Q4/17 Analyst Conference Call

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Forward-looking information

Cautionary statement

Certain information in this presentation and in responses to questions contains forward-looking information. Actual results could differ materially from conclusions, forecasts or projections in the forward-looking information, and certain material factors or assumptions that were applied in drawing conclusions or making forecasts or projections as reflected in the forward-looking information.

Additional information about the material factors and risks that could cause actual results to differ materially from the conclusions, forecasts or projections in the forward-looking information and the material factors or assumptions that were applied in drawing a conclusion or making a forecast or projection as reflected in the forward-looking information are disclosed on slide 17 of this presentation and in the Company's fourth quarter 2017 Management's Discussion and Analysis (MD&A) prepared as of February 15, 2018 which is available under the Company's profile on SEDAR at sedar.com and on the Company's website at capitalpower.com.

Non-GAAP financial measures

The Company uses (i) earnings before net finance expense, income tax expense, depreciation and amortization, impairments, foreign exchange gains or losses, finance expense from its joint venture interests, and gains or losses on disposals (adjusted EBITDA), (ii) adjusted funds from operations, (iii) normalized earnings attributable to common shareholders, and (iv) normalized earnings per share as financial performance measures.

These terms are not defined financial measures according to GAAP and do not have standardized meanings prescribed by GAAP and, therefore, are unlikely to be comparable to similar measures used by other enterprises. These measures should not be considered alternatives to net income, net income attributable to shareholders of the Company, net cash flows from operating activities or other measures of financial performance calculated in accordance with GAAP. Rather, these measures are provided to complement GAAP measures in the analysis of the Company's results of operations from management's perspective.

Reconciliations of these non-GAAP financial measures are contained in the Company's Management's Discussion and Analysis prepared as of February 15, 2018 for the fourth quarter of 2017, which is available under the Company's profile on SEDAR at SEDAR.com and on the Company's website at capitalpower.com.

Execution in 2017

Substantial contracted growth and diversification

- Executed on renewables strategy including a 20-year contract for Whitla Wind
- Acquired five thermal assets
- Added nearly 1,300 MW to the fleet including completion of Bloom Wind
- 13% increase in AFFO per share
- Contracted % of Adjusted EBITDA increased from 67% in 2016 to 79% in 2017
- Increased dividend by 7% and extended dividend growth guidance out to 2020

Excellent operations

- Exceeded availability performance target on our plants
- Excellent realized AB power price of $51/MWh versus $22/MWh spot price
- Continued efforts on reducing carbon footprint

