Q2/22 Analyst Conference Call

Brian Vaasjo, President & CEO
Sandra Haskins, SVP Finance & CFO

August 2, 2022

Capital Power

Forward-looking information

Cautionary statement

Certain information in this presentation and responses to questions contains forward-looking information. Actual results could differ materially from conclusions, forecasts or projections in the forward-looking information as a result of 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 14 of this presentation and in the Company's second quarter 2022 Management's Discussion and Analysis (MD&A) prepared as of July 29, 2022 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 and ratios

The Company uses (i) earnings before net finance expense, income tax expense, depreciation and amortization, impairments, foreign exchange gains or losses, finance expense and depreciation expense from its joint venture interests, gains or losses on disposals and unrealized changes in fair value of commodity derivatives and emission credits (adjusted EBITDA), (ii) adjusted funds from operations (AFFO), and (iii) normalized earnings attributable to common shareholders as financial performance measures.

The Company also uses AFFO per share and normalized earnings per share as performance measures. These measures are non-GAAP ratios determined by applying AFFO and normalized earnings attributable to common shareholders, respectively, to the weighted average number of common shares used in the calculation of basic and diluted earnings per share.

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 disclosed in the Company's Management's Discussion and Analysis prepared as of July 29, 2022 for the second quarter of 2022, which is available under the Company's profile on SEDAR at SEDAR.com and on the Company's website at capitalpower.com.

Q2 developments supportive of natural gas strategy

- Continued track record of recontracting natural gas assets
- Executed agreement to acquire a 50% interest in the Midland Cogen facility, the largest gas-fired cogeneration facility in North America
- Ontario IESO has identified significant incremental capacity needs as early as 2025 – positive outlook for our three natural gas facilities
- Federal Government released Proposed Frame for Clean Electricity Regulation that recognizes the continued role for natural gas generation in supporting reliability and integrating renewables

Continued execution of midlife natural gas strategy

Acquisition of Midland Cogeneration Venture (Midland Cogen)

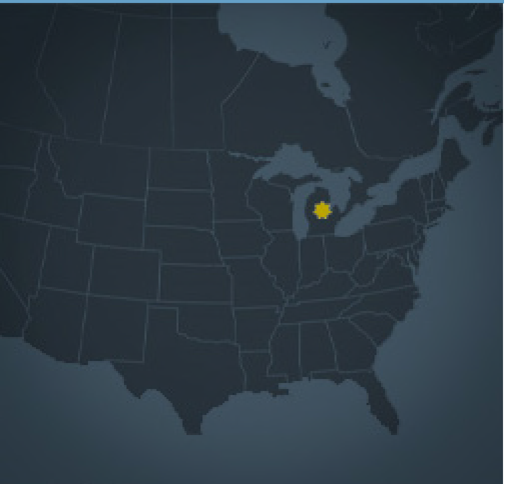
- 1,633 MW natural gas combined-cycle cogen facility located in Midland, Michigan
- Partnered with Manulife Investment Management to acquire Midland Cogen for a total of US$894M, including US$521M of project level debt
- Each partner to contribute ~US$186M
- Closing expected in Q3/22

Financial highlights

- Financing with cash on hand and credit facilities; no equity required
- ~85% of capacity under long-term contracts with high quality counterparties with contract expiries in 2030 and 2035
- Accretive transaction: 5-year average AFFO accretion of US$0.30 (7%)
- 5-year average annual adjusted EBITDA of US$59M and AFFO of US$35M (our portion)

Recontracting outlook

- Critical asset to support grid reliability during transition to renewables and extremely well-positioned for recontracting beyond 2030



Solid track record of recontracting natural gas assets

Securing long term PPAs provide stable cash flows

Acquired: Jun/17
Original PPA Expiry: Dec/22
Recontracting: 10-year extension to Dec/32; includes enhancements for immediate additional capacity when extension announced in Aug/20.

Acquired: Nov/18
Original PPA Expiry: Oct/25
Recontracting: 6-year extension to Oct/31 with materially higher AFFO over extended term.

