

Capital Power – 2022 Investor Day December 1, 2022

Corporate Participants

Randy Mah - Director, Investor Relations Brian Vaasjo - President and CEO

Kate Chisholm - Senior VP, Planning, Stakeholder Relations and Chief Sustainability Officer

Chris Kopecky - Senior VP, Chief Legal, Development and Commercial Officer

Bryan DeNeve - Senior VP, Operations

Steven Owens - Senior VP, Construction and Engineering

Sandra Haskins - Senior VP, Finance and CFO

Conference Call Participants

Robert Hope, Scotiabank Mark Jarvi, CIBC Capital Markets John Mould, TD Securities Maurice Choy, RBC Capital Markets Ben Pham, BMO Capital Markets Naji Baydoun, IA Capital Markets Patrick Kenny, National Bank

Presentation

Slide 1

Good morning everyone. Welcome to Capital Power's 14th annual Investor Day taking place here in the City of Brampton. I'm Randy Mah, the Director of Investor Relations. Thank you for joining us – both here in-person and on the webcast. In the spirit of reconciliation, we want to respectfully acknowledge that Capital Power operates within the ancestral homelands. traditional and treaty territories of the Indigenous peoples of Turtle Island, or North America. The City of Brampton is located on the Treaty Territory of the Mississauga's of the Credit First Nation, and before them, the traditional territory of the Haudenosaunee, Huron and Wendat, We want to acknowledge the diverse Indigenous people who call this area home.

Slide 2

Today's event is a combination of both pre-

recorded presentations and live interaction. Our executive team are here with us or will be joining virtually for the live Q&A session. Here with us is: Brian Vaasjo, President & CEO; Kate Chisholm, our Senior VP, Chief Strategy and Sustainability Officer; Sandra Haskins, Senior VP, Finance & CFO. And joining us later for the live Q&A will be: Bryan DeNeve, Senior VP, Operations; Chris Kopecky, Senior VP and Chief Legal, Development and Commercial Officer; Steve Owens, Senior VP, Construction and Engineering, and Jacquie Pylypiuk, Senior VP, People, Culture and Technology.

Slide 3

In today's presentation, certain information and responses to questions contain forward-looking information. Please refer to the forward-looking information disclaimer at the end of the presentation as well as our disclosure documents filed on SEDAR, for further information on the material factors and risks that could cause actual results to differ.

Slide 4

Early this morning, we issued two press releases highlighting some of the major announcements that we'll be covering in greater detail today. We'll be providing updates on our: strategy, sustainability targets, operations, construction projects, our growth pipeline, market outlook, and highlight our 2023 operational and financial targets. The total duration for all the presentations will be about 1.5 hours. Afterwards, we'll take a 5minute break to set up and then come back to take your guestions.

At 11:30, a buffet lunch will be available for those joining us. And Chris Benedetti from the Sussex Strategy Group will be our luncheon guest speaker. After lunch, we'll host a tour of our Goreway facility – the bus will be ready for boarding at 1 o'clock and will depart at 1:15. Okay, let's get started.

Slide 5

Good morning and welcome. We have planned for you what we hope will be very informative day. In addition to our regular Investor Day discussions, we are highlighting the Ontario capacity situation and our opportunities here. As well we will be focusing on the Genesee Carbon



Capture and Sequestration project and the US MISO market.

Capital Power's strategy remains the same as we have had for the last number of years. Invest in renewables, invest in strategically located natural gas assets, pursue pathways to reduce our carbon footprint and have the best assets in the Alberta market. This strategy has proved to be both resilient and rewarding for investors. Integrating ESG considerations and making it our business has been very positive. We continue to deliver on and extend our ESG targets. As we go through today and discuss our opportunities and challenges, I hope you will conclude the outlook for Capital Power has never been better.

Slide 6

Our strategy continues to drive our future. Our natural gas strategy of acquiring and optimizing strategically placed natural gas assets has never been on a more stable footing. As Kate will describe, there is a growing appreciation that natural gas generation is critical to reliable, lowcost, sustainable power. Our success in recontracting four of our natural gas assets proves this thesis. The situation evolving in Ontario underscores the importance that natural gas has in many regions. It is very early days, but Chris will describe some of the opportunities we see around the Midland acquisition and the outlook for the MISO region including renewables. In Alberta, our repowering project has been challenged by the interconnection to the grid which has modestly increased costs and delayed the completion. Chris will share that the repowering project continues to have extremely robust returns. Steve will describe the review of the 210 MW battery project as several elements are evolving that may significantly reduce the battery size or eliminate the need for a battery altogether.

