

A decorative graphic consisting of two overlapping chevrons, one blue and one grey, pointing to the right.

Electric Power Infrastructure Services

Duke Austin, President & Chief Executive Officer

B.J. Ducey, Senior Vice President – Operations

Key Takeaways



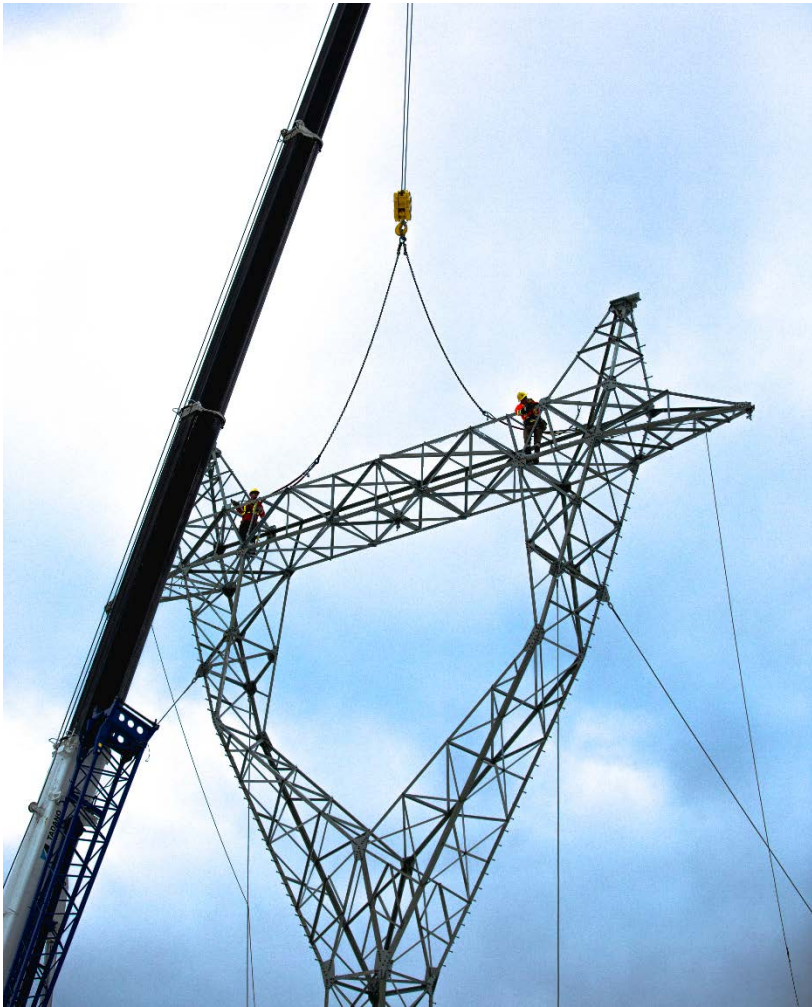
Quanta is the largest electric utility solutions provider in North America

Well-positioned to meet customers' infrastructure needs, as they continue to invest capital in transmission and distribution infrastructure at historic levels

Quanta intends to maintain and grow its position as the recognized market leader in electric power infrastructure services by providing unmatched knowledge, expansive resources and complete scope of services

Quanta is uniquely positioned to take advantage of strong end market fundamentals

Electric Power Segment Overview



Service Offering

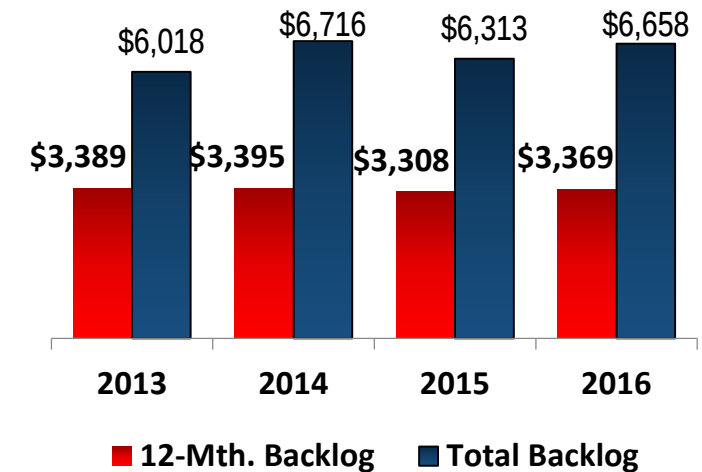
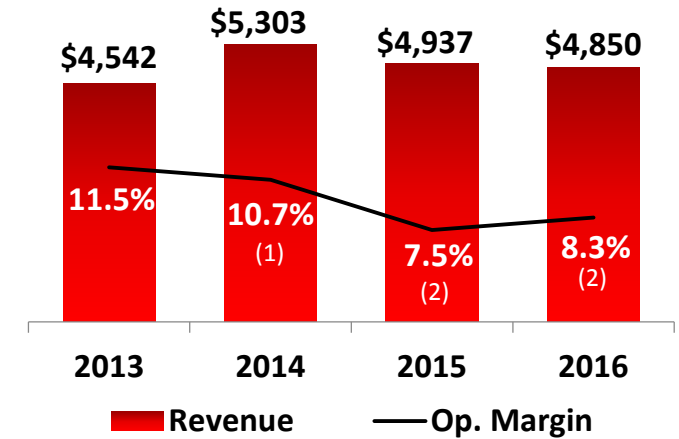
- Transmission
- Distribution
- Substation
- Engineering
- Energized Services
- Emergency Restoration
- Smart Grid Deployment
- EPC Renewable Generation
- Asset Management

