Speakers

Ian Robertson  
*Chief Executive Officer*  
Algonquin Power & Utilities Corp.

David Bronicheski  
*Chief Financial Officer*  
Algonquin Power & Utilities Corp.

Chris Jarratt  
*Vice Chair*  
Algonquin Power & Utilities Corp.
Safety Moment
Agenda for Investor Day 2016

- **Algonquin Power & Utilities Corp.**
  - Demonstrating a robust business proposition

- **Distribution Business Group (DBG)**
  - Increasing value for customers and shareholders through scale

- **Acquisition of Empire District Electric Company (EDE or Empire)**
  - Outlining the “Art of the Possible” for “greening” of the portfolio

- **Transmission Business Group (TBG)**
  - Delivering value by connecting customers to natural gas and renewable electricity

- **Generation Business Group (GBG)**
  - Creating value through core competencies in wind and solar

*Investor day to provide insight into APUC business proposition*
Positioning Aspiration

To be a top quartile North American integrated utility as measured by:

- Safety
- Customer experience
- Employee engagement
- Growth in financial metrics
- Commitment to renewable energy in generation mix

Corporate Milestones: Through 2021, we intend to ...

- Double the current number of customers served by our national utility
- Expand the installed capacity of our generation fleet to more than 5 GW
A Proven Business Proposition Brings

- A conservative business model which is sufficiently robust for today’s social, political and market conditions

- A portfolio of long-lived, high-quality assets delivering predictable earnings and cash flows

- A line-of-sight opportunity set representing ~$C 10B of investment potential across modalities

- The organizational commitment, human capacity, and financial capability to execute on its growth plan

Highly transparent growth outlook through 2021

- 23-25% CAGR in adjusted EBITDA
- 16-18% CAGR in adjusted EPS
- 11-13% FFOPS CAGR
- All metrics supportive of targeted 10% DPS CAGR

Commitment to consistent strategy has delivered results
Cohesive Vision Adaptive to Changing Environment

“The utility company most admired by customers, communities and investors for our people, passion and performance”

<table>
<thead>
<tr>
<th>Generation</th>
<th>Transmission</th>
<th>Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renewable Focused Electrical Generation</td>
<td>Electric and Natural Gas Transmission</td>
<td>Electric, Natural Gas and Water Distribution</td>
</tr>
<tr>
<td>“Demonstrating core competency in on-shore wind and PV solar - the economic choice for a responsible future”</td>
<td>“Delivering value by connecting customers to renewable energy and domestic natural gas”</td>
<td>“Demonstrating the proven ability to surface accretive investment opportunities through growing scale”</td>
</tr>
</tbody>
</table>

*Business group narratives aligned around our strategic objective*
Shifting Political, Environmental and Social Winds

Global carbon sensitivity
- Possible loss of U.S. leadership in climate change initiatives

Renewable energy policies
- State policies and fundamental economics driving renewable energy success

Evolving consumer characteristics
- Changing customers driving grid evolution

*Recent political developments unlikely to derail APUC business model*
Technological Change Driving Utility Strategies

Evolution of renewables
- Falling cost and rising efficacy

Abundant domestic shale gas
- The perfect complement fuel

Smart Grid supporting renewables
- Investment opportunity for utility 2.0

Technological evolutions driving change - political policy will have difficult time stopping technology
Consequences for the Utility Industry

End of legacy baseload generation
- Being forced up the dispatch ladder

Challenge of more renewables in the mix
- Managing intermittency creates opportunity

Natural gas utilities play supporting role
- Supplying the perfect complement fuel

Fundamental market and environmental changes driven by unstoppable technological evolution
Update on Governance and Risk
Governance – Further Strengthened

Strong and continually improving Board of Directors
- Diversity (gender, nationality, skills, backgrounds)
- Independence
- Comprehensive skillsets

Recent Board appointments
- Melissa Stapleton Barnes
  - Eli Lilly SVP, Enterprise Risk Management, and Chief Compliance Officer
  - New perspective on sector

Shareholder alignment through improved governance
- Continued support from ISS and Glass Lewis
- Regional Boards - continuity for acquisitions, local knowledge
- Expanded management functions
Dividend History and Expected Growth

- Six years of steady dividend growth, average growth rate of 15%
- Member of S&P Canadian Dividend Aristocrats Index
- Dividend paid in US$ (or C$ at investor’s choice)
- Low payout ratio provides for re-investment and growth
Dividend Strategy

Organization targets

- Dividend payout ratio of:
  - 85% to 100% GAAP earnings
  - 33% to 40% FFO
- Targets drive annual dividend growth of 10%