Updates on Alberta power market

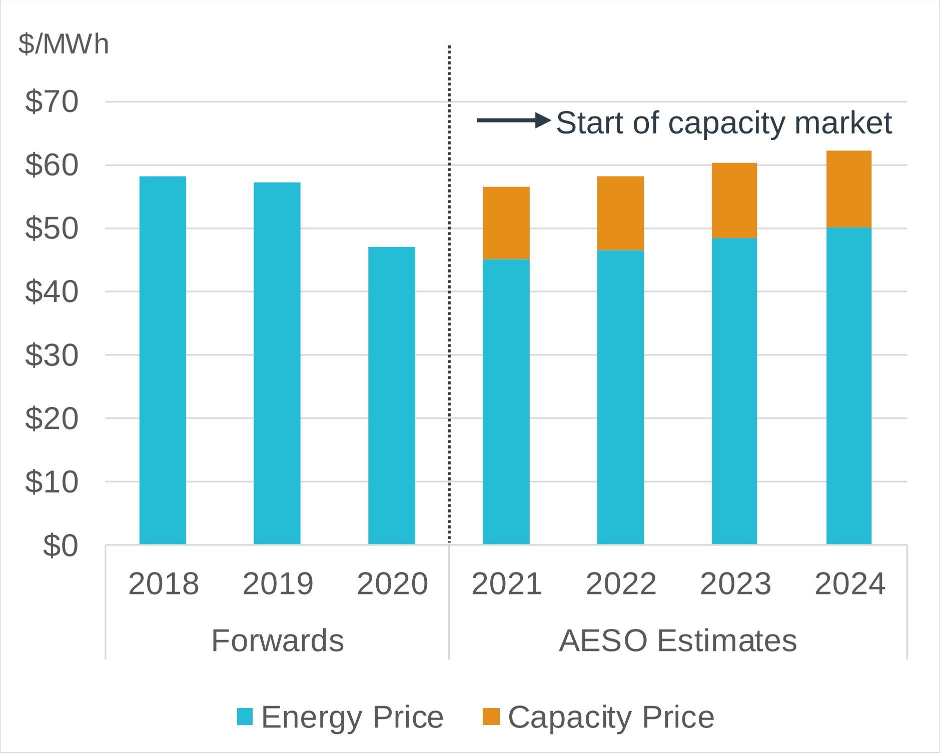
Capacity market design – key components

- AESO released Draft 1 of the Comprehensive Market Design (Draft 1) on Jan 26/18
- Overall, design appears constructive and resembles a market structure where existing and future assets have the opportunity to earn a return on/of capital without putting undue cost or risk onto the ratepayer
- Government of AB's commitment to treat new and existing assets equitably has been honored – one auction for new and existing
- Draft 1 includes a reasonable amount of energy and capacity market mitigation as expected
- AESO will be working through an iterative process to finalize market design that is targeted for July 20, 2018

Draft 1 is generally consistent with our view of a properly designed capacity market for Alberta and Capital Power is well-positioned under this market design

Updates on Alberta power market

AESO's forecast revenue for baseload facilities commencing in 2021 based on proposed design



Under the capacity market, AESO's forecast of $55-$65/MWh for the combined capacity and energy payments will allow existing and future assets an opportunity to earn a return on/of capital

Alberta power market

Renewable Electricity Program (REP) – Rounds 2 & 3

- Next two rounds of the REP target 700 MW of new renewable capacity
- Key requirements under both rounds
  - new or expanded renewable electricity generation projects
  - connection to existing distribution or transmission systems
- AESO to submit competition proposals to Minister of Energy at the end of Feb/18 for approval, including recommendations for payment mechanisms and target in-service dates
- AESO expects to launch both competitions this spring and successful bidders to be announced by the end of 2018

REP-2 (300 MW)
Minimum Indigenous equity component (i.e. ownership stake in the project or land use agreement between the company and the community)

REP-3 (400 MW)
Similar to round 1

Capital Power is well-positioned to bid on both competitions with its Whitla 2 and Halkirk 2 projects

Q4/17 Financial review

- Q4/17 financial results were in line with management's expectations
  - Generated $91M of AFFO (63% increase from $56M in Q4/16)
  - Normalized EPS of $0.24 versus $0.27 in Q4/16
- Trading desk captured a 109% higher realized average power price versus spot price in Q4/17

Portfolio optimization	Q4/17	Q4/16
AB spot power price average (/MWh)	**$22**	$22
Realized power price[1] (/MWh)	**$46**	$67
% realized above spot power price	**109%**	205%

1) Realized power price is the average price realized as a result of the Company's commercial contracted sales and portfolio optimization activities in Alberta.

Financial performance – Q4/17

$M, except per share amounts	Q4/17	Q4/16	Change
Revenues and other income	**$261**	$280	(7%)
Adjusted EBITDA (before mark-to-market)[1]	**$172**	$138	25%
Basic earnings (loss) per share	**$(0.20)**	$0.21	(195%)
Normalized EPS	**$0.24**	$0.27	(11%)
Adjusted funds from operations (AFFO)	**$91**	$56	63%

Higher Adjusted EBITDA due to acquisitions of Veresen assets and Decatur in Q2/17, addition of Bloom Wind, and annual off-coal compensation payment

1) Before unrealized changes in fair value of commodity derivatives and emission credits of -$18M and $6M for Q4/17 and Q4/16, respectively.

