents
5% - 10% of the Turbine



INOX WIND

DOOSAN



Electrical Control Systems

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Electrical Pitch System
Power output

Nacelle Cabinet
Power distribution and turbine control

Tower Base Cabinet
Turbine control

Converter Cabinet
for connection to any grid frequency

Wind Licensing Model

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Partner Criteria

1 GW+ regional markets

Heavy industry expertise

Financial capability

Access to local supply

Partner Benefit

Competitive CAPEX
-5% due to localization

High annual energy production
up to +15%

Financial incentives due to local content

Up to 3,500 new local jobs created

	System Engineering	License and Development	Technology Transfer	Localization	Supply Chain	Global Field Service	Grid Interconnection	Wind Farm Management	Wind Farm Retrofits
Only Full Service Wind Licensing Company	✓	✓	✓	✓	✓	✓	✓	✓	✓

Technology Transfer

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Core IP NOT Shared:
Source code, calculation methods, control strategy

Technology Transfered:
Operating software, documents and drawings, specifications, BOM

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Ship Protection Systems

John Ulliman

The Sea Mine Threat

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Sea mines have damaged or destroyed more U.S. Navy ships than any other type of threat

Mines are inexpensive, stealthy, lethal and psychologically crippling.

Perfect terrorist asymmetric weapon—no fingerprints.

Russian Navy	250,000 mines
Chinese Navy *2000 mines per day capability*	100,000 mines
North Korea Navy *Reported to have nuclear mine*	50,000 mines
Iran	8,000 mines

Captured Iranian mine-laying ship IRAN AJR with a U.S. Navy landing craft alongside.

Mine	Missile	Torpedo	Aircraft	Small Boat
Princeton	Stark	Liberty	Higbee	Cole
Tripoli			Liberty	
S.B. Roberts				
Warrington				
Westchester County				
Barton				
E.G. Small				
Walke				
Mansfield				
Brush				
Sarsi				
Partridge				
Pledge				
Pirate				
Magpie				

Source: U.S. Navy N85 and PEO LMW, 2009

Area Denial

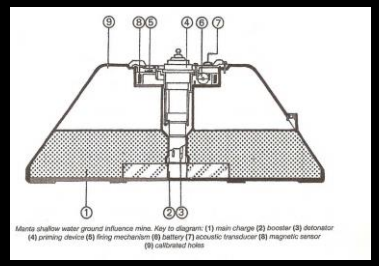
Mines and torpedoes are triggered by **recognition of the ship's magnetic signature.**

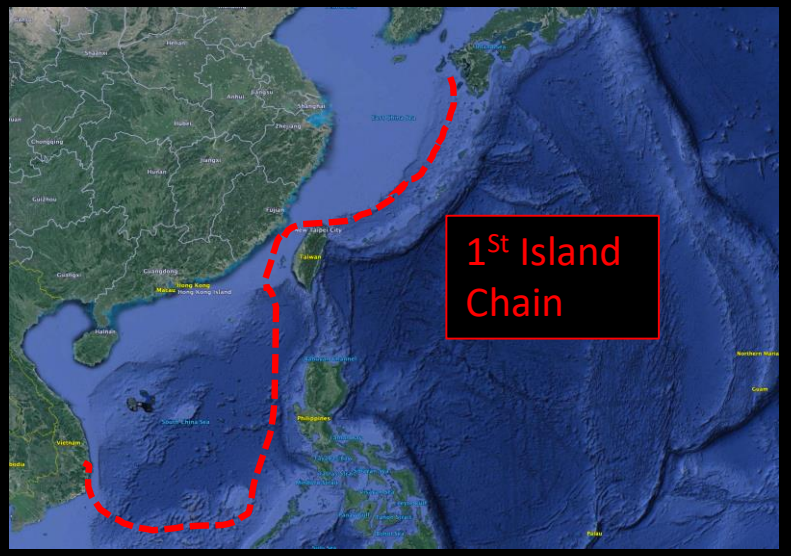
A spherical gas bubble forms.

A **high-pressure** shock wave moves through the water.

And applies a huge force to the hull crushing it and lifting it out of the water.

Physical Size
(approx):
Diameter 3 Ft.
Height 1.5 Ft.
Weight 500 Lbs.