Strategies for achieving targets

- Optimize existing assets
- Disciplined growth
  - Alignment with strategy
  - Growth through: organic, development, acquisition
  - Accretive transactions
  - Attractive risk-adjusted returns
- Disciplined execution
  - Project management expertise
  - Well-defined processes
  - Proven track record
  - Intelligent risk mitigation
Maturation of the business with strategic ERM function

- Proactively addresses both risks and opportunities
- Protects business enterprises
- Creates value for stakeholders

Financial flexibility reduces risk

- Low payout ratio is a strategic weapon
- Liquidity provides flexibility
- Multiple sources of capital
  - Successful bond platform
  - Canadian equity markets
  - NYSE listing expands capital access
Financing Considerations
Key Messages

- What is the impact of lower U.S. taxes on APUC’s earnings and cash flow?

- Can APUC retain its cross border advantage even with lower U.S. taxes?

- How is APUC broadening its access to capital to fund growth?
APUC Corporate Tax Structure

- **APUC has an efficient corporate tax structure**
  - Maximum flexibility for cross border tax planning
  - Maximum flexibility between regulated/unregulated businesses

- **Growth can defer tax, but profitable companies eventually pay tax**
  - C$ 2.4B of tax attributes exist within APUC
  - APUC expects to begin paying cash taxes in 2019/2020

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**APUC has an efficient cross border – regulated/unregulated platform**

<table>
<thead>
<tr>
<th></th>
<th>Generation</th>
<th>Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-capital losses</td>
<td>C$ 519</td>
<td>C$ 243</td>
</tr>
<tr>
<td>PP&amp;E tax shelter</td>
<td>C$ 364</td>
<td>C$ 1,287</td>
</tr>
<tr>
<td></td>
<td><strong>C$ 883</strong></td>
<td><strong>C$ 1,530</strong></td>
</tr>
</tbody>
</table>
Lower U.S. Taxes – Speculation vs. Reality

- Lower U.S. taxes will drive long-term EPS growth
- APUC cash from U.S. operations expected to be largely unaffected by lower U.S. tax rates
  - Thin capitalization rules
  - Unregulated business make up >30% of operations post Empire
  - Unregulated businesses will directly benefit from lower U.S. taxes
  - Lower utility rates provide for reinvestment opportunity and rate base growth

Lower U.S. taxes is not expected to have an adverse effect on APUC earnings and cash flow
The Cross Border Advantage

- Most companies investing in the U.S. use cross border financing structures

- Cross border tax structures depend on asymmetry of tax codes, not differential tax rates to drive value

- APUC's cross border tax strategies are independent of lower U.S. tax rates

APUC maintains its cross border structures not impacted by lower U.S. taxes
Funding our Growth in North America

- **New source of capital**
  - NYSE listing
    (access to U.S. markets, equity as currency)

- **Proven sources of capital are still available**
  - U.S. private placements
  - U.S. tax equity
  - Canadian equity markets
  - Canadian public debt markets
  - Canadian preferred share market

*APUC continues to broaden its access to capital to fund growth*
APUC continues to enjoy a competitive cost of capital with access to diverse sources of capital to fund growth.
Growth Profile
### Growth Program – Story Remains Intact and on Strategy

A $9.7B investment program delivering 18% - 20% CAGR in net assets through 2021.

#### Total Assets 2015

- **C$ 5.0B**
  - Generation – non-rate based
  - Generation – rate based
  - Transmission
  - Distribution

#### Total Assets 2021

- **C$ 14.5B**

#### 2017 through 2021

<table>
<thead>
<tr>
<th></th>
<th>Organic Investment</th>
<th>Empire District Acquisition</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generation - Non-Rate Base</td>
<td>2,360</td>
<td>0.0</td>
<td>2,360</td>
</tr>
<tr>
<td>Generation - Rate Based</td>
<td>1,910</td>
<td>1,670</td>
<td>3,580</td>
</tr>
<tr>
<td>Transmission</td>
<td>260</td>
<td>440</td>
<td>700</td>
</tr>
<tr>
<td>Distribution</td>
<td>1,740</td>
<td>1,300</td>
<td>3,040</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6,270</strong></td>
<td><strong>3,410</strong></td>
<td><strong>9,680</strong></td>
</tr>
</tbody>
</table>

*C$ 9.7B investment program delivering 18% - 20% CAGR in net assets through 2021*
Creating Value Through Growth

Value accretive growth
- EBITDA growth consistent with asset growth
- Per share accretion based on maintaining (or reducing) leverage