Acquired: Oct/10
Original PPA Expiry: Apr/22
Recontracting: 4.5-year renewal to Oct/26. Continue to advocate for longer-term recontracting as part of BCUC's IRP review process.

Acquired: Jun/19
Original PPA Expiry: Jun/29
Recontracting: Goreway, York Energy and East Windsor are well positioned to participate in IESO's upcoming procurement process. IESO has identified significant incremental capacity needs as early as 2025.

Clean Electricity Standard (CES) update

March 2022

- Federal consultations on CES design principles and considerations
- Government commitment to manage transition to maintain reliability and affordability

July 26, 2022

- Released Proposed Frame for Clean Electricity Regulation (CER)
- Recognizes continued role for natural gas generation in supporting reliability and integrating renewables
- "Near-zero" intensity-based performance standard
- New units (post-2024 COD) must comply with standard effective Jan/35
- Existing units (pre-2025 COD) compliance with standard either 2035 or linked to "end-of-life"

Next steps

- Proposed Frame provides basis for workable framework
- Environment & Climate Change Canada (ECCC) targeting end of 2022 for release of draft CES regulation

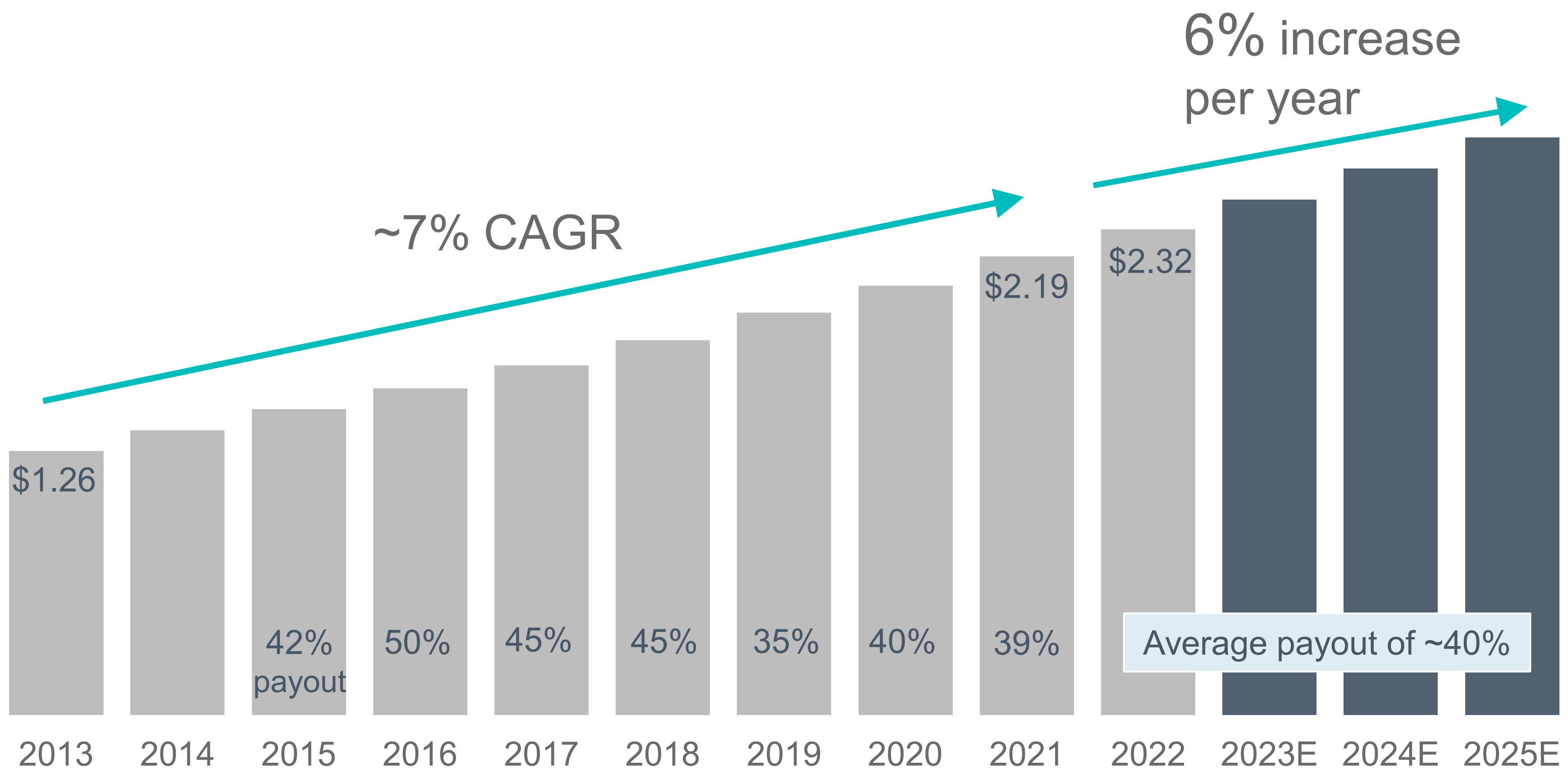
Notable impacts to Capital Power

- Our Canadian thermal fleet, including Genesee repowering, would qualify as existing units