China's Sea Control

Iran – Straight of Hormuz

N. Korea Area Denial

Russia – Baltic Sea Denial

How SPS Provides Stealth

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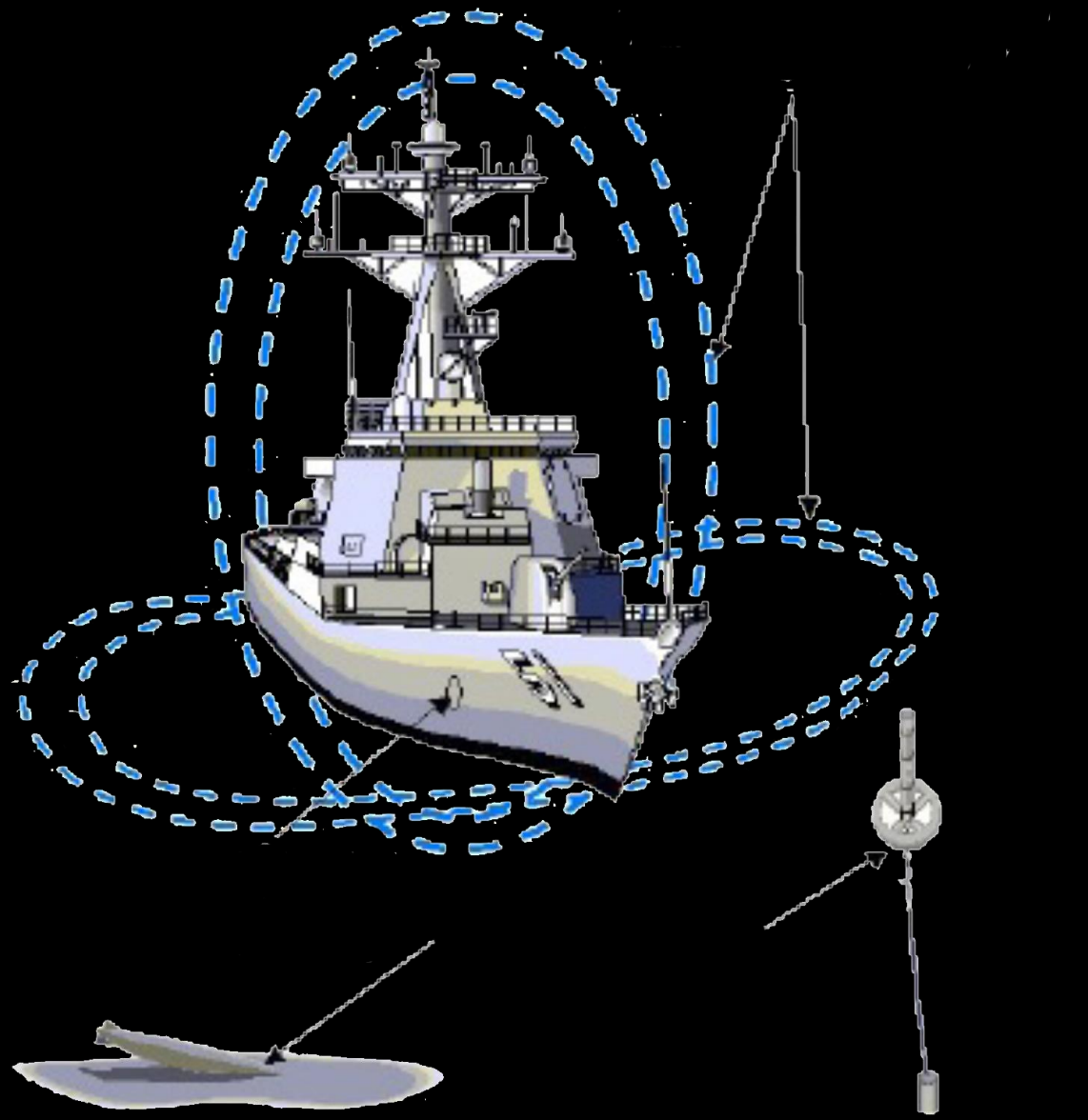
Problem: ships create a *unique* magnetic field (signature)—along 3 axes—depending on location, heading, pitch and roll as it moves through the earth's natural magnetic field providing ship identification and trigger data to the mine or torpedo weapon.