Robust and transparent EBITDA, EPS and FFOPS growth will support targeted 10% DPS growth

Note: FX C$1.35/US$, EBITDA in $C millions and share amounts in $C/share
Post 2021 Outlook

Focus on long-term cash flows

- Growth outlook from 2015 through 2021 provides 11%-13% CAGR FFOPS
- 2021-2026 FFOPS CAGR outlook
  - Reduce debt: ~3%
  - Share buyback: ~6%
  - Continued investment: ~10%
- Current growth initiatives accretive to long-term cash flows

Characteristics of current and future assets will deliver growing cash flows
Messages for the Day

Stability and predictability of results
- Demonstrated diversification benefits from a solid foundation of high-quality, long-lived utility assets

Robust and resilient business model
- Well positioned for changing business, political and social environment

Industry leading growth profile intact
- C$ 9.7B investment pipeline will deliver earnings and cash flow growth to support targeted 10% dividend growth target through 2021

New investment channel through Empire transaction
- Greater organizational efficacy and investment opportunity without undue execution risk

*Strategically aligned for a changing future through core competencies in renewable energy, smart electrical grids and natural gas delivery infrastructure*
Speakers

David Pasieka
President
Distribution Business Group

Peter Eichler
Vice President
Strategic Planning

Todd Mooney
Vice President
Finance & Administration
Distribution Utility Key Messages

- **Advantages of diversification** – Diversified utility platform by geography and modality

- **Predictable returns delivered** – Through multiple rate cases across multiple jurisdictions

- **Increased efficacy of scale** – Enabled by Empire transaction

- Demonstrated ability to execute on total investment opportunity of C$ 3.0B

*DBG’s growth profile supports APUC’s target to be a top quartile utility*
<table>
<thead>
<tr>
<th>Scaling the Distribution Platform for Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>800,000 customers</strong></td>
</tr>
<tr>
<td>Local, responsive, and caring service</td>
</tr>
<tr>
<td>Core customer care competency</td>
</tr>
<tr>
<td><strong>Over 2,000 employees</strong></td>
</tr>
<tr>
<td>Skilled at managing complex projects</td>
</tr>
<tr>
<td>Capital investment competency</td>
</tr>
<tr>
<td><strong>13 operating states</strong></td>
</tr>
<tr>
<td>Provides regulatory diversification</td>
</tr>
<tr>
<td>Regulatory relationship management competency</td>
</tr>
<tr>
<td><strong>100% rate regulated income</strong></td>
</tr>
<tr>
<td>Predictable, gradual earnings increases</td>
</tr>
<tr>
<td>Rate case competency</td>
</tr>
</tbody>
</table>

Note: Values include pending Empire transaction.
Corporate Culture Enables Strategy

**DBG Narrative**

“Demonstrating the proven ability to surface accretive investment opportunities through growing scale.”

- Engage and invest locally
- Improve continuously
- Empower people to expand our capabilities
- Pursue rapid growth to deliver sustainable prosperity

**APUC’s culture enables our strategy and delivers results**
Distribution Utility ROEs vs. Treasury Yields

Utility ROEs have stabilized between 9-10% and have maintained yields to treasury notes.

Legend:
- 30 year US T-Note
- Electric ROE
- Gas ROE
- DBG average

600 - 700 bps
### Rate Regulation

<table>
<thead>
<tr>
<th>Mechanism type</th>
<th>CA</th>
<th>AZ</th>
<th>GA</th>
<th>NH</th>
<th>MA</th>
<th>MO</th>
<th>AR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue assurance</td>
<td>⚫️</td>
<td>⚫️</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>⚫️</td>
<td>⚫️</td>
</tr>
<tr>
<td>Accelerated recovery mechanisms</td>
<td>⚫️</td>
<td>⚫️</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>⚫️</td>
<td>⚫️</td>
</tr>
<tr>
<td>Increases between test years</td>
<td>⚫️</td>
<td>⚫️</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>⚫️</td>
<td>⚫️</td>
</tr>
<tr>
<td>Deferred recovery</td>
<td>⚫️</td>
<td>⚫️</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>⚫️</td>
<td>⚫️</td>
</tr>
</tbody>
</table>

- ⚫️ - electric  
- ⚫️ - water  
- ●  - gas  
- ⚫️ - under consideration

*Mechanisms enhance DBG’s ability to earn its authorized ROE*
Socioeconomic Characteristics are Favourable