Differentiators

- Largest T&D solutions provider in North America
- Reputation and Track Record
- Unmatched Solutions Scope and Scale
- Safety Record
- Manpower and Equipment Resources
- Lazy Q Training Facility
- Energized Services
- EPC Capabilities Across All Offerings
- Infrastructure Capital Solutions

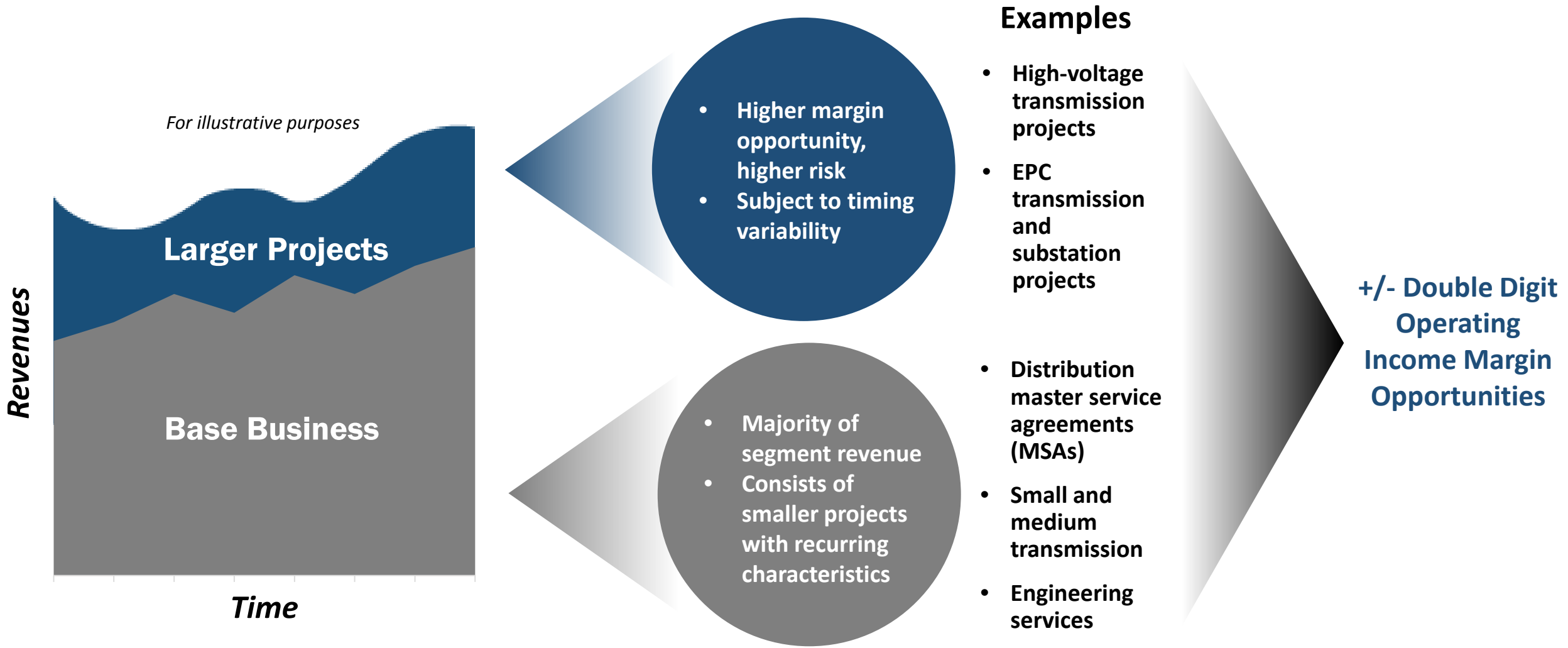
Financial Snapshot

For the years ended Dec. 31, (\$ in millions)



(1) Operating margin excludes a \$102.5 million charge to cost of services for long-term contract receivable in 2014. Refer to appendix for non-GAAP reconciliation
(2) Excludes a \$6.6 million property and equipment charge in 2015 and a \$5.7 million asset impairment charge in 2016. Includes the impact of \$66.1 million in 2015 and \$54.8 million in 2016 of project losses. Refer to appendix for non-GAAP reconciliation.