Solution: generate a counteracting magnetic field—along 3 axes—in real time as the ship moves. SHIP DEGAUSSING.

The counteracting field is executed with cable—coils exactly positioned along 3 axes throughout the ship where each cable/coil set is fed just the right amount of electricity at just the right time to mask the ship's signature.



Why AMSC?

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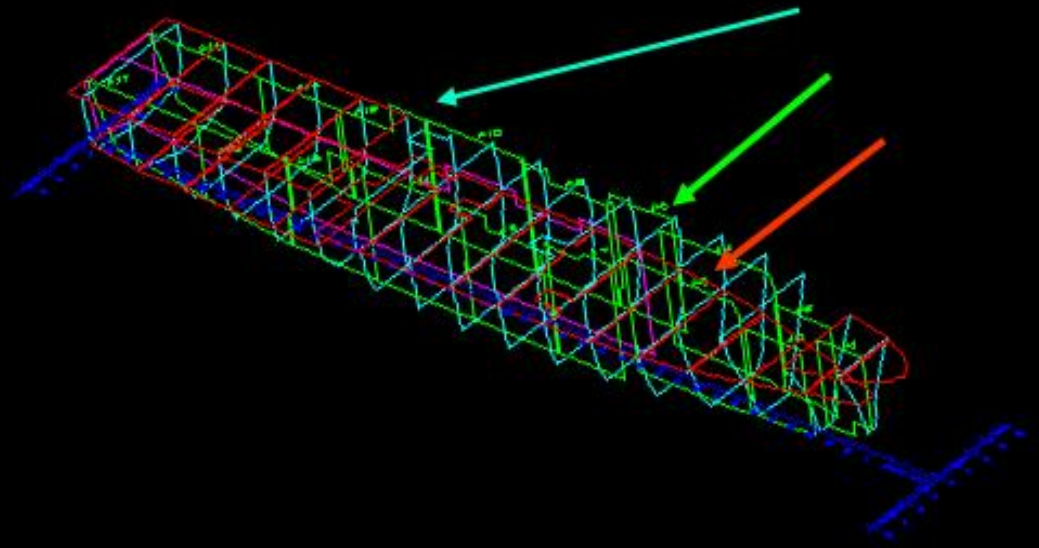
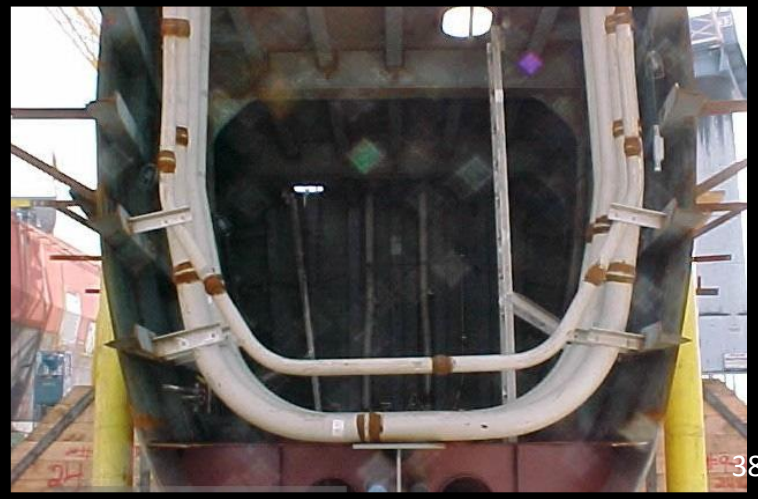
Current system: ships' magnetic signature masked by substantial amounts of copper cable-coils, taking up valuable space, weight and power.

AMSC solution: ships' magnetic signature masked by much smaller, lighter and higher performing HTS cable coils eliminating 50-70% of the system weight and saving 40-50% of the system power.