Strong economic indicators across our service territories

Declining Unemployment

Positive Trend in Housing Starts

Economic prosperity enables organic growth
Utility Earnings Growth Influencers

- **Rising market demand** – New housing starts and increasing gas demand

- **Societal goals** – Moving to a reduced carbon footprint creates opportunities

- **Aging utility infrastructure** – Requires replacement

- **Regulators** – Encouraging certain types of investments

DBG’s growth is influenced by multiple factors
DBG Operations and Strategy

Algonquin Power & Utilities Corp.
DBG’s Service Model Delivers a Better Offering

- Central strategy, regional execution increases customer satisfaction
- Unique operating model delivers better results
- Happy customers result in happy regulators

By providing local, responsive, and caring service, DBG earns the trust of customers, and in turn, regulators
Regulatory Priorities

- Building trust through transparency
- Encouraging progressive ratemaking constructs to reduce regulatory lag
- Utilize IRP process to benefit customers and enable growth

**Strong regulatory relationships result in enhanced operating results**
Our Operating Model in Action

- Prioritizing capital expenditures to reduce lag
- Reducing operating expenses to increase efficiency
- Utilizing regulatory mechanisms to reduce lag

=DBG has a proven ability to earn its authorized ROE
Growth Within the DBG
Organic Growth Opportunities

- Aged infrastructure replacement
- OpEx for CapEx
- Customer expansion opportunities
  - Service territory growth
  - Plant the flags
  - Small acquisition opportunities

*Organic investment opportunities create CapEx opportunity of over C$ 540M and expands service to 30,000 new customers*
Smart Grid

- Modernization of the grid

- Smart Grid benefits include
  - Improved reliability
  - Reduction of costs
  - Integration of distributed resources
  - Improved asset management

- Enables significant investment opportunities

DBG will invest C$ 270M in Smart Grid investments over the next five years
M&A Transactions

- M&A market remains area of focus
- Given our increased size, we have expanded opportunities
- Disciplined strategy
- Surfacing additional value through increased scale

*We are confident in our ability to find and unlock value where others do not*
Distribution Portfolio Composition

Diversified Distribution portfolio across modalities, geographies, and regulatory regimes decreases risk to APUC of achieving financial goals.
Distribution CapEx Growth of C$ 3.0B

- **Significant investment potential** - Growth of $3.0B includes investment opportunities of C$ 1.7B and Empire acquisition of C$ 1.3B

- CAGR for net plant of 14%

*Investment in accretive distribution projects supports APUC’s dividend growth target*
Distribution Operating Profit Growth at a CAGR of 21%

- Empire acquisition and continued investment drives earnings growth
- Operating profit more than doubles by 2021

Optimally timed investment and rate cases drive returns and support APUC’s dividend growth target
Summary

- Diversified utility platform by geography and modality
- Predictable returns delivered through multiple rate cases across multiple jurisdictions
- Increased efficacy of scale enabled by Empire transaction
- Demonstrated ability to execute on total capital investment opportunity of C$ 3.0B

DBG’s growth profile supports APUC’s target to be a top quartile utility
The Empire District Electric Company

The Empire Strikes Back
Speakers

Gerald Tremblay
Senior Vice President
Operations

Mike Griffin
Senior Director
Strategic Planning

Todd Mooney
Vice President
Finance & Administration
Empire Acquisition – Key Messages

- **Significant potential** – Total investment opportunity of C$ 2.5B over 5 years
- **Focus on creating new stakeholder value**
- **Efficacy through scale** – Larger scale improves effectiveness, reduces risk
- **Enhanced stability** – Seasonal variability improvements

*Empire allows opportunities for APUC to deploy additional capital and to become more effective in its operations*
EDE and APUC – Truly Better Together

- Introducing Empire
- Tangible benefits of combined entity
- Common traits facilitate close
- APUC’s strengths will unearth new value

Highly complementary businesses, and an opportunity to leverage APUC’s strengths to deliver value
Macro Factors Provide Supportive Backdrop

- Low cost renewables create opportunity to reduce customer costs
  - Wind (full cost): US$ 20 - 30/MWh
  - Coal (operating cost): US$ 30 - 40/MWh

- Natural gas is plentiful, and low cost

- Social pressure to protect the environment continues to grow

The shift from coal to renewables will continue
Expanding the Empire Opportunity Set

- **New wind generation** – 400 MW
- **Repowering wind generation** – Potential with facility currently under PPA
- **Fast start natural gas generation** – New low cost, flexible capacity
- **New generation, lower cost** – Investment opportunities will reduce energy costs
- Incremental opportunities in post-2021 period