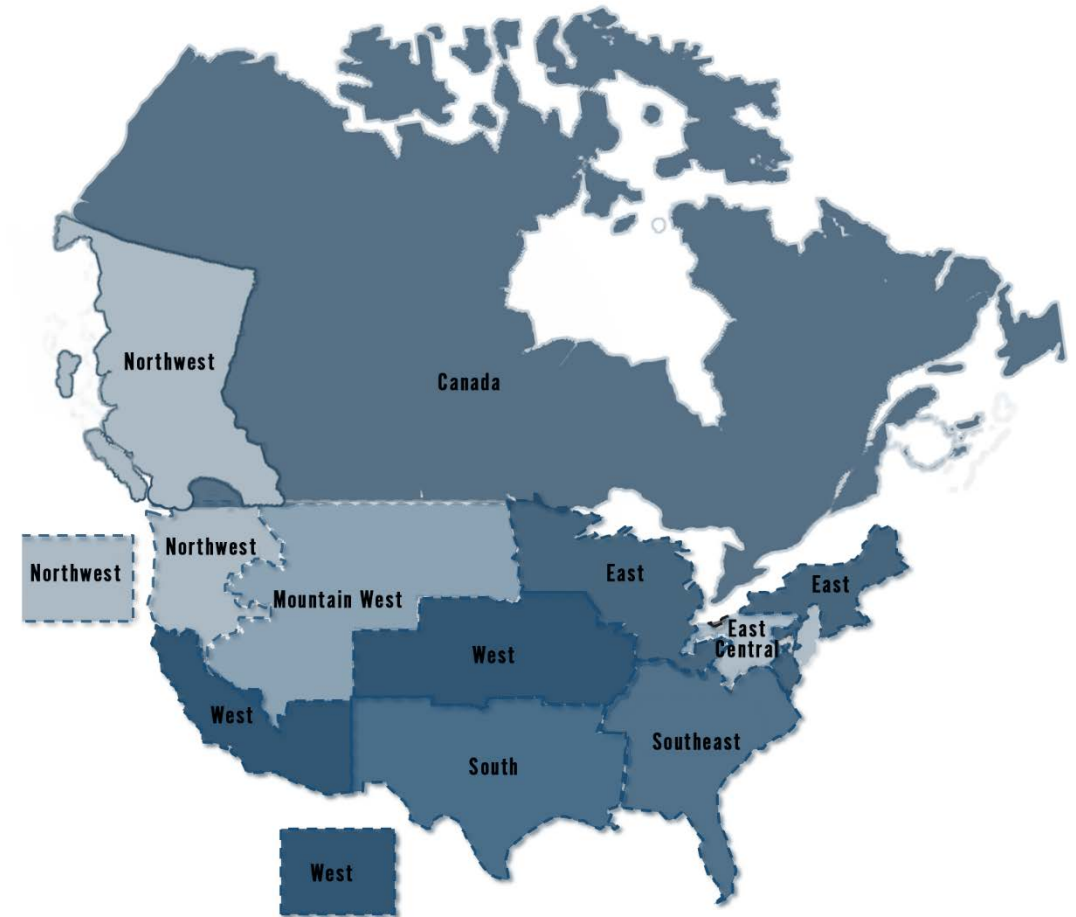
Larger Projects Complement Base Business



Grow Recurring Business While Remaining Well Positioned to Capture Larger Project Opportunities When They Occur

Regional Structure

- Electric Power Regional Vice Presidents established
- Oversee and coordinate customer strategies in their regions in alignment with Quanta's strategic initiatives established by senior management
- Responsible for fostering a safe work culture and continued development of a safe working environment
- Responsible for understanding the customer activities in the region and the situational P&L of projects across all operating units
- Facilitates improved coordination across regions and operating units
- Facilitates improved communication and information flow from the field to senior management



Regional Structure Is Key Component of Our Strategy to Service the Needs of Our Customers

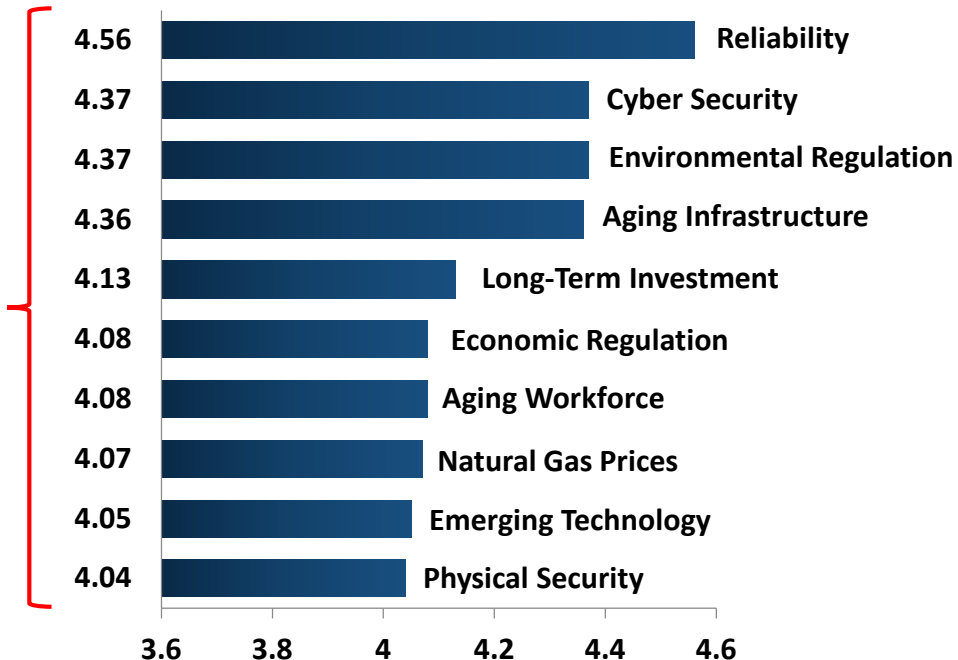
Power Grid Investment Drivers



- The North American electric grid requires significant investment to address a number of reliability related challenges