- Framework would accommodate regional differences and mitigate potential for market disruption
- Affirms a continued role for natural gas generation within a net-zero framework

Proposed Frame preserves value for our natural gas fleet

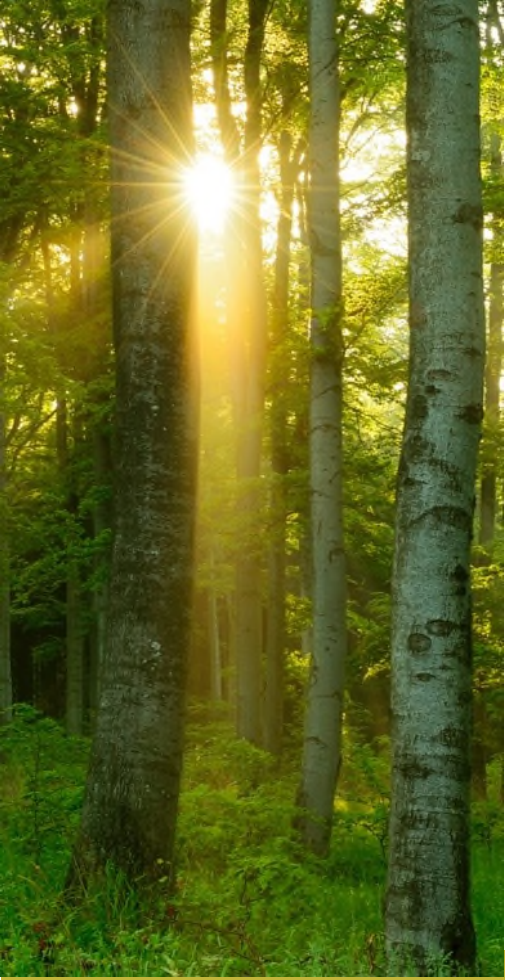
Delivering 9 consecutive years of dividend growth

Increased annual dividend guidance to 2025 from 5% to 6%



Forecast to be below AFFO payout ratio target range of 45% to 55% through 2025

1) Subject to market conditions, economic outlook, cash flow forecast, and Board approval at the time.
2) 2013 to 2021 annualized dividend based on year-end quarterly common shares dividend declared.



Strong company-wide Q2/22 financial performance

$697M	$319M	$108M	$180M
+33% yoy	+32% yoy	-16% yoy	+98% yoy
Revenues and other income[1]	Adjusted EBITDA	Net cash flows from operating activities	AFFO

- Higher generation and power pricing from AB Commercial facilities
- Full quarter of contributions from additional phases of Whitla Wind and Strathmore Solar
- 1.5x higher generation from Goreway
- Significantly higher adjusted EBITDA contributions from Decatur and Arlington

Overall, higher generation and availability across the fleet contributed to significant yoy increases in AFFO and adjusted EBITDA

1) Before unrealized changes in FV of commodity derivatives & emission credits.