HTS Degaussing Cable

Copper Degaussing Cables





San Antonio Class

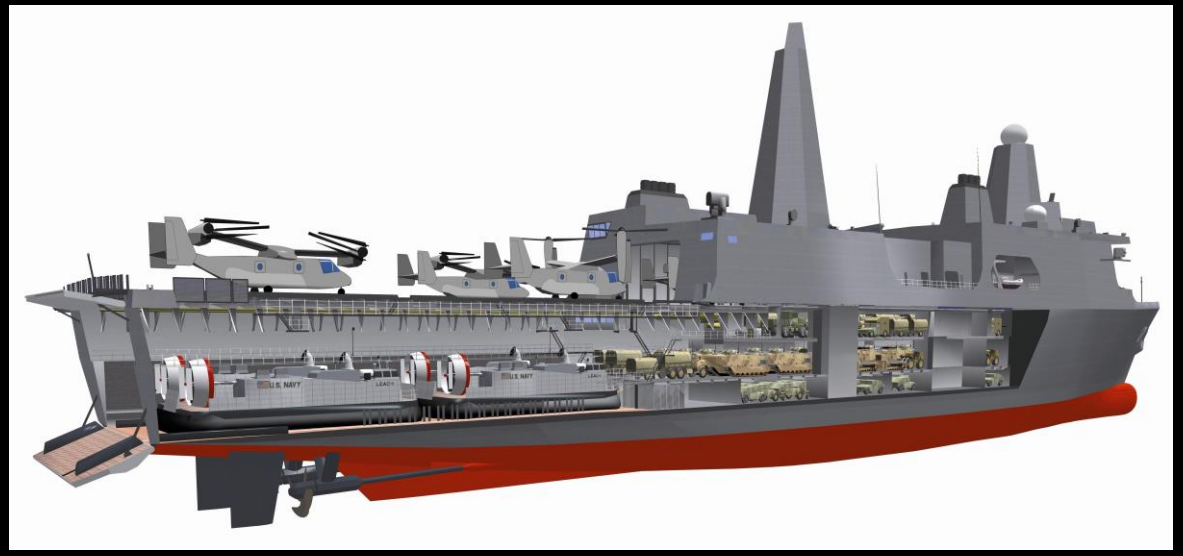
AMSC's SPS has been chosen as the baseline design for the San Antonio Class Platform

LPD Revenue Annuity

2 Flight I LPDs
13 Flight II LPDs
~$10 Million per vessel
Potential $150 million revenue stream

Ship Impact

60 Tons removed
50% Energy savings
Lower installation cost
Lower life cycle cost



25,000 Tons, 22 knots, 360 sailors/800 marines

SPS Target Market

U.S. Navy SPS Candidates

Amphibious Transport Dock (LPD)
Amphibious Assault Vessel (LHA)
Aircraft Carrier (CVN)
Destroyer (DDG)
Frigate (FFGX)
Attack Submarine (SSN)
Combat Logistics (black hull ships)

Carrier Strike Group

Allied Navy SPS Candidates

NATO – United Kingdom, Canada, Germany, France, Spain, Italy Portugal, Belgium, Netherlands