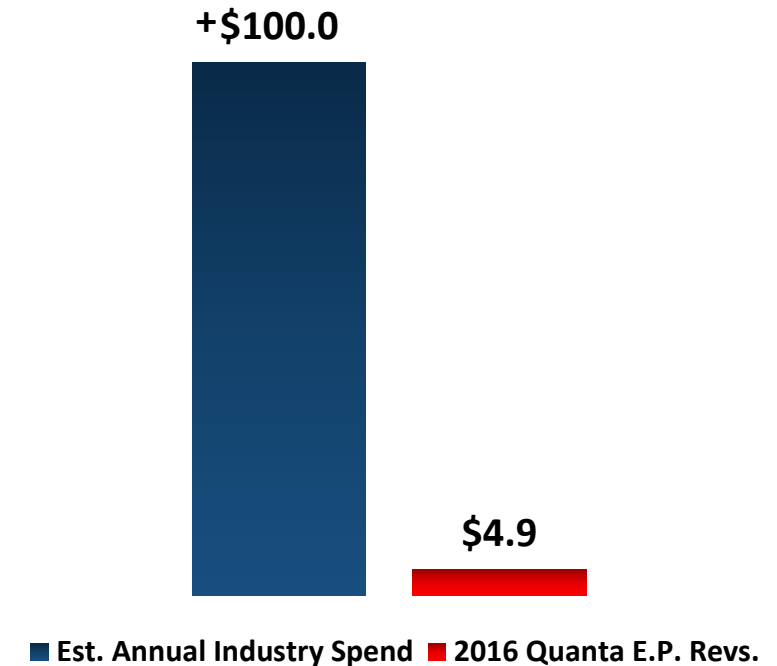
Top 10 Industry Issues Facing Utilities⁽¹⁾ (5 = Very Important)

*Most of these
issues are related
to grid reliability*



(1) Black & Veatch's 2016 Strategic Directions in the U.S. Electric Industry report

Large Addressable Market⁽²⁾ (in billions \$)



(2) Estimated North American electric power industry annual spend data based on estimates from The C Three Group and SNL Energy

Power Grid Investment Drivers - Transmission



Market Drivers

- An aging grid that requires repair, upgrade and maintenance
- Favorable transmission regulation: Energy Policy Act of '05, NERC Reliability Standards, possibly FERC Order 1000 over the long-term
- More stringent reliability standards will require repairing lines and adding redundant capacity
- Coal and nuclear generation retirements and switching to natural gas and renewable generation strains the grid
- Existing and new renewable generation needs interconnection to the grid
- Opportunity for industrial driven load growth
- Regional grid infrastructure is too congested to get lowest-cost power to consumers
- Sub-transmission interconnection
- Canada has same drivers as U.S., as well as the need to serve mining interests and hydro generation for export to U.S. load centers

Restraining Factors

- Challenged economic conditions in Canada
- Environmental and other regulatory scrutiny, right of way acquisition, permitting, etc.
- Tepid load growth
 - Economy
 - Energy efficiency initiatives
- Uncertain ongoing federally supported renewable generation subsidy/incentives environment
- State renewable portfolio standards being evaluated in some states
- Transmission ROE challenges due to low interest rate environment

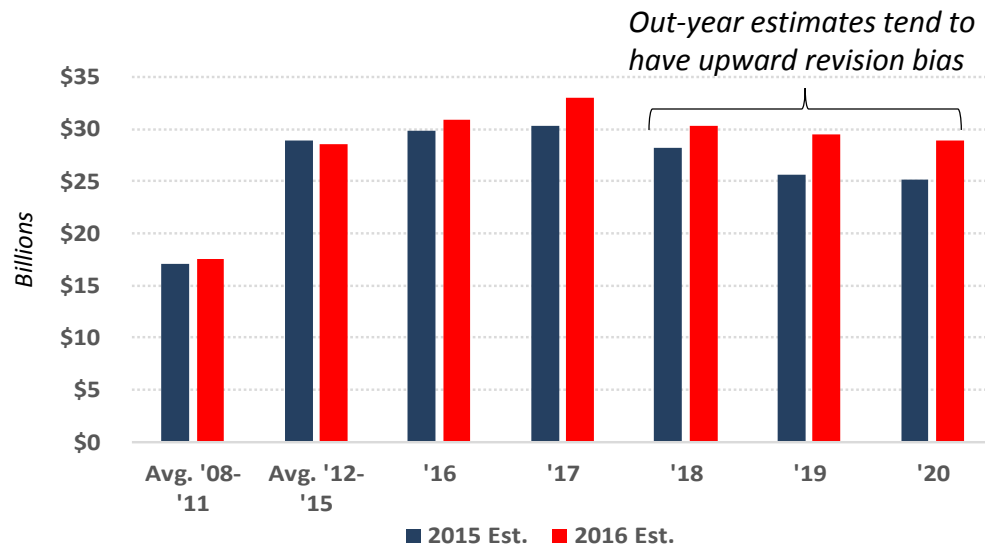
Power Grid Investment Drivers - Transmission