We announced through a separate news release this morning that our Board has approved a limited notice to proceed on our Genesee Carbon Capture and Sequestration project. We have a ways to go but this is an important milestone as we check everything from cost, the status of the Enbridge hub and the evolution of government support. Two refinements to what we have shared with you previously is that the cost has moved to \$2.3 billion and timing of our final notice to proceed has moved to Q3 2023. The timing change does not impact on the completion date in late 2027. We are very excited about where we are today. We hope today's discussion will address some of the questions around CCS and the Governments' support for it.

Government support has shifted and is growing for CCS and other carbon reduction technologies including direct air capture. The combination of the Governments' commitments to emerging and existing technology and our own commitment to reducing our carbon footprint has led to us moving the yardsticks to Capital Power being net zero by 2045.

Chris will be describing the outlook for our renewable developments coming out of our expansive pipeline. We have been challenged by supply chain issues on our solar projects. The North Carolina projects continue to be problematic as Chris will describe. The two Alberta solar projects have finished strong at the revised costs.

Slide 7

Many of you have seen this slide or earlier versions which lays out our roadmap to get to net zero. Similar to prior years, the biggest change to the roadmap this year has been points of acceleration including changing net zero by 2050 to by 2045. As we have alluded to previously, we are starting to investigate direct air capture and continue to monitor hydrogen.

<u>Slide 8</u>

Alberta continues to be an excellent market for Capital Power. We continue the strategy we have had since our inception of having and maintaining the best assets in the market. Kate will discuss how evolving environmental policy continues to be constructive for the Alberta market. Sandra will discuss the Alberta market dynamics while Steve and Chris will provide a more detailed update on the Repowering and Genesee battery projects.

Slide 9

I would like to turn now to the shorter term. Capital Power is coming out of 2022 very strong as evidenced by our forecast 16% increase in adjusted EBITDA over our initial 2022 target. Although much of our strong results is attributable



to the strong prices in Alberta, we continue to have good results across much of our fleet. Bryan will touch on a few of our operating challenges but will also describe how we are making our fleet more resilient and reliable.

Our adjusted EBITDA growth continues in 2023 where we are starting off the year with a 13% increase over the 2022 midpoint. Sandra will describe the reconciling items between the years. This performance and outlook for the company goes hand-in-hand with leading our peer group in 2022 total shareholder return at 20%. When added to our track record it spells a 25% average annual TSR over the last 5 years. This strength in turns drives our ability to pay and grow the dividend. The expected dividend increase of 6% in 2023 will make a decade of stable, annual dividend increases.

<u>Slide 10</u>

We are continuing our leadership on the sustainability front in 2023. We continue to have long, and short-term goals aimed at driving lower emissions as well as gender diversity and diversity beyond gender. Short- and long-term compensation incentives include ESG metrics. We continue to be among the most diverse Boards and executive teams. This year we are adding a sustainable sourcing policy with a target for sourcing 5% responsibly sourced natural gas in Alberta. And of course, we will be off coal in 2023.

We continue to be very excited about what is happening at the Genesee site. We commenced the repowering project without consideration of the Genesee CCS project. However, when you put the two projects together it is a very powerful story. Following is a short video on the combined Genesee developments of repowering and CCS.

<u>Slide 11</u>

Good morning everyone. I'm here to provide you with brief updates on government policy that impacts Capital Power and why Capital Power's sustainability performance continues to lead our industry.

Slide 12

At Investor Day last year, we were facing some policy headwinds because the federal government

had unexpectedly increased its carbon reduction target to 40 - 45% below 2030 targets, going well beyond the earlier Healthy Environment Healthy Economy Plan, causing significant uncertainty about the long-term role for natural gas generation and carbon abatement technologies like CCS.