Asia Pacific – Australia, New Zealand, Korea, Japan, India

South America – Brazil, Chile, Peru

15 Allied Navies Off Coast of Spain – Dynamic Mariner 2019

Beyond 2025

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HTS

Electrification of the Navy Fleet

Power delivery systems

Main ship power generation

Main ship propulsion

Energy storage – electric weapons

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Financial Overview

John Kosiba

Increasing Shareholder Value

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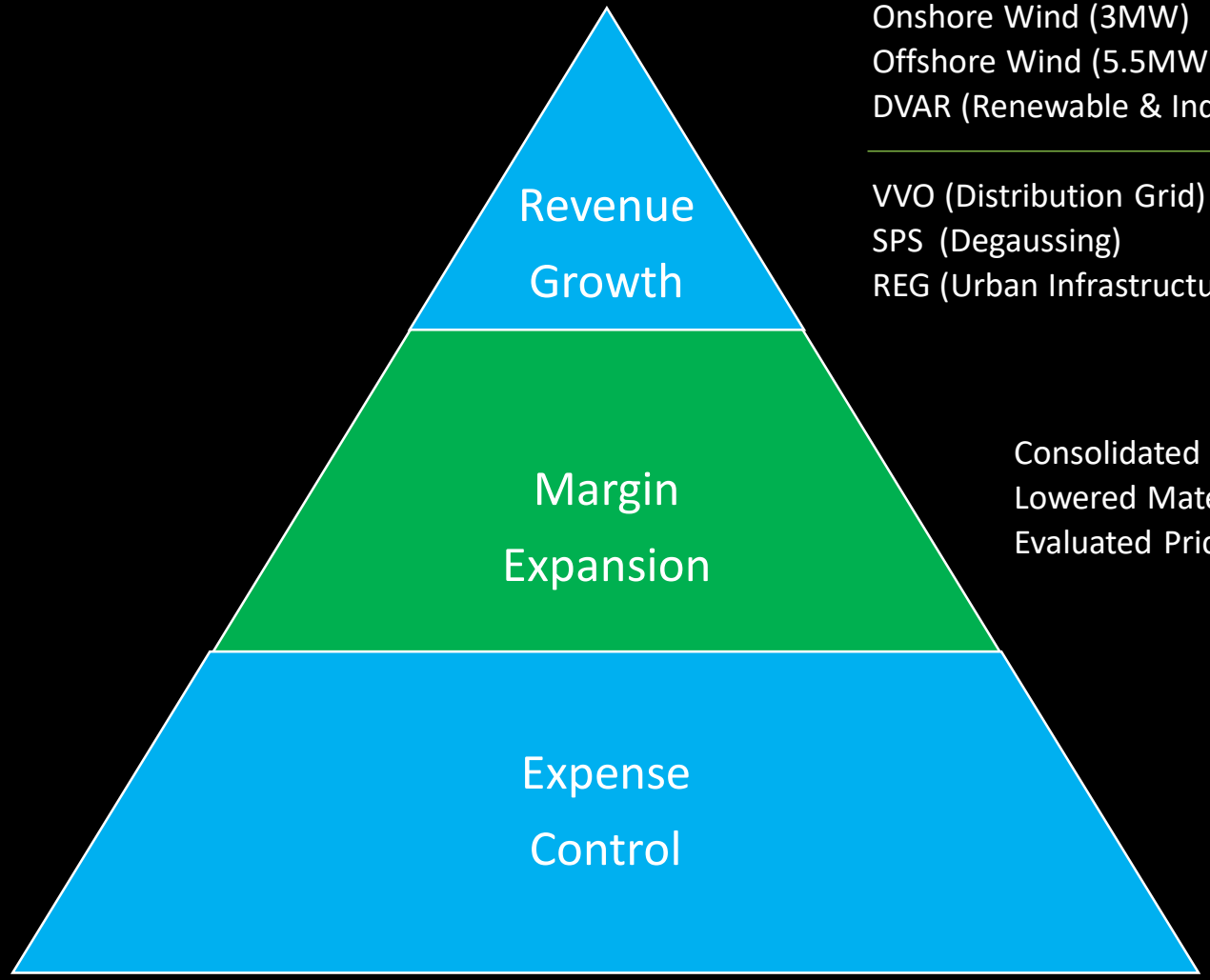

Onshore Wind (3MW)
Offshore Wind (5.5MW)
DVAR (Renewable & Industrial)

Existing Product Expansion

VVO (Distribution Grid)
SPS (Degaussing)
REG (Urban Infrastructure)

Commercialize New Products

Consolidated Fixed Factory Overhead
Lowered Material Cost
Evaluated Pricing Models