6-month financial performance above expectations

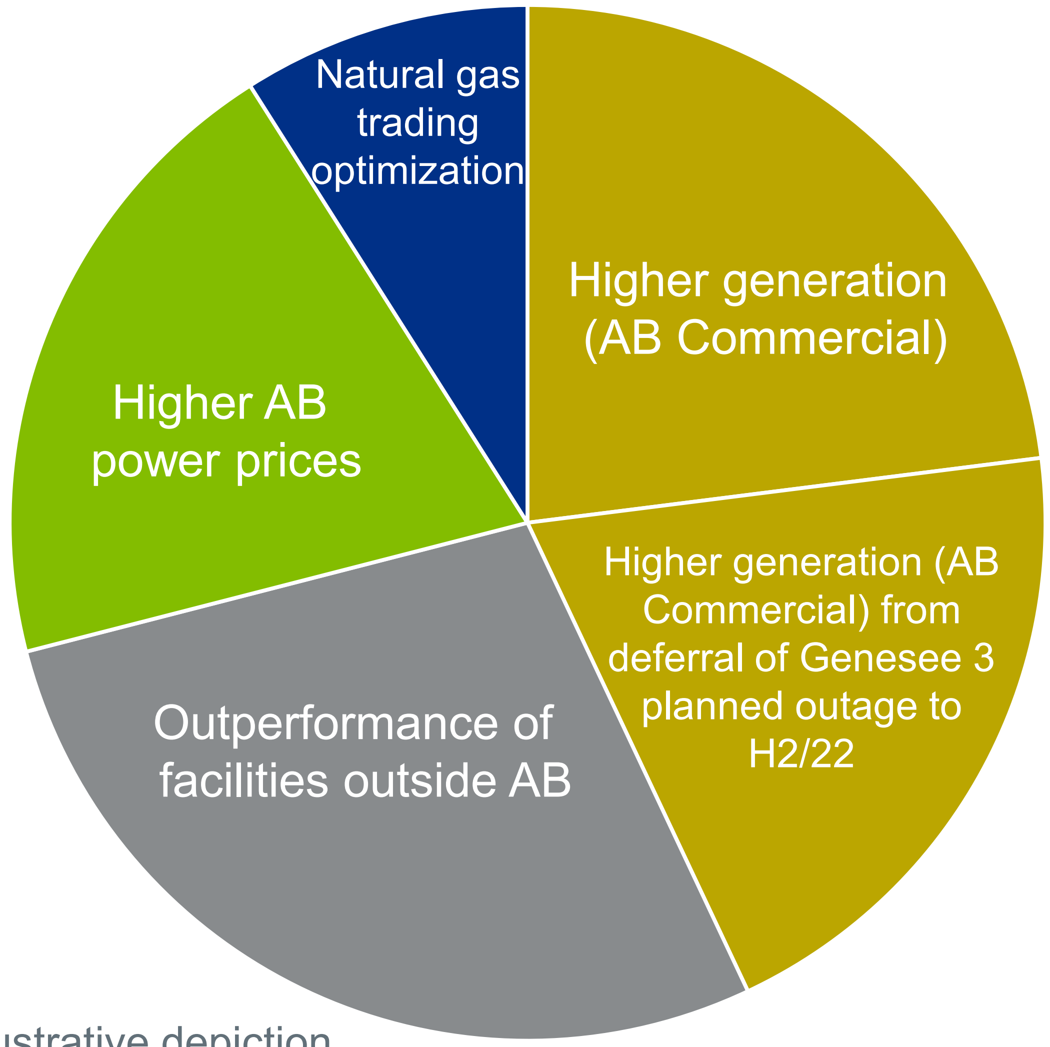
$1,443M	$667M	$523M	$380M
+28% yoy	+23% yoy	+56% yoy	+52% yoy
Revenues and other income[(1)]	Adjusted EBITDA	Net cash flows from operating activities	AFFO

- Similar explanations for Q2/22 YTD performance as Q2/22 including higher generation and strong AB power prices averaging $106/MWh
- Increase in adjusted EBITDA partially offset by higher current income taxes and higher sustaining capex
- New Energy Purchase Agreement for Island Generation (effective May 1/22) classified as a finance lease and does not impact AFFO but reduces adjusted EBITDA by ~$3M/quarter

Double-digit % increases in all key financial metrics

1) Before unrealized changes in FV of commodity derivatives & emission credits.