There was also significant uncertainty about how federal climate policy might interact with provincial frameworks such as TIER in Alberta, and the equivalency assessment reviews scheduled for 2022.

Slide 13

In the first half of 2022, we were encouraged to see many and repeated affirmations of the importance of CCS as a key part of every jurisdiction's toolkit, starting with the International Energy Agency and the IPCC both clearly stating that the world cannot practically reach net zero without CCS. Then came actions by Canadian and provincial governments to clarify carbon objectives and support the necessary investments.

The federal Emission Reduction Plan went so far as to discuss the role of CCS in specific sectors, including power generation, along with various measures the government would take to accelerate its deployment, including the use of carbon contracts for differences to address stroke-of-pen risk. The Alberta Electric System Operator's net-zero study also highlighted the important role CCS will have in Alberta's road to net-zero, especially because of its ability to facilitate greater renewable integration reliably.

The launch of the Strategic Innovation Fund in March demonstrated the Federal Government's serious commitment to supporting the deployment of CCS and offered constructive partnerships with industry to get the ball rolling. March also saw the Alberta Government announce that the Enbridge Wabamun hub project, that will provide transmission and sequestration services for the Genesee CCS Project, was selected to advance to the next phase of the Province's CCUS Hub Initiative.



The draft Clean Electricity Standard also included clear acknowledgement of the need to balance sustainability with affordability and reliability, and that regional differences would have to be accommodated in the framework.

Slide 14

Environment Canada's draft Clean Electricity Standard framework aligns with Capital Power's longstanding views by recognizing a long-term role for both abated and potentially even unabated natural gas generation in emergency situations, to support reliability and affordability.

The announcement of the US Inflation Reduction Act provided an unexpected level of support for CCS, thus creating a sense of urgency for Canadian policy makers to ensure the continuing competitiveness of Canada's CCS policy frameworks. The measures announced in Canada's Fall Economic Statement were a constructive and meaningful response, giving the Canada Growth Fund the mandate to invest in projects via CCFDs.

Autumn also saw acknowledgement by the Province of Ontario of a critical need for additional natural gas generation to provide specific reliability services to the system and, as Chris will explain later, Capital Power is well-positioned to participate in that procurement.

More recently, we were very pleased when our Genesee CCS Project was selected by Innovation, Science & Economic Development Canada to advance to the next phase of the Strategic Innovation Fund/Net Zero Accelerator call to action. Based on our discussions with the Federal and Alberta governments, we're also increasingly confident that the equivalency discussions will not result in any unmanageable changes to TIER. All in all, it's fair to say the policy has turned direction so we're now enjoying tailwinds.

Slide 15

All this to say, we were right all along. Keeping the lights on through the energy transition will require prudent use, and decarbonization of, natural gas generation. Let's again review some recent examples of why this is the case.

<u>Slide 16</u>

California and much of the Western United States experienced a record-setting heatwave this summer that caused an all-time historic record. Demand on the California grid reached a new peak load on September 6th, right when the sun was setting, solar production was ending for the day, with demand remaining very high due to air conditioning load.

Despite the sustained and unprecedented load levels and maximum use of available batteries, the Cal-ISO avoided rotating outages and maintained reliable system operations by ramping up natural gas generation (shown here in orange). Note that the steady imports (shown in red) are also substantially natural gas, including Capital Power's Arlington unit. My point is that, in extreme weather events that last more than a few hours, natural gas is currently the only technology flexible and reliable enough to provide the necessary emergency back up in many regions.

<u>Slide 17</u>

Similarly, this is a snapshot of the real-time Alberta supply mix during Alberta's recent unseasonable November cold snap. Only 3% of Alberta's more than 3000 MW of wind capacity and 20% of our solar capacity were generating. In total, wind and solar were providing less than 5% of Alberta's supply. Events like these two, winter storm Uri in Texas, western wildfires and eastern ice storms and hurricanes will continue to require emergency back up until such time as flexibly ramping, long-duration storage options are commercialized. In addition to extreme weather events, abated gas generation will continue to be needed for other system events, like unexpected and/or lengthy outages, as well. The faster these grids can decarbonize their natural gas supply, the better.