*Capital investment opportunities of C$ 2.5B*
Leveraging APUC’s Development Expertise

- **Depth of experience** – 30 years of renewable energy development experience

- **Dual focus a material differentiator** – Utility presence and development expertise are well aligned

- **Proven collaboration** – APUC development team works actively with DBG to deliver rate regulated capital projects

- **EDE brings new skills** – Expertise in transmission planning and in operation and development of thermal generation

*Capitalizing on APUC’s core competencies allows for success in development opportunities*
Unlocking Shareholder Value – Closing the ROE Gap

- **Using our playbook** – The DBG has proven strategies to unlock additional shareholder value:
  - Capital optimization
  - Managing operating costs

- **Material contributions to earnings** – Achieved through careful execution

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Potential improvement of earnings by C$ 15M within current Empire operations
Granite State – Unlocking Additional Value

- Acquired Granite State in 2012
  - Under earning at the time of purchase

- Leveraging our skills to build value
  - Cost controls
  - Capital management

- The result – We expect to earn the authorized ROE

_Tangible proof of unlocking additional shareholder value_
Improved Efficacy and Reduced Risk Through Scale

- Increased stability and predictable earnings
- Facilitates delivery of improved customer service
- Brings more management and operational expertise
- Stronger capital access creates flexibility
- Economics and environmental responsibilities are now closely aligned

*Increased scale allows for improved operational effectiveness and strengthened access to capital*
CapEx Growth of C$ 2.5B over 5 years

- **Significant investment potential** – Investment opportunities of C$ 2.5B in the next 5 years

- **Improved ability to earn** – Timing of CapEx adjusted to optimize returns

*Additional investments will increase CAGR in net plant to 10%*
Operating Profit Growth at a CAGR of 11%

- **Strong earnings uplift** – Incremental investment delivers substantial earnings growth

- **Low cost renewables** – Ensure minimal impact on customer rates

*Empire delivers expected accretion to per share earnings and cash flows*
Summary

- Incremental capital deployment opportunity of C$ 1.6B
- Scale allowing for increased operational effectiveness and reduced risk
- Provides support for APUC strategic goals

_Empire allows for additional capital deployment to achieve APUC’s overarching strategic objectives_
Transmission Business Group (TBG)

Building new links and new value
Speakers

Chico DaFonte  
*Vice President*
*Energy Procurement*

Mike Griffin  
*Senior Director*
*Strategic Planning*

Jeff Norman  
*Vice President*
*Business Development*
APUC’s Transmission Business

- **Leveraging our skillsets** – Drawing on distribution and generation expertise / market presence to develop electric and gas transmission opportunities

- GBG’s New England natural gas footprint provides foundation for development of gas transmission and storage projects

- Empire augments APUC’s transmission planning and operator skillsets, and new, owned transmission assets within SPP

*Critical capabilities in place to participate in transmission growth*
Growing Natural Gas Demand Continues

Steady growth in LDC demand

- Design day for New England LDCs increasing by almost 0.4 Bcf by 2025

Gas-fired generator demand continues

- 8,300 MW of oil and coal-fired units in New England expected to be retired by 2020
- Natural gas-fired and dual-fuel projects represent 6,400 MW of new capacity additions by 2020

Incremental gas demand in New England is forecast to reach as much as 3 Bcf/day

Sources: ScottMadden and Northeast Gas Association
Supply / demand imbalance

- **Project headwinds** – Large projects have met with significant opposition
- **Small-scale remains viable** – Smaller, lower cost projects are progressing well
- **Bridging the gap** – Appalachian production and the price spreads to main markets is compelling

**Price spreads drive the TBG business model**

Source: ScottMadden

<table>
<thead>
<tr>
<th>New Pipeline Projects – Capacity (BCF/D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancelled</td>
</tr>
<tr>
<td>Delayed</td>
</tr>
<tr>
<td>On Schedule</td>
</tr>
<tr>
<td>0.6</td>
</tr>
<tr>
<td>1.6</td>
</tr>
<tr>
<td>2.5</td>
</tr>
<tr>
<td>4.1 Bcf/d in unmet demand</td>
</tr>
</tbody>
</table>
LNG Business Model: Develop Tolling & Rate Base Projects

Long term tolling contracts for LDCs and other customers
- Liquefaction, storage and vaporization services
- Independent services to fit market need

Solve gas transmission constraints within owned utilities
- Satellite distribution system model for owned utilities
  - Four communities already identified for LNG service in NH and MA

Opportunity exists to develop LNG hub for liquid and vapor services
An Attractive LNG Opportunity Set