Maximize Sales Efficiency
Engineering Focused on New Products
Simplify G&A

Improved Financial Performance

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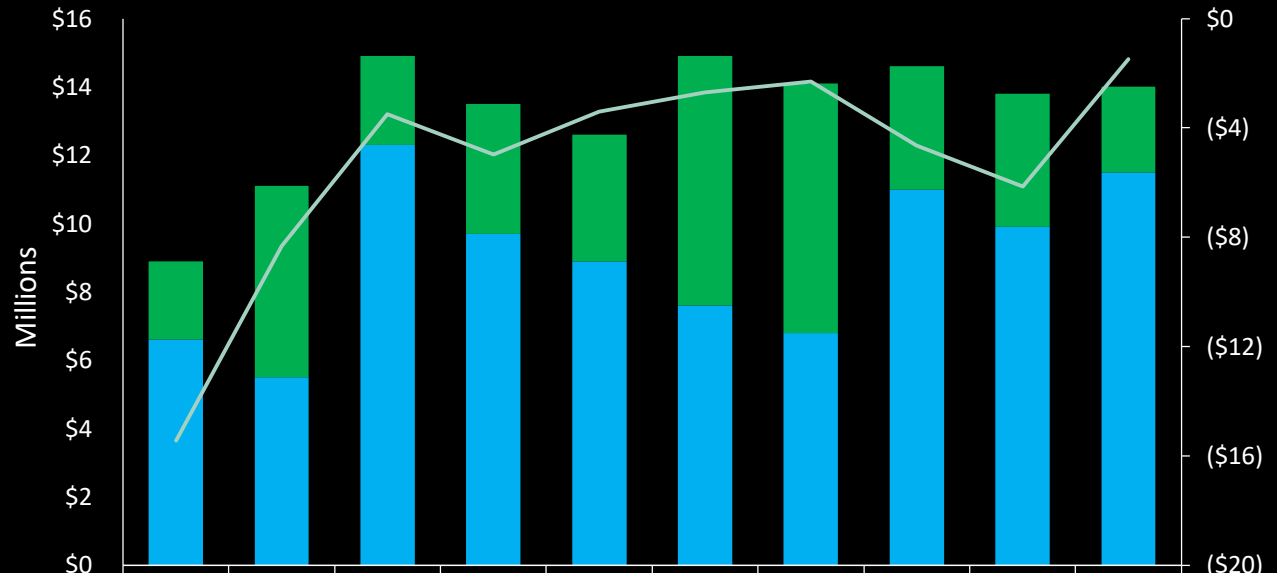
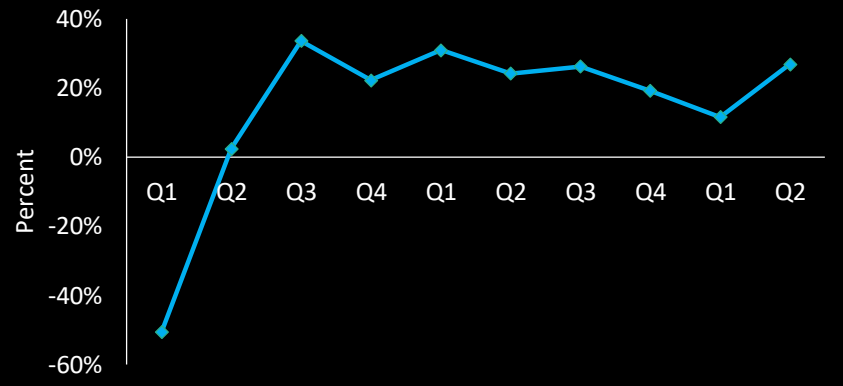
Revenue

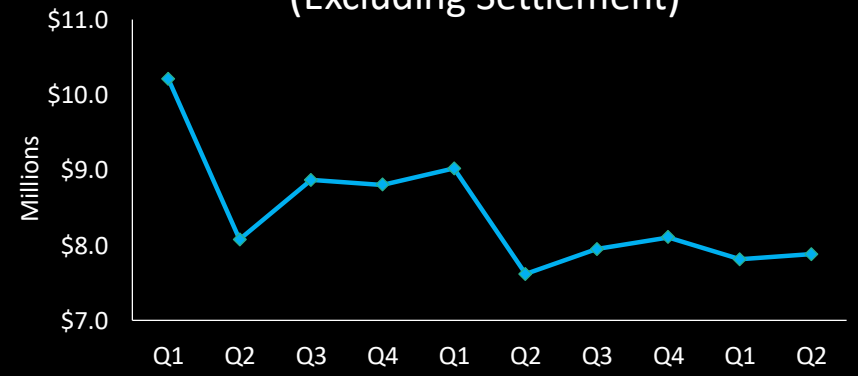


	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Wind	2.3	5.6	2.6	3.8	3.7	7.3	7.3	3.6	3.9	2.5
Grid	6.6	5.5	12.3	9.7	8.9	7.6	6.8	11.0	9.9	11.5
Non GAAP NI	(15.4)	(8.3)	(3.5)	(5.0)	(3.4)	(2.7)	(2.3)	(4.6)	(6.2)	(1.5)
	FY17				FY18				FY19	

Gross Margin



Operating Expenses (Excluding Settlement)



Please see appendix for reconciliation of GAAP Net Income to Non-GAAP Net Income

Please see appendix for reconciliation of GAAP Operating Expenses to Non-GAAP Operating Expenses