Slide 18

The renewables that Capital Power and others hope to develop are becoming more affordable but are intermittent and unreliable on a standalone basis. Nuclear and large hydro are capable of providing clean baseload generation in BC, Manitoba and Quebec but other jurisdictions aren't as lucky. They'll need to look at SMRs and hydrogen to complement their renewables but will still require occasional reliably and



instantaneously available peaking generation to ensure the lights stay on during winter cold snaps and summer heat waves.

The graph on the left depicts a generic 2045 net zero supply stack. Note how the unabated natural gas is operating in less than 5% of hours, only when needed, but serving a critically important purpose. As different jurisdictions decarbonize at different rates, depending on their past investment decisions, unique natural resource mix and future load characteristics, this is the kind of supply mix transition envisioned by Canada's Emission Reduction Plan and Clean Electricity Standard. Although the relative size of each layer could vary, this picture could equally apply to many jurisdictions in North America. Peaking gas will play different roles depending on the technology makeup of an individual market, but it will still be needed and its emissions can be validly offset when required.

Slide 19

Capital Power's midlife natural gas strategy is designed to help the power grid provide increasingly clean, reliable and affordable power for decades to come by making sure the necessary natural gas backbone supply is available when needed – because somebody's got to do this. If everybody takes the easy road of divesting thermal power and producing 100% renewables, power in places like California, the US Southwest, Northwest and Midwest, Texas, Alberta and Ontario would become both unaffordable and unreliable.

Here are the technologies that Capital Power is researching to decarbonize our gas generation. They'll become technically and economically viable in different jurisdictions at different times, depending on each jurisdiction's geography, natural resource mix and infrastructure, and depending on baseload or peaking applications. For example, DAC will likely become economically viable much sooner as a way to offset aggregate emissions from peakers than as applied to baseload power. Pending commercialization of other fast-ramping technologies that can balance supply from renewables, decarbonized natural gas is the only way to ensure reliability in many jurisdictions.

Slide 20

According to the IPCC, even if the world rapidly reduces or even eliminates anthropogenic emissions altogether, we'll still need to remove carbon dioxide from the atmosphere to have any chance of avoiding dangerous levels of global warming. For example, the United States would need to remove about 2 gigatonnes of CO₂ per year, roughly equivalent to about a third of current U.S. emissions, by midcentury in order to reach net-zero, even with rapid investment in emission reductions. Hence the generous DAC ITC in the Inflation Reduction Act. The Government of Canada also recognized the urgency of carbon removals by offering a DAC ITC in its Budget 2022.

The IPCC report says that, in addition to stabilizing the climate in the near term, carbon dioxide removal will also help to zero out emissions from hard-to-abate sectors in the medium term and could potentially even remove more CO₂ than mankind emits in the latter half of the century. So, all roads point to carbon removal.

While strategies to reduce emissions such as increasing renewable energy, improving energy efficiency and avoiding deforestation, are all critically important, they will not be enough on their own. This is why there's now scientific consensus that both deep decarbonization and scaling up carbon dioxide removal are now necessary to stay below dangerous levels of warming.

<u>Slide 21</u>

Capital Power has therefore begun working on potential carbon removal approaches via both natural and technological means. We're starting to explore with afforestation and wetland management on our reclaimed mine land at Genesee. We're also researching a number of direct air capture technologies to assess which will be best for specific application to Capital Power's portfolio.

Slide 22

Inescapable power system physics explain why Capital Power's pathway to net zero in 2045 focuses in the near term on CCS, on direct air



capture in the medium to long term and eventually on hydrogen blending and hydrogen as fuel.

Slide 23

Capital Power is being asked to consider establishing "science-based targets", but frankly can't. The Science-Based Target Initiative uses a Sectoral Decarbonization Approach, which requires all companies in the power sector to converge to a shared 2040 net zero emission intensity target that will limit global warming to below 1.5° celsius. Capital Power actively supports this goal. However, SBTi would require Capital Power to commit to reduce its emission intensity to 0.1 tCO2e/MWh by 2030 - which Capital Power believes is a possible and desirable goal for the entire electric system but not possible or desirable to enforce on an IPP-by-IPP basis because it would leave nobody to look after the reliability part of the equation. Given that Capital Power's corporate purpose of powering a sustainable future for people and planet requires maintaining reliability and affordability throughout the energy transition, Capital Power is unable to establish a Science-Based Target.