- The NEC facility in MA - C$ 160M
  - 16,000 Dth/d liquefaction (14,000 Dth/d under long-term contract with National Grid)
  - 120,000 Dth storage
  - 2020 in-service date

- Larger-scale LNG Projects -
  - A total of C$ 540M in additional large-scale liquefaction/storage/vaporization opportunities identified

Our LNG business model is already in motion
Empire Brings Base of Transmission Assets

Electric Transmission

- **Established presence** - Empire is a transmission owner/operator within SPP
- **A C$ 500M opportunity set** exists within Empire’s current integrated plan
- **Congestion relief** - Projects to address known congestion issues are currently with SPP for review

Gas Transmission

- **New generation driving coal retirements** - Low cost gas and renewables driving retirement of baseload coal in SPP
- **Bottlenecks in getting gas to market** - Limited natural gas pipeline capacity in western MO results in relatively high gas transmission costs
- **Market dynamics support development** of new gas transmission opportunities

*Opportunities relate to improving reliability and meeting the needs of changing power markets*
Strengthening the Transmission System

- **Calpeco** – 625/650 transmission projects
- **Tinker** – Transmission capacity upgrade
- **Empire** – Opportunities to upgrade transmission and distribution system

*A total of C$ 225M in organic capital investment opportunities*
Investment in accretive transmission projects supports APUC’s dividend growth target
Generation Business Group (GBG)

An environment ripe for development
Speakers

Mike Snow
President
Generation Business Group

Jeff Norman
Vice President
Business Development

Todd Mooney
Vice President
Finance & Administration
Key Messages

- **Power market transformation** – North American legacy generation fleet is being upgraded
- **Empire adds strength** – Empire is scaling the generation platform for growth
- **We are well positioned** for success in the changing North American marketplace
- **Deep skillset** – Operating and development competencies in wind and solar
- **Significant opportunity** – Development strategy will execute on C$ 6.0B in investment opportunities

*GBG’s growth profile supports APUC’s target to be a top quartile utility*
## Scaling the Generation Platform for Growth

<table>
<thead>
<tr>
<th>Energy Type</th>
<th>Capacity (MW)</th>
<th>Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wind</td>
<td>1,150</td>
<td>12 facilities in North America</td>
</tr>
<tr>
<td>Gas</td>
<td>1,100</td>
<td>9 facilities including Empire</td>
</tr>
<tr>
<td>Hydro</td>
<td>130</td>
<td>18 facilities in North America</td>
</tr>
<tr>
<td>Solar</td>
<td>40</td>
<td>3 facilities in California and Ontario</td>
</tr>
<tr>
<td>Coal</td>
<td>430</td>
<td>3 facilities in U.S.</td>
</tr>
</tbody>
</table>

**Total:** 2,860 MW, 45 Facilities

Note: Values include pending Empire transaction.
Corporate Culture Enables Strategy

**GBG Narrative**

“Demonstrating core competency in on-shore wind and PV solar – the economic choice for a responsible future”

- Pursue rapid growth to deliver sustainable prosperity
- Engage and invest locally
- Improve continuously
- Empower people to expand our capabilities

**APUC’s culture enables our strategy and delivers results**
Foundation in Operational Excellence

- **Drive to Zero** – Achieved world-class Lost Time Injury Rate
- Incremental revenue of C$ 2M for every 100 basis point improvement in wind availability
- **Breadth of experience** – Operating expertise in 12 energy markets across North America

**Optimizing Wind Availability**

Successfully commissioned over 930 MW of wind and solar

![Bar chart showing wind availability improvement from 96.8% in 2012 to 98.6% in 2016 YTD]
Building out C$ 4.3B of New Generation

Cumulative new Capacity

- **2017**: 275 MW
- **2018**: 734 MW
- **2019**: 1,159 MW
- **2020**: 1,486 MW
- **2021**: 1,686 MW

**Utility** C$ 1.9B
- **Calpeco Turquoise Solar**
- **Luning Solar**
- **75 MW EDE Wind Re-power**
- **200 MW EDE Wind 1**
- **200 MW EDE Wind 2**
- **200 MW EDE Natural Gas**

**IPP** C$ 2.4B
- **Val Éo Wind**
- **Deerfield Wind**
- **160 MW Texas Wind**
- **150 MW U.S. Wind 1**
- **150 MW U.S. Wind 2**
- **Great Bay Solar**
- **Amherst Wind**
- **Chaplin Wind**
- **200 MW EDE Re-power**
- **150 MW U.S. Wind 1**
- **150 MW U.S. Wind 2**
North American Market