Strengthen Balance Sheet

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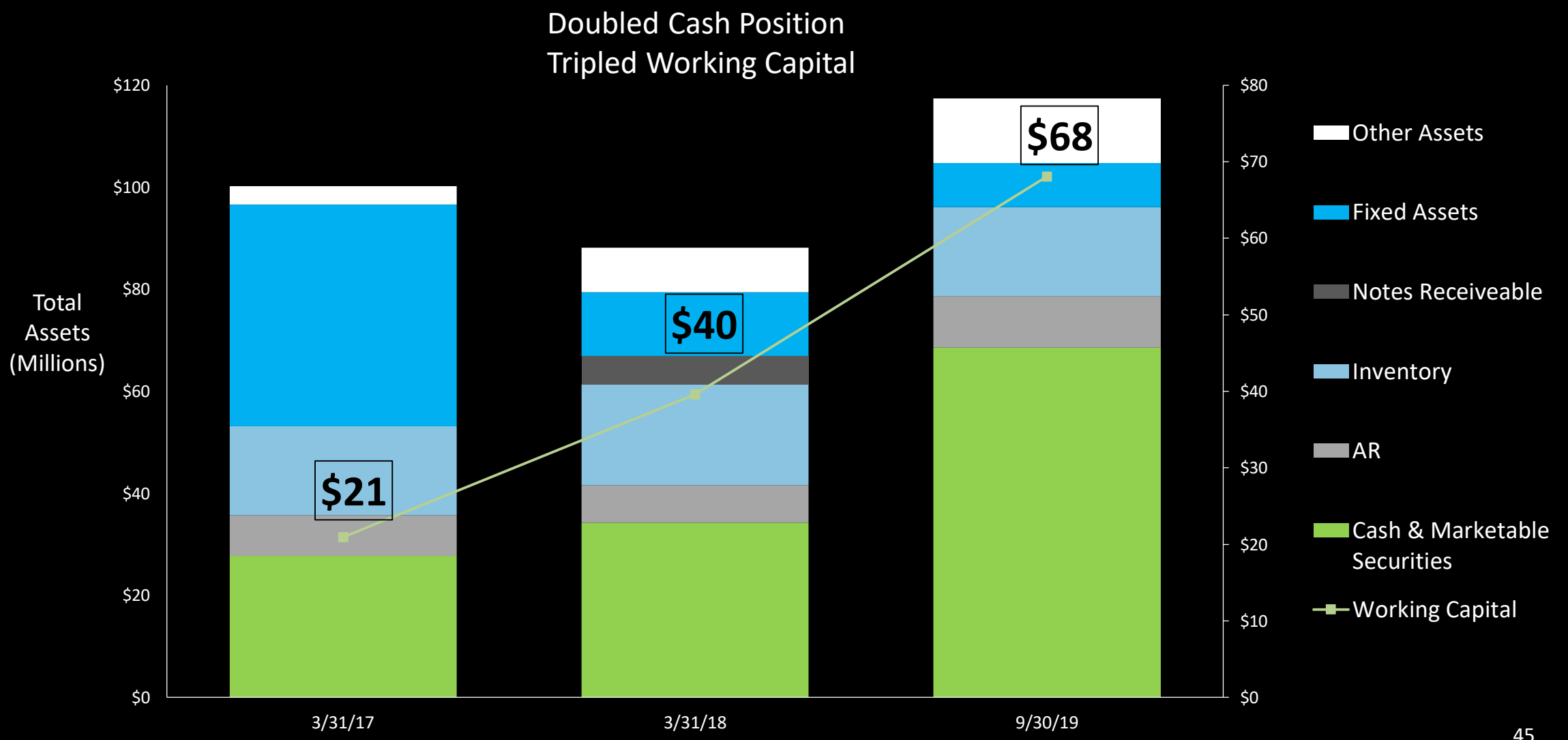

Hypothetical Scenarios

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	500MW ECS 1 Ship Platform 1st Chicago REG D-VAR (Run Rate) VVO (Early Production)	250MW ECS 2 Ship Platforms 1 Small REG city D-VAR (RR + 20%) VVO (Early-Cycle Adoption)	400MW ECS 3 Ship Platforms 1 Large REG city D-VAR (RR + 20%) VVO (Mid-Cycle Adoption)	600MW ECS 3 Ship Platforms + Export 1 Large REG city D-VAR (RR + 20%) VVO (Mid-Cycle Adoption)
Revenue	$100M	$150M	$200M	$250M
Gross Margin	24% to 27%	25% to 28%	27% to 30%	29% to 32%
Cash OPEX	> $28M	> $30M	> $32M	> $34M
Operating Cash Flow	breakeven	5% to 10%	10% to 15%	15% to 20%

For illustrative purposes only. Does not reflect anticipated results for the Company.