Market Trends

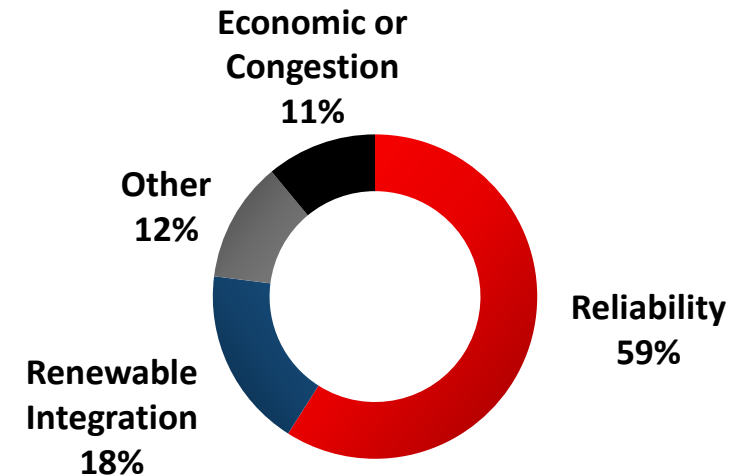
- Transmission spending continues to reach all time highs, and forecasts point towards sustained robust spending as large transmission projects are expected to move forward
- North American transmission spending estimated to average approx. \$30 billion per year between 2017-2020
- Utility spending continues to shift from generation to transmission and distribution
- Previously delayed, larger transmission projects are expected to move forward over next several years

Est. North American Transmission Spending



The C3 Group, August 2016

Primary Drivers of New Transmission Projects

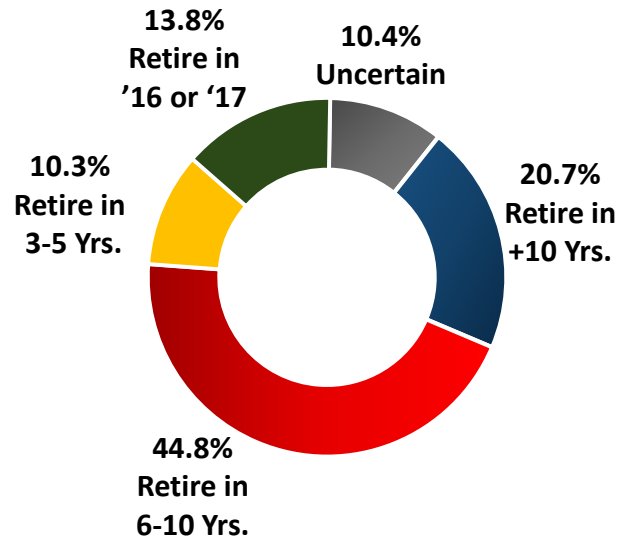


Source: NERC 2013 Long-Term Reliability Assessment

Power Grid Investment Drivers - Transmission



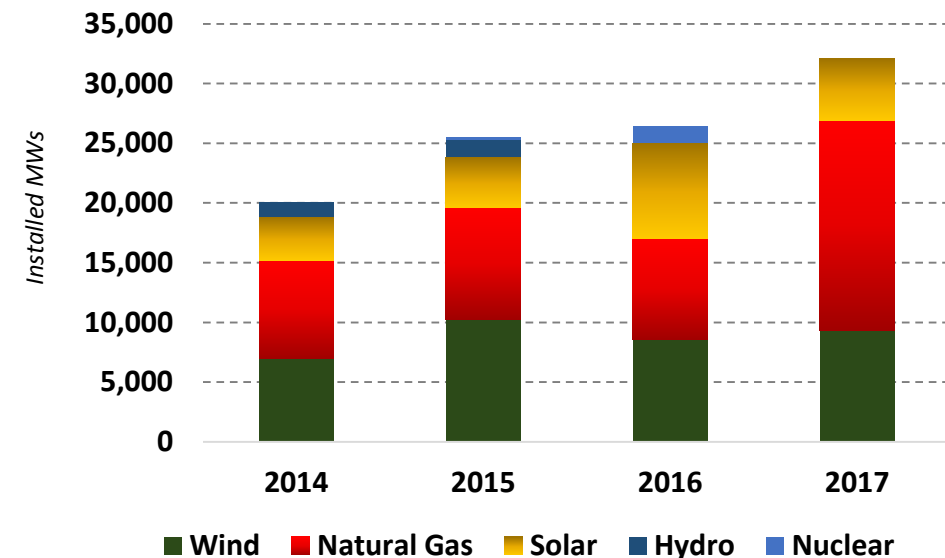
How soon does your organization plan to retire your coal-fired generation?