Capital Power believes that the way in which SBTi requires targets to be set ignores reliability and affordability by failing to acknowledge the importance of spinning reserve, blackstart and other ancillary services that only natural gas can effectively provide during increasingly frequent, prolonged weather events as we build out renewables in certain regions of Canada and the US.

Slide 24

In addition to committing to net zero by 2045 instead of 2050, we still remain on track to meet all of the sustainability targets we've spoken to you about in the past. For 2023, we've added that 5% of our Alberta natural gas purchases will be from Responsibly Sourced Natural Gas.

Slide 25

In addition to having a growing portion of our variable compensation determined by our ESG performance, we also have targets for 30% reduction in emissions intensity by end of 2025 from 2022 levels. The 5% natural gas target will be part of our short-term incentive payment measures in 2023, and the 30% reduction target

will be used for our long-term incentive plan performance share units.

Slide 26

In fact, Capital Power is showing continued strong performance in each of the "E", "S" and "G" categories. On the "E" side, in addition to our decarbonization strategy – being off coal in 2023, attaching CCS to our repowered facilities, committing to net zero 2045, tying our emission reduction targets to sustainability-linked credit facilities and our Green Financing Framework, we've also enacted a water strategy to optimize water use across our operations and a sustainable sourcing strategy to improve the ESG performance of our supply chain.

On the "S" side, we have one of the best safety records in the business, as Bryan DeNeve will describe in more detail. We're seeking Indigenous partnership in our CCS and Halkirk 2 facilities, we've again been named one of the world's most ethical companies by Ethisphere and earlier this month we were given Canada's Most Admired Corporate Culture Award for best-in-class Canadian organizations with cultures that help enhance performance and sustain a competitive advantage. That was based in part, on the fact that we're providing Paid Volunteer Time so our employees can be active members of their communities.

Of course, we also lead on the "G" side, having 40% Women Board members, 43% Women Executives and a Board that includes 30% diversity representation beyond gender. We also link both short-term and long-term executive and leadership compensation to environmental and social targets including: 30% reduction in fleet emissions intensity by 2025, 10% growth in women leaders by 2025, and 9% increase in workforce diversity by 2025.

Slide 27

In short, we're extremely proud of Capital Power's continued leadership in sustainability. Now, I'll turn it over to Bryan.

<u>Slide 28</u>

Good morning. Today I'm going to provide an update on Capital Power's operations. The areas I will cover include: challenges in the 2022



operating environment, strong operations performance, planned outage work successfully completed, successful implementation of the Data Operations Center, update on the progress being made on the optimization of our generating facilities, and finally continued strong safety record.

<u>Slide 29</u>

Capital Power has overcome a very challenging environment in 2022. The first challenge has been labour availability across North America. The biggest driver has been the deferral of planned maintenance across most industries from 2020 and 2021 into 2022. It wasn't possible to complete planned outages given the impact of Covid-19 on labour availability and lack of parts required for planned maintenance due to supply issues. As a result, 2022 become an abnormal year for both the number and length of planned outages needed across the economy to catch up on deferred maintenance. In Capital Power's case. the most significant example is the planned outage for Genesee 3 which was deferred almost two full years. The second challenge has been ongoing supply chain issues which have delayed the delivery of parts. In addition to the adverse impact on planned outages, it has also affected the ability to recover in a timely manner from a forced outage.

Inflationary pressures have started to materialize in a number of areas affecting operations expense with the most notable being chemicals and labour costs. There has been more extensive planned outage scope due to the deferral of planned outages as discussed earlier, as well as plant optimization projects such as adding the ability to burn 100% natural gas at Genesee 3.

Finally, Capital Power has seen the operating hours at its units increase materially. This is a result of strong demand recovery across jurisdictions, CBEC being positioned materially lower in the Alberta supply stack and continued retirements of coal fired units. The increase in operating hours and starts results in increased wear and tear which not only affects availability but also reduces the down time available to complete proactive maintenance.