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Reconciliation Tables

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RECONCILIATION OF GAAP NET INCOME (LOSS) TO NON-GAAP NET INCOME (LOSS)
(In millions)

	FY17 Q1	FY17 Q2	FY17 Q3	FY17 Q4	FY17 Total	FY18 Q1	FY18 Q2	FY18 Q3	FY18 Q4	FY18 Total	FY19 Q1	FY19 Q2
Net Income	$ (15.3)	$ (7.3)	$ (4.2)	$ (6.0)	$ (32.8)	$ (4.7)	$ 22.6	$ 17.3	$ (8.4)	$ 26.8	$ (3.5)	$ (0.8)
Sale of Minority Investments	$ -	$ (1.0)	$ -	$ (0.2)	$ (1.2)	$ -	$ -	$ (0.1)	$ -	$ (0.1)	$ -	$ -
China Settlement	$ -	$ -	$ -	$ -	$ -	$ -	$ (28.7)	$ (25.0)	$ 1.0	$ (52.7)	$ -	$ -
Stock-Based Compensation	$ 0.8	$ 0.5	$ 0.9	$ 0.6	$ 2.7	$ 0.8	$ 0.8	$ 0.8	$ 0.6	$ 3.0	$ 0.2	$ 0.4
Amortization of Acquisition-Related Intangibles	$ 0.0	$ -	$ 0.1	$ 0.1	$ 0.2	$ 0.1	$ 0.1	$ 0.1	$ 0.1	$ 0.3	$ 0.1	$ 0.1
Consumption of Zero Cost-Basis Inventory	$ (0.1)	$ (0.3)	$ (0.1)	$ (0.2)	$ (0.7)	$ (0.2)	$ -	$ -	$ -	$ -	$ -	$ -
Change in Fair Value of Derivatives and Warrants	$ (0.9)	$ (0.3)	$ (0.1)	$ 0.8	$ (0.6)	$ 0.5	$ (0.3)	$ 2.5	$ 1.1	$ 3.7	$ (2.9)	$ (1.1)
Non-Cash Interest Expense	$ 0.0	$ -	$ -	$ -	$ 0.0	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Tax Effect of Adjustments	$ 0.0	$ 0.1	$ 0.0	$ 0.0	$ 0.2	$ 0.0	$ 2.8	$ 2.2	$ 0.9	$ 5.9	$ -	$ -
Non-GAAP Net Loss	$ (15.4)	$ (8.3)	$ (3.5)	$ (5.0)	$ (32.2)	$ (3.6)	$ (2.7)	$ (2.3)	$ (4.6)	$ (13.0)	$ (6.2)	$ (1.5)

RECONCILIATION OF GAAP OPERATING EXPENSES TO NON-GAAP OPERATING EXPENSES
(In millions)

	FY17 Q1	FY17 Q2	FY17 Q3	FY17 Q4	FY17 Total	FY18 Q1	FY18 Q2	FY18 Q3	FY18 Q4	FY18 Total	FY19 Q1	FY19 Q2
Operating Expenses	$ 10.2	$ 8.1	$ 8.9	$ 8.8	$ 36.0	$ 9.0	$ (21.1)	$ (17.0)	$ 9.1	$ (20.0)	$ 7.8	$ 7.9
Gain on Settlement	$ -	$ -	$ -	$ -	$ -	$ -	$ (28.7)	$ (25.0)	$ 1.0	$ (52.7)	$ -	$ -
Operating Expenses Exlcuding Settlement	$ 10.2	$ 8.1	$ 8.9	$ 8.8	$ 36.0	$ 9.0	$ 7.6	$ 7.9	$ 8.1	$ 32.7	$ 7.8	$ 7.9