Black & Veatch – 2016 Strategic Directions: Electric Utility Industry report

- Ongoing generation mix shift from coal and nuclear to natural gas and renewables requires transmission investment
- Uncertainty around status of Clean Power Plan (CPP) has made future transmission planning difficult in some regions and has negatively impacted transmission spending in the short-term

North America New Generation Capacity Additions



The C3 Group

- *If CPP Canceled* – Could remove uncertainties and allow planning and transmission investment to move forward
- *If CPP Implemented* – Could accelerate shift towards natural gas and renewable generation and require accelerated transmission investment

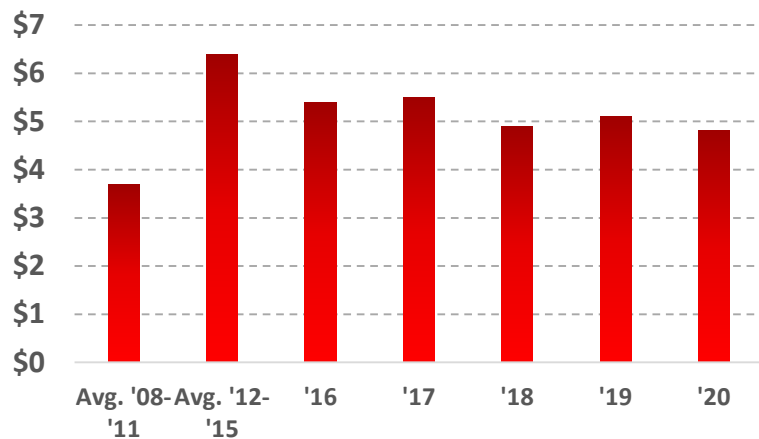
The Shift From Coal and Nuclear to Natural Gas and Renewables Will Move Forward Regardless of CPP

Power Grid Investment Drivers - Canada



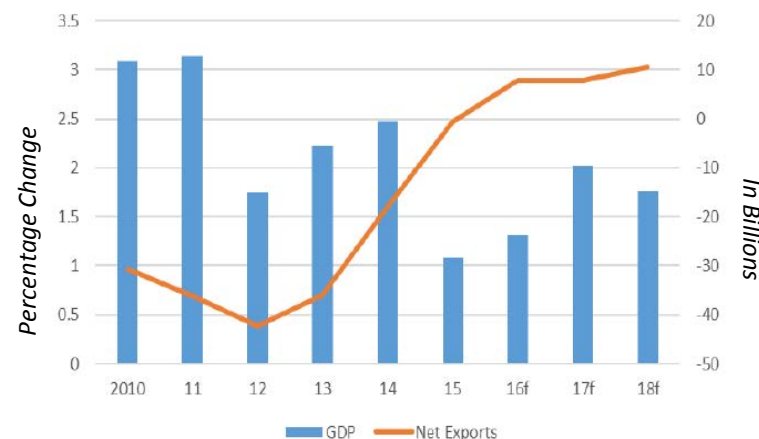
- Quanta is the leading transmission and distribution solutions provider in Canada
- Canada has the same transmission drivers as the U.S., but also transmission needs to export hydro power to the U.S., connect remote mining, oil sands and shale operations
- However, the energy sector is a major driver of the Canadian economy, both of which have been pressured over the last couple years.
- These macro headwinds have negatively impacted transmission and distribution investment and our Canadian operations