Financial performance – 2017

$M, except per share amounts	2017	2016	Change
Revenues and other income	**$1,146**	$1,214	(6%)
Adjusted EBITDA (before mark-to-market)(1)	**$592**	$509	16%
Basic earnings per share (EPS)	**$1.07**	$0.91	18%
Normalized EPS	**$1.12**	$1.22	(8%)
Adjusted funds from operations (AFFO)	**$363**	$307	18%
AFFO per share	**$3.60**	$3.19	13%
Dividend payout ratio (AFFO)(2)	**44%**	47%	

13% increase in AFFO per share resulted in a payout ratio of 44% in 2017 (near the low end of 45-55% annual target range)

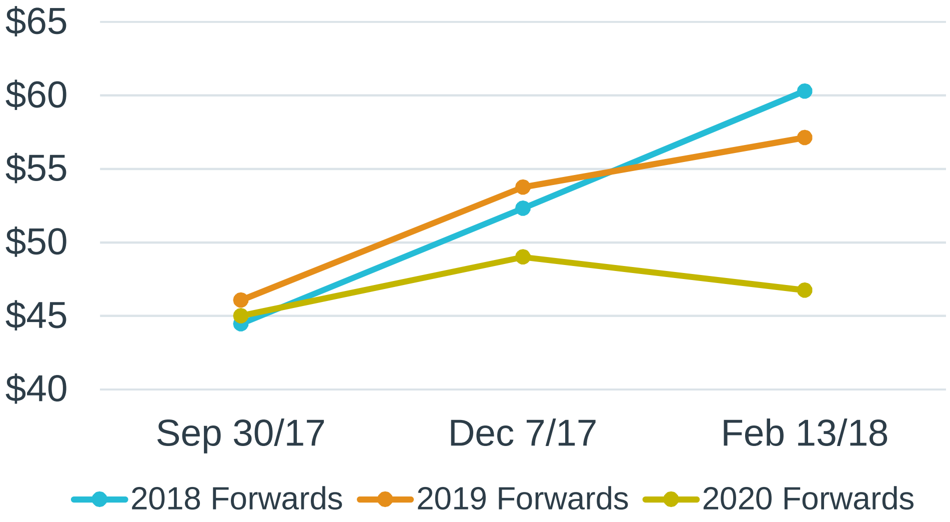
1) Before unrealized changes in fair value of commodity derivatives and emission credits of -$41M and $11M for 2017 and 2016, respectively.
2) Dividend payout ratio calculation based on dividends paid per share divided by AFFO per share.

Alberta power market outlook

AB commercial portfolio positions (as of Dec 31/17)

	2018	2019	2020
% baseload generation sold forward(1)	87%	37%	20%
Contracted prices(2) ($/MWh)	High-$40	Low-$50	Low-$50

Forward prices ($/MWh)

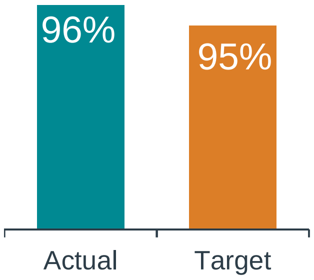


Nearly 500 MW (gas peaking, wind) available to capture upside from higher power prices or price volatility

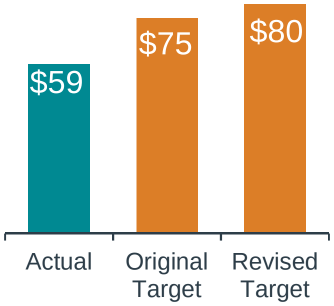
1) Based on the Alberta baseload plants plus a portion of Joffre and the uncontracted portion of Shepard.
2) Forecasted average contracted prices may differ significantly from future average realized prices as future realized prices are driven by a combination of previously contracted prices and settled prices.

2017 performance vs. annual targets

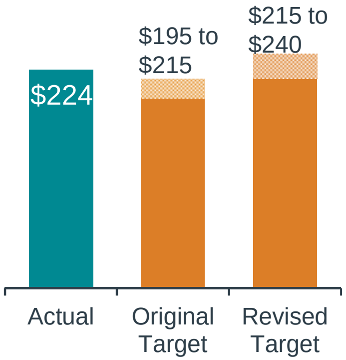
Facility availability



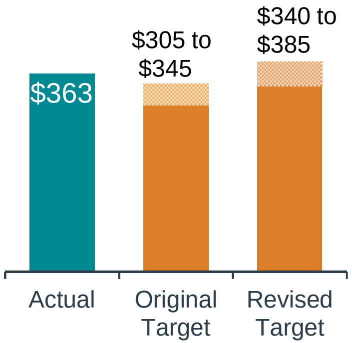
Sustaining capex ($M)



Facility O&M expenses ($M)



AFFO ($M)



12% increase in AFFO compared to original target[1]

1) Based on the mid-point of the original $305 million to $345 million target range.