Key drivers of outperformance in first 6-months



Illustrative depiction

Main drivers of outperformance

- Higher generation (AB Commercial segment)
- Better performance from non-Alberta facilities

Alberta portfolio optimization of commodity price risk

(All data as of Jun 30/22)	2023	2024	2025
Power			
% Sold forward[1]	**70%**	**45%**	**27%**
Contracted power prices[2] ($/MWh)	**High-$60s**	**Low-$60s**	**Low-$60s**
Forward power prices ($/MWh)	$95	$69	$65
Natural gas			
% Bought forward[3]	**Over 80%**	**Over 80%**	**Over 50%**
Weighted avg cost of gas contracts[2] ($/GJ)	**$2.00-$2.50**	**$2.00-$2.50**	**$2.00-$2.50**
Forward Alberta gas prices ($/GJ)	$4.37	$4.10	$4.08

Q2/22 average spot price of $122/MWh

- Higher natural gas costs
- Lower imports and overall increase in demand
- Carbon compliance pricing of $50/tonne in 2022 versus $40/tonne last year

Natural gas hedged at prices significantly below spot prices in H1/22

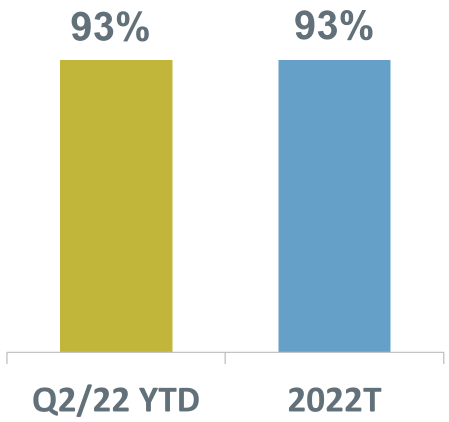
Successfully de-risking variable costs and locking in higher margins

1) Based on the Alberta baseload plants, including Joffre and 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. When long-term forward portfolio optimization hedges are transacted, they reflect the market's expectations for future period pricing.
3) Includes gas burn for all baseload plants, and estimated gas requirements to supply fixed retail contracts.

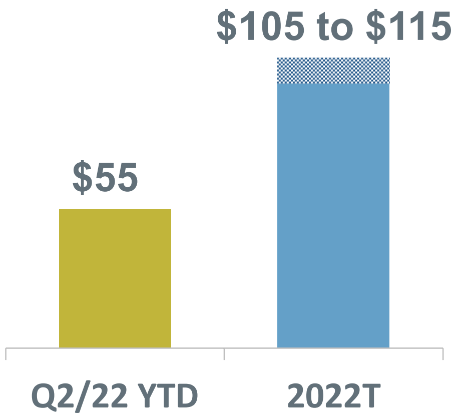
2022 targets

Higher financial guidance reflects YTD results and positive outlook

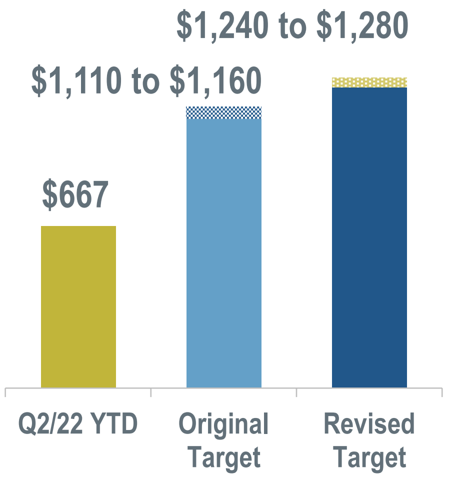
Facility availability[1]