<u>Slide 30</u>

These graphs show the change in plant availability and capacity factor from 2020 through 2023. In 2022, the availability of the fleet has recovered to over 93% despite the challenging operating environment. We are projecting further improvement to our plant availability in 2023 to over 94%. The strong availability in 2022 is a result of the operation team being able to proactively address maintenance issues and when a forced outage did occur, being able to bring the units back in a timely manner.

In terms of capacity factor for our thermal generating units, 2022 is expected to come in at 47% compared to 39% in 2021 which is a 20% increase in operating hours. The majority of the higher operating hours are coming from CBEC and Goreway. This increase in capacity factors is expected to continue in 2023 and then subsequently decline as more renewables are added to the Alberta system. Although the increased capacity factor increases maintenance costs, it is more than offset by the increased revenue.

<u>Slide 31</u>

Availability was critical in 2022 to capture the high power prices across the markets. EBITDA from Capital Power's generating units are projected to be 50% higher than 2021 primarily due to the higher pool price in Alberta. Despite the inflationary pressures, controllable costs on a \$/kW have been maintained at 2021 levels due to Management being able to find cost savings across the organization.

Slide 32

Capital Power has completed four major planned outages in 2022 with a fifth currently underway at the Decatur facility. As discussed earlier, the scope of these outages was extensive given the delay in the timing of some of the outages and the additional found work resulting from the higher operating hours on the facilities. In addition, the Genesee 3 outage included two material optimization projects which were the installation of a more efficient HIP rotor and addition of 100% natural gas capability. Management is very pleased with the successful completion of the extensive planned outage work despite the challenging environment. In addition, completion



of this work positions the company well to continue its strong operating performance in the future. The number and magnitude of planned outages is expected to decline post 2023 following the completion of Genesee 1 and 2 repowering.

Slide 33

This slide summarizes the progress that has been made on Ops2030 which is a legacy program focusing on optimizing our existing generation facilities. Major upgrades that have been completed is the addition of third evaporation pond at Arlington Valley to allow increased capacity factors, upgrades to the Decatur combustion turbines, Genesee 2 LP turbine upgrade, Genesee 3 HIP turbine upgrade and dual fuel transformation at Genesee 3. The combined impact of the projects completed to date is a \$27 million EBITDA lift which comprises over 50% of the Ops2030 target.

<u>Slide 34</u>

Given the addition of a number of combined cycle facilities over the past eight years and the conversion of Genesee 1 and 2 to combined cycle, Management felt it would be timely to create a more effective organization for supporting the generation facilities.

In effect this is a centralized Operations Support Group assembled mostly from existing staff to address the needs of a growing fleet and sharing of ever-changing technology and tools for the broader good of the fleet. While there has been bits and pieces of each of these historically across the organization, there has not been a coordinated and concerted effort to work on them as a fleet – benefiting from sharing of knowledge and economies of scale.

The first area of scope is fleet analytics, monitoring and diagnostics. This will involve ensuring we are capturing the key data elements from our fleet and then applying analytics to find areas of optimization. The company will be using data experts to ensure we have clean and reliable data across the fleet. Using a centralized approach will ensure consistency in data capture and will readily identify common areas of optimization across the assets. The second area of scope is resource sharing and coordination. A key element of this scope is turnaround support. Capital Power recognizes that disciplined, and well executed turnarounds is critical to both O&M cost management and plant reliability. Currently the turnaround support comes from a couple of different groups – once repowering is complete at Genesee, we will move to one team. To clarify, this will be a small group that helps on scheduling, scope development and cost tracking with the majority of on-site support coming from the existing plant staff. The other element is central coordination of technical initiatives that can be more effectively applied across the fleet.

The next area is remote operations and monitoring through the Energy Management and Operations Centre. This group will continue with the real time operations and settlement work they have completed for years but are now adding a much greater focus on 24/7 remote operation and condition-based equipment monitoring. Finally, the Data Operations Center will provide a central reporting function on behalf of the Operations facilities which reduces the administrative work on individual plants managers and ensures consistent reporting across the groups.

Slide 35

Health and safety are core to Capital Power's values. We utilize a HSE performance index of leading indicators that ensures activities such as training and inspections are being completed in a timely manner. This index is tied to our employee short term incentive program. Through October, Capital Power has once again done extremely well on its TRIF target and continues to demonstrate a downward trend in the five-year rolling average TRIF. Capital Power also recognizes the importance of mental health through the roll out of additional mental health services that are available to employees.