Renewable Installations

U.S. Market
- 2013: 6,100 MW
- 2014: 11,400 MW
- 2015: 16,160 MW (2nd in the world)

Canadian Market
- 2013: 2,050 MW
- 2014: 2,500 MW
- 2015: 3,050 MW (9th in the world)

Renewables growth accelerating in both the U.S. and Canada

Sources: BNEF, AWEA, SEIA, NREL, CANWEA
North American Market Drivers

**Current Market Conditions**

**Policy drivers**

*United States:*
- Renewable portfolio standards (RPS)
- FERC 1000 – transmission
- PTC/ITC extension

*Canada:*
- Alberta and Saskatchewan
- Federal government coal facility phase-out by 2030

**Economic drivers**

- Record low gas prices
- Declining wind and solar costs
- Fossil fuel independence with renewable energy

*Superior LCOEs are the most powerful driver of renewables growth*
Robust Wind and Solar Growth Forecast Beyond 2016

- 230 GW of new wind and solar to 2040 under a “no CPP” outlook
- Solar investment surpasses wind long-term
- Natural gas capacity additions of 150 GW over the period

Source: EIA
Electrical Demand and Markets

- Retirement of legacy fleet drives investment in new generation
- Energy markets are absorbing renewable generation
- Positioned for success in evolving markets

The evolution of generation markets supports APUC’s growth strategy
Generation Fleet Turnover

- **Winners and losers** – New technologies changing North American generation

- **Wind** – Low cost and increasing energy capture

- **Solar** – Dramatically dropping costs

- **Natural gas** – Low cost fuel with flexibility to manage intermittency

*Low cost and flexibility underpin the long-term outlook for generation*

Source: Lazard
Significant renewables development opportunity in the U.S.

Source: AWEA
U.S. Strategy – Wind PTC Support

In 2015, the PTC/ITC program supporting renewable generation was extended

- **Wind** – 5-year phase out
- **Solar** – Step down of ITC from 30% to 10%
- **Full PTC value available** – 2016 projects will get 100% PTC value for 10 years

<table>
<thead>
<tr>
<th>PTC Value</th>
<th>4-year Construction Period</th>
<th>PTC Period</th>
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</thead>
<tbody>
<tr>
<td>2016</td>
<td>100% = US$ 23.00 per MWh</td>
<td>2017 - 2020</td>
</tr>
<tr>
<td>2017</td>
<td>80% = US$ 18.40 per MWh</td>
<td>2018 - 2021</td>
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<tr>
<td>2018</td>
<td>60% = US$ 13.80 per MWh</td>
<td>2019 - 2022</td>
</tr>
<tr>
<td>2019</td>
<td>40% = US$ 9.20 per MWh</td>
<td>2020 - 2023</td>
</tr>
</tbody>
</table>

*Locking-in tax benefits to secure future U.S. growth pipeline*
U.S. Strategy – Wind Safe Harbour Components

2016
C$ 100M PTC components

2017 – 2020
C$ 2B investment opportunity

Secures competitive advantage of $5 / MWh
Greenfield Wind and Solar

- **Origination resources allocated between**
  - Wind
  - Solar
- **Focus by development stage**
  - Greenfield
  - Early stage development
  - Late stage development
- **Dual revenue model**
  - Independent power
  - Regulated utility

*Project IRRs decline while equity returns relatively constant*

Source: NREL
Robust Development Team

Focused growth by leveraging expertise:

- Origination, development and construction capabilities
- Deep knowledge of wind and solar markets in the U.S. and Canada

Focus on North American on-shore wind and utility scale solar
410 MW of Construction Projects in 2016

We will surpass 1,000 MW of wind with the commissioning of Deerfield Wind
Wind Strategy – 75 MW Amherst Island Wind

- Successful ERT decision
- Long-lead items ordered and delivered
- TSA executed with Siemens
- Dock construction imminent
- COD expected 2018

*ERT decision affirms investment decision; construction moving ahead as planned*
U.S. Strategy – 75 MW Great Bay Solar I

- Long-term PPA with U.S. government
- Transformer ordered
- EPC contract executed
- Construction to begin Q1 2017
- Interconnection for 150 MW

*Investment opportunity of C$ 240M, with incremental potential of C$ 200M*
Build-out Schedule of C$ 4.3B

**Utility**
- C$ 1.9B
  - Calpeco Turquoise Solar
  - Calpeco Luning Solar

**IPP**
- C$ 2.4B
  - Val Éo Wind
    - Deerfield Wind
    - 160 MW Texas Wind
    - 150 MW U.S. Wind 1
    - 150 MW U.S. Wind 2
  - Great Bay Solar
  - Amherst Wind
  - Chaplin Wind