Est. Canada Transmission Spending



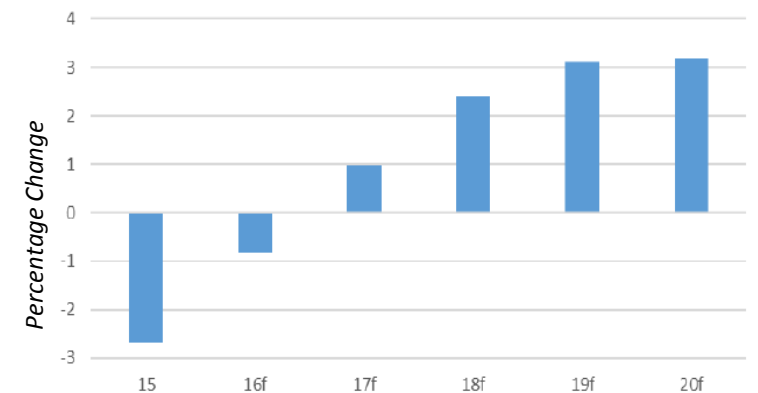
The C3 Group, August 2016

Canadian Real GDP & Net Exports



Statistics Canada; The Conference Board of Canada

Business Investment Expected to Rebound



Engineer, Procure, Construct (EPC) Is A Differentiator

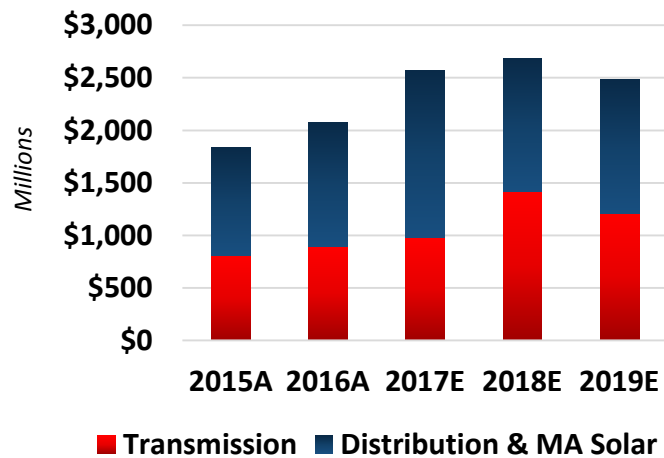


EPC Drivers

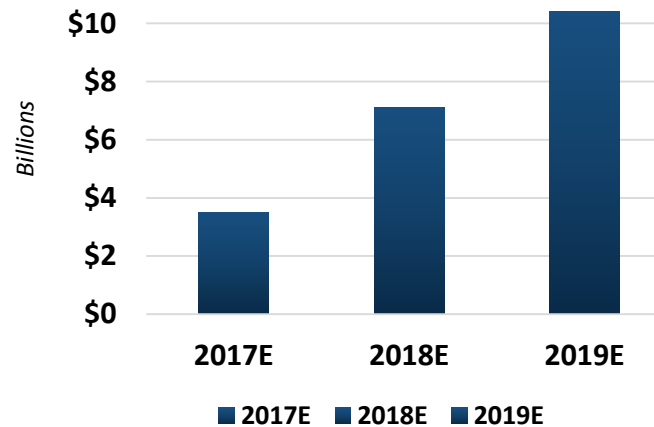
- Customers' capital programs are at historic levels and growing. Projects are getting larger and more complex
- Many customers have limited internal resources and expertise to manage these dynamics and are turning to Quanta for solutions
- Evolution of regulatory demands, new entrants, open competition and alternative pricing models
- Project cost certainty becoming increasingly important

Examples of Growing Capital Budgets

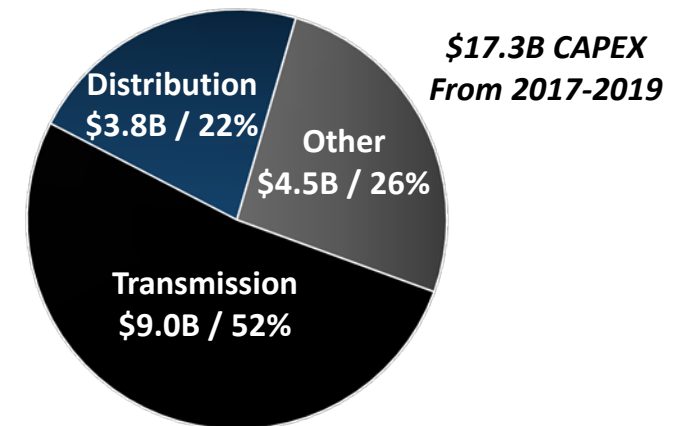
Eversource Energy Projected T&D CAPEX



Entergy Utility Capital Plan



AEP 2017-2019 Capital Plan



Engineer, Procure, Construct (EPC) Is A Differentiator



- EPC = The engineering, design, procurement and construction of a project
 - Often performed on a fixed price basis.
- Quanta has a long history in the EPC business and is increasingly performing select projects on an EPC basis
- We are enhancing initiatives to ensure we have a scalable, comprehensive, enterprise-wide capability for EPC projects that is consistently executed across all segments and geographies
- EPC projects are a meaningful contributor to our current backlog and provide significant opportunity for future growth

Integrated Services



Assessment,
Planning &
Development



Engineering &
Design



Procurement



Construction &
Installation



Operation and
Maintenance

Engineer, Procure, Construct (EPC) – Case Study



Quanta is a best-in-class EPC provider for our customers

- Successful and impressive resume of EPC projects (electric, oil & gas and telecom)
- Self-perform capabilities
- Unique approach and skillset
 - Construction-centric approach forces upfront involvement in project scoping, planning and pricing
 - Construction expertise leads engineering process for risk management and efficiency
 - Quanta's deep understanding of risk and cost
 - Quanta's extensive database and knowledge from previous projects and self-perform capabilities allow scope and risk to be quickly and accurately defined

Fort McMurray West 500 kV Transmission Project

Location: Alberta, Canada

Length: 500 kilometers / 310 miles

Start: 2015 – Permitting, ROW, etc.

Construction Start: Mid - 2017

Energization: Mid - 2019

Quanta Team:

Valard Construction

Dashiell

Northstar

Phasor Engineering

Quanta Energized Services

Quanta Technology

Quanta Capital Solutions



Industry Leading Energized Services Is A Differentiator



- Many customers view energized services as the preferred solution for certain high-voltage transmission upgrades
- Quanta is the clear industry leader in energized work methods and live line techniques
- Quanta Energized Services allows utilities to maintain, construct and upgrade substation, transmission and distribution facilities at any voltage with no outages
- Quanta is the only solution provider with the proprietary *LineMaster Robotic Arm* and the ability to reconductor and replace transmission lines while never taking the line out of service



In 2016, Quanta's record-breaking American Electric Power, Rio Grande Valley Energized Re-Conductor Project won the Edison Electric Institute's Edison Award, the electric power industry's most prestigious honor.