2017 Disciplined growth

Bloom Wind and new developments

2017 Target	Results
Complete Bloom Wind on time and on budget for COD in Q3/17	✓ Project completed ahead of schedule with construction costs below budget
Execute contracts for the output of two new developments	✓ New Frontier Wind – secured a 12-year contract for 87% of output ✓ Whitla Wind – awarded a 20-year contract in first round competition of Alberta's REP
	✓ Acquired five thermal assets that significantly increased contracted cash flow

Significantly exceeded growth target

2018 Development & construction targets

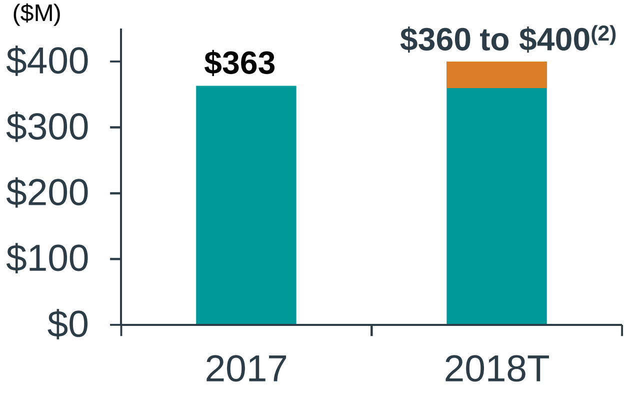
Disciplined growth

- Complete New Frontier Wind within $182M budget for COD in Dec 2018
- Complete Whitla Wind within $315-$325M budget for COD in Q4 2019
- Execute contracts for the output of 1-3 new wind developments
  - Alberta REP – rounds 2 & 3
  - US development pipeline

Impact from recent U.S. tax reform on Company's U.S. renewables portfolio and growth opportunities is not expected to be material

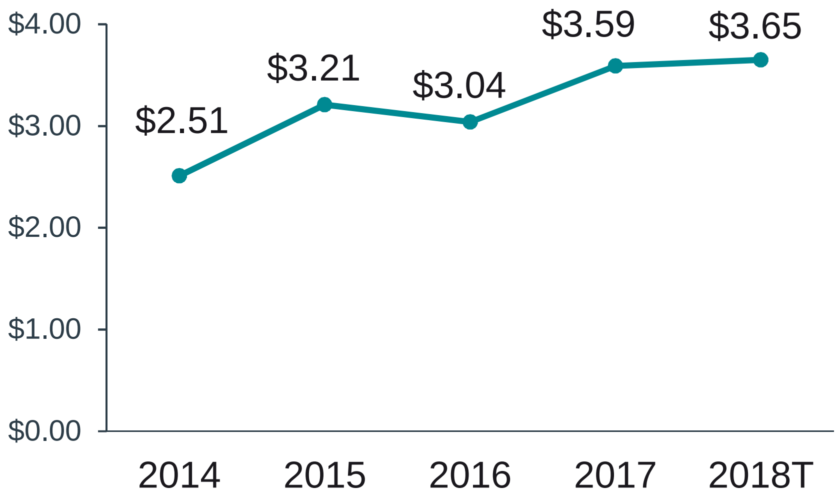
2018 Financial target

Adjusted funds from operations[1]



2018 AFFO expected to be above the mid-point of the guidance range

AFFO[3] per share



Expect ~10% CAGR for AFFO/share from 2014 to 2018

1) 2017 Adjusted FFO is calculated under the current method and 2018T Adjusted FFO is calculated under the 2018 method.
2) 2018 key assumptions include: $49/MWh average Alberta power price and approximately $2/GJ AECO natural gas. Excludes any impacts from $500M of committed capital for growth.
3) Represents Adjusted FFO (2018 method), less the portion allocated to the non-controlling interest (calculated consistent with the proportion of income and distributions allocated to the non-controlling interest in each period). Commencing in 2016, there is no longer a non-controlling interest, therefore, for 2016 onward this metric reflects adjusted FFO (2018 method).