**Cumulative new Capacity**
- 2017: 275 MW
- 2018: 734 MW
- 2019: 1,159 MW
- 2020: 1,486 MW
- 2021: 1,686 MW

**Highly visible development pipeline**
International Opportunities

Investment criteria:

- Stable legal jurisdiction
- Minimal political risk
- Low currency risk
- Capital repatriation
- Strong local partner

Pursuit of opportunities outside North America on an opportunistic basis
Generation CapEx Growth of C$ 6.0B

- Growth of C$ 6.0B includes investment opportunities of C$ 4.3B and Empire generation assets acquisition of C$ 1.7B

- CAGR for net plant of 20%

Investment in accretive Generation projects supports APUC’s dividend growth target
Diversification due to Empire further mitigates GBG’s seasonality
Generation Operating Profit Growth at a CAGR of 28%

- Empire acquisition and continued investment drives earnings growth
- GBG operating profit quadruples by 2021

Investment in accretive Generation projects supports APUC’s dividend growth target
Summary

- **Strong positioning** - APUC is well positioned for success in the changing North American marketplace.

- **North American fleet transformation** - Legacy generation fleet is being upgraded.

- **Leverage core competencies** - Operating and development competencies in wind and solar.

- **Empire scales** the generation platform for growth.

- **Significant opportunity set** - Incremental capital deployment opportunity of C$ 6.0B.

*GBG’s growth profile supports APUC’s target to be a top quartile utility.*
Closing Remarks
Tracking our “Say Do” Ratio

- Generation Business Group
  - 2012 - Installed MW "march to a million (kw)"
    - 1,100 MW in 2013
  - Asset Growth 15% per year
    - Avg. annual 26% since 2010
  - Operating Profit
    - Avg. annual 26% since 2010

- DBG
  - 2012 - Customers "march to a million"
    - Est. 782,000 by end of 2017 - 130% growth
  - EBITDA Growth 15% annual
    - Avg. annual 24% since 2010
  - EPS Growth Recent target – 15%
    - Avg. annual growth, last 3 years = 66%
  - Asset Growth 15% per year
    - Avg. annual 26% since 2010

- APUC Financial Goals
  - AFFO
    - Avg. 29% since 2010

☑ = Achieved  ☐ = On track
Closing Remarks

- Empire closing is imminent
- No material changes expected from incoming U.S. administration
- Continuing the “Creating Value through Growth” theme

For the Generation Business Group
- Commitment to continued competitiveness within U.S. energy markets
- Focused on developing renewable energy assets in North America but willing to explore international opportunities if they meet defined criteria
- Forecasting operating profit CAGR through 2021 of 28% from existing growth pipeline

For the Distribution Business Group
- Expect significant organic growth in existing portfolio and Empire
- Forecasting operating profit CAGR through 2021 of 21% from existing growth pipeline
Empire closing is imminent
- Integration planning for closing in early January well underway
- Potential 5 year capital investment program of US$ 1.8B compares with US$ 700M discussed at time of announcement; incremental investment opportunity through customer rate supportive renewable generation

No material changes expected from incoming U.S. administration
- Comfortable that possible changes in income tax rates, national trade protectionism and climate change leadership will not have a significant effect on the APUC business proposition

Continuing the “Creating Value through Growth” theme
- Contributions from EDE and new generating stations expected to deliver significant y-o-y growth in APUC EBITDA (~95%), EPS (~40%) and FFOPS (~40%)
- C$ 9.7B growth program will support more than doubling the size of the company through 2021, with total asset CAGR of 18% - 20%
- Increased EPS (16%-18% CAGR) and FFOPS (11%-13%) will support targeted DPS CAGR of 10%
- Commitment to maintain (or improve) investment grade credit metrics

For the Generation Business Group
- Commitment to continued competitiveness within U.S. energy markets through “safe harbour” wind turbine purchases supporting more than C$ 2B in project development
- Focused on development of renewable energy assets centered primarily on North America but willing to explore initial international opportunities if they meet defined criteria
- Forecasting operating profit CAGR through 2021 of 28% from existing growth pipeline

For the Distribution Business Group
- Expect significant organic growth in existing portfolio and EDE
- Forecasting operating profit CAGR through 2021 of 21% from existing growth pipeline

Corporate Milestones
Double current number of customers served by our national utility
Expand installed capacity of generation fleet to more than 5 GW