Go here for an overview video of the project: <https://youtu.be/aPaNHawldFA>

Power Grid Investment Drivers - Distribution



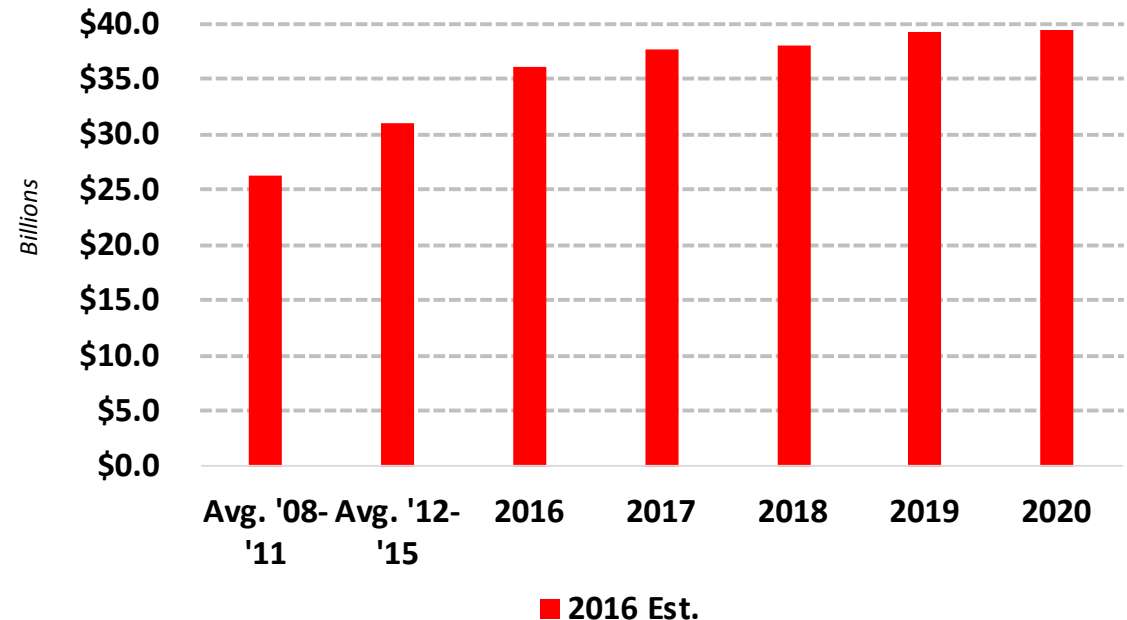
Market Drivers

- Renewed focus on reliability versus costs
- Significant portion of the grid is approaching the end or is beyond its useful life
- More stringent reliability standards will require repairing lines and adding redundant capacity
- System hardening initiatives, particularly in areas hard hit by severe weather
- Technology innovations will continue to grow. A focus on upgrades to modernize the grid will overlap with spending needed to address aging infrastructure
- Depending on the proliferation of distributed generation, certain systems will require upgrades to accommodate new resources

Restraining Factors

- Lower ROE versus FERC transmission returns
- Flat to minimal load growth
 - Economy
 - Energy efficiency initiatives
- Regulatory and consumer pressures on utilities against rising power bills
- If utilities face declining demand growth, rate pressures could increase. This could restrain their ability to spend capital

Est. North American Distribution Construction Market



Source: The C Three Group, Aug., 2016

Managing Resources for Growth

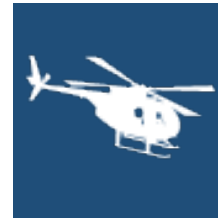


Labor

- Tight labor market for lineman and other skilled employees
- Recruiting, training and maintaining people is critical
- Lazy Q Training facility is critically important
- Quanta is the preferred and largest employer in our industry

Equipment

- Purchased specialty transmission equipment several years ahead of prior cycle and have preferred production slots when new equipment is needed
- Have preferred relationships with all major equipment manufacturers and equipment rental companies



Quanta Has the Resources to Safely Execute on Backlog and to Win and Safely Execute on Future Projects

Electric Power - Strategic Imperatives Alignment



Focus On Safety Excellence

- Drive safety culture throughout operations
- Lazy Q safety programs
- AEDs, specialty gloves, flame resistant clothing

Maintain High Performance Culture

- Entrepreneurial culture
- Regional structure
- Lazy Q training programs
- Leadership selection and development

Strengthen and Grow Our Core

- Organic growth coupled with acquisitions
- Differentiating solutions to customers
- Move vertically up customer value chain

Continue to Innovate

- Build EPC capabilities
- Advance energized services
- Infrastructure Solutions
- Invest in R&D and Technology

Organic Growth & Strategic Acquisitions
Capitalize on End Market Trends
Execution Focused
Grow the Base

**Achieve and Sustain +/- Double Digit Operating
Income Margins**

Well Positioned, Focused on Safe Execution



- Quanta's scale, scope, unmatched resources and expertise positions the company to capitalize on opportunities for growth
- Positive drivers support need to invest in transmission and distribution infrastructure for an extended period of time
- Believe industry is entering a renewed multiyear upcycle
- Focused on growing the base business while remaining positioned to capture larger project opportunities
- Committed to returning to historical profitability profile





Questions and Answers

Reconciliation of Electric Power Infrastructure Services Segment Operating Income, As Adjusted



Amounts in millions, except percentages

	<i>Electric Power</i>		
	<u>12/31/2014</u>	<u>12/31/2015</u>	<u>12/31/2016</u>
Revenues	\$ 5,302.7	\$ 4,937.3	\$ 4,850.5
Operating Income (as reported)	463.0	362.3	395.7
Addback:			
Provisions for long term contract receivable	102.5	-	-
Asset impairment charge	-	6.6	5.7
Operating Income (as adjusted)	<u>\$ 565.5</u>	<u>\$ 368.9</u>	<u>\$ 401.4</u>
Operating income margin (as reported)	8.7%	7.3%	8.2%
Operating income margin (as adjusted)	10.7%	7.5%	8.3%