Questions?

Forward-looking information

Forward-looking information or statements included in this presentation and in responses to questions are provided to inform the Company's shareholders and potential investors about management's assessment of Capital Power's future plans and operations. This information may not be appropriate for other purposes. The forward-looking information in this presentation is generally identified by words such as will, anticipate, believe, plan, intend, target, and expect or similar words that suggest future outcomes.

Material forward-looking information in this presentation includes expectations regarding:

- future revenues, expenses, earnings and adjusted funds from operations,
- the future pricing of electricity and market fundamentals in existing and target markets,
- future dividend growth,
- the Company's future cash requirements including interest and principal repayments, capital expenditures, dividends and distributions,
- the Company's sources of funding, adequacy and availability of committed bank credit facilities and future borrowings,
- future growth and emerging opportunities in the Company's target markets including the focus on certain technologies,
- the timing of, funding of, and costs for existing, planned and potential development projects and acquisitions (including the New Frontier Wind project and phase 1 of the Whitla Wind project),
- facility availability and planned outages,
- capital expenditures for facility maintenance and other (sustaining capital, future growth projects),
- the impact of environmental regulations on the Company, its businesses, accounting policies, and emissions compliance costs,
- the impact of the transition to a capacity market on the Company's future growth projects including the Genesee 4 and 5 project,
- expectations pertaining to the acquisition of Decatur Energy regarding: (i) financial impacts including expected impacts to adjusted funds from operations and adjusted EBITDA, and (ii) re-contracting of the facility,
- expectations pertaining to the financial impacts of the acquisition of the Veresen thermal facilities, including expected impacts to adjusted funds from operations and adjusted EBITDA,
- expectations pertaining to the amendment of the Genesee Coal Mine Joint Venture Agreement regarding reduction to Capital Power's cost of coal and expected enhancements to the Company's net income, adjusted EBITDA, net cash flows from operating activities and adjusted funds from operations,
- expectations around the Line Loss Rule Proceeding including timing of retrospective loss factors being finalized, participation in applicable appeal processes, and potential impacts to the Company,
- expectations around future impacts of U.S. tax law changes substantively enacted in the fourth quarter of 2017, and
- impacts of future IFRS standards and amendments.

These statements are based on certain assumptions and analyses made by the Company in light of its experience and perception of historical trends, current conditions, expected future developments, and other factors it believes are appropriate including its review of purchased businesses and assets. The material factors and assumptions used to develop these forward-looking statements relate to:

- electricity and other energy prices,
- performance,
- business prospects and opportunities including expected growth and capital projects,
- status of and impact of policy, legislation and regulations,
- effective tax rates,
- other matters discussed under the Performance Overview and Outlook and Targets for 2018 sections, and
- anticipated performance of the acquired Veresen thermal facilities and Decatur Energy

Whether actual results, performance or achievements will conform to the Company's expectations and predictions is subject to a number of known and unknown risks and uncertainties which could cause actual results and experience to differ materially from the Company's expectations. Such material risks and uncertainties are:

- changes in electricity prices in markets in which the Company operates,
- changes in energy commodity market prices and use of derivatives,
- regulatory and political environments including changes to environmental, financial reporting, market structure and tax legislation,
- generation facility availability and performance including maintenance of equipment,
- ability to fund current and future capital and working capital needs,
- acquisitions and developments including timing and costs of regulatory approvals and construction,
- changes in market prices and availability of fuel,
- ability to realize the anticipated benefits of the acquisitions,
- limitations inherent in the Company's review of purchased businesses and assets, and
- changes in general economic and competitive conditions.

See Risks and Risk Management in the MD&A for further discussion of these and other risks. Readers are cautioned not to place undue reliance on any such forward-looking statements, which speak only as of the specified approval date. The Company does not undertake or accept any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements to reflect any change in the Company's expectations or any change in events, conditions or circumstances on which any such statement is based, except as required by law.

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