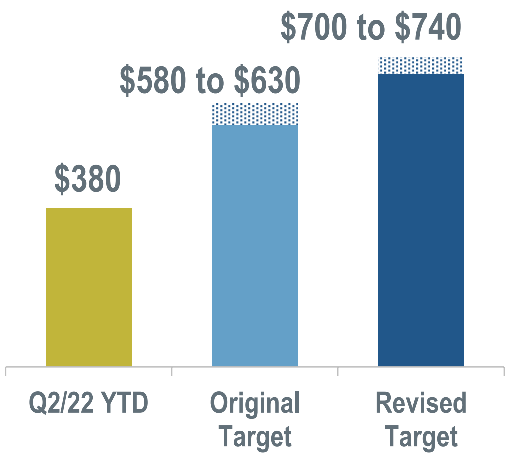
Sustaining capex[1] ($M)



Adjusted EBITDA ($M)



AFFO ($M)



Higher revised financial guidance

- 11% and 19% increases to the midpoints of guidance ranges for adjusted EBITDA and AFFO, respectively
- Driven by stronger AB Commercial performance, higher contributions from contracted Ontario and US facilities and acquisition of Midland Cogen

Sustaining capex

- Expected to be above target range due to increased work planned for remainder of the year and timing of work

Exceeded $500M target of committed capital for growth with Midland Cogen acquisition

1) 2022 targets for Facility availability and Sustaining capex does not reflect the impact from the acquisition of the Midland Cogeneration facility.

Forward-looking information

Forward-looking information or statements included in this presentation 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 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:

- our 2022 performance targets and current period updates to our expectations, including for facility availability, sustaining capital expenditures, adjusted funds from operations (AFFO) and adjusted EBITDA;
- our company-wide targets specific to climate-related performance, including reduction of emissions and emissions intensity, repowering of Genesee 1 and Genesee 2 with the addition of battery storage and conversion of Genesee 3, completion of the Genesee Carbon Conversion Centre, commercial application of carbon conversion technologies and plans to be off coal in 2023;
- future revenues, expenses, earnings, adjusted EBITDA and AFFO;
- 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;
- expectations pertaining to the financial impacts of the acquisition of Midland Cogeneration Venture (Midland Cogen), including the impacts to AFFO, AFFO per share and adjusted EBITDA, transaction close timing, financing plans, positioning for potential re-contracting following contract expiries in 2030 and 2035, and future site development opportunities;
- the timing of, funding of and costs of existing, planned and potential development projects and acquisitions (including phase 2 of Halkirk Wind, the repowering of Genesee 1 and 2 (including being hydrogen ready and battery storage), Bear Branch Solar, Hornet Solar, Hunter's Cove Solar and Enchant Solar;
- facility availability and planned outages;
- capital expenditures for facility maintenance and other (sustaining capital, future growth projects, commercial initiatives);
- market and regulation designs and the impact thereof on the Company's core markets; and
- the impacts of climate change and the Russia-Ukraine conflict.

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 and carbon prices;
- performance;
- business prospects (including potential re-contracting of facilities) and opportunities including expected growth and capital projects;
- status of and impact of policy, legislation and regulations;
- effective tax rates;
- the development and performance of technology;
- foreign exchange rates;
- matters relating to the LLR Proceeding, including the timing and recovery from appropriate parties; and
- other matters discussed under the Performance Overview, Outlook and Risks and Risk Management sections.

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, natural gas and carbon prices in markets in which the Company operates and the use of derivatives;
- regulatory and political environments including changes to environmental, climate, financial reporting, market structure and tax legislation;
- disruptions, or price volatility within the Company's supply chains;
- generation facility availability, wind capacity factor and performance including maintenance expenditures;
- 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 the availability of fuel;
- ability to realize the anticipated benefits of acquisitions;
- limitations inherent in the Company's review of acquired assets;
- changes in general economic and competitive conditions, including inflation;
- changes in the performance and cost of technologies and the development of new technologies, new energy efficient products, services and programs; and
- risks and uncertainties discussed under the Risks and Risk Management section.

See Risks and Risk Management in the Company's 2021 Integrated Annual Report and in the Company's second quarter 2022 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 date made. 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.

Questions?

Investor Relations

Randy Mah
Director, Investor Relations
(780) 392-5305
rmah@capitalpower.com

10423 101 Street NW
11th Floor
Edmonton, Alberta
Canada T5H 0E9