Finally, Capital Power recently received Electricity Canada's President's Award for Safety Excellence for companies between 301-1500 FTEs. The President's Award is given to the electricity provider that achieved the top ranking in Total Recordable Injury Frequency (TRIF) amongst



peers of comparable size in the electricity generation category.

<u>Slide 36</u>

In summary, Capital Power continues to strategically navigate and respond to challenges in the operating environment; successfully execute planned outages to maintain and optimize our fleet; remains on track to create \$50 million additional EBITDA by 2030 through asset optimization; successfully implement the Data Operations Centre and continues to improve Health and Safety performance.

<u>Slide 37</u>

This morning Steve and I are going to be talking about a number of our projects in construction and advanced development. Capital Power is executing on \$1.3 billion of growth capex related to current, committed capital investments through 2024, including the Genesee Repowering project which involves the conversion of Genesee Units 1 and 2 from coal fired units to highly efficient combined cycle units. Upon initial simple cycle commissioning of the units, Capital Power will be off coal by the end of 2023. In addition to repowering activities, Capital Power has a number of wind and solar projects in advanced development. We will be providing updates on those projects including highlighting recent contracting activities.

Slide 38

Thank you Chris. We continue to make excellent progress on our repowering project at Genesee. All equipment required for simple cycle operation, except the six transmission structures for switchyard tie-in, is on site. Meanwhile 95% of the combined cycle equipment has been received. This effectively means that all supply chain issues for this project have been successfully overcome.

Simple cycle construction is progressing according to schedule; however, a schedule adjustment has been made to accommodate the later than anticipated completion of the switchyard, which is required for commissioning, and is now scheduled be completed in October and November of 2023 for units 1 & 2, respectively. That said, EDTI has made significant progress on the switchyard since receiving their AUC permit on October 6th. Civil construction is well underway and structural components have begun to arrive on site.

Like our Operations group, labour attraction and retention has been an issue, our project has had to compete with a heavier than normal industrial maintenance turnaround season and construction elsewhere in Canada has attracted a large number of Alberta-based trades. However, since implementing a sitewide premium, we have been successful in attracting all the required trades.

Slide 39

Commissioning of Unit 1 in simple cycle is scheduled for completion in November 2023 and Unit 2 will reach COD at the end of December. Unit 1 combined cycle commissioning will begin in earnest in Q1 of 2024 and followed closely behind by Unit 2. Commissioning timelines for the two units will be coordinated to minimize the impacts on unit availability. Our forecast of \$1.1 billion reflects a modest overrun to the approved budget of \$997 million due to unforeseen complexity and costs associated with the EDTI switchyard.

Despite headwinds resulting from increased switchyard costs and a difficult environment for labor, we are on schedule to be off coal at the end of 2023 and the project's returns remain robust. When we announced the Genesee Repowering project, we indicated that we expected to see levered returns in excess of 20%. The Project's economics continue to be strong with forecasted levered returns, based on the project's actual financing, exceeding 35%.

<u>Slide 40</u>

The Genesee Battery Energy Storage System is intended to maximize our ability to operate above the current Most Severe Single Contingency imposed by AESO. As Brian mentioned at the outset, several parallel efforts are underway to reduce or eliminate the operational gap and eliminate the need for BESS.

For one, AESO has embarked on a process to engage stakeholders with the intention of improving grid stability which may result in an increase of MSSC.



Meanwhile, Capital Power is investigating options of implementing other operational means of providing primary and secondary grid frequency support. And if Capital Power were to move forward with our CCS project, the parasitic load will consume some of the excess power, bringing the plant's net output closer to the current MSSC of 466 MW.

Slide 41

Our three solar projects under advanced development in North Carolina have been impacted by significant cost increases since the contracts were executed. We continue to work on optimizing the projects and are evaluating the potential impact of enhanced tax credits under the Inflation Reduction Act. At this point, two of the three projects remain challenged. We are currently exploring options, including delaying the projects' COD for a year to 2025, a potential sale of the projects or a build-transfer.

Clydesdale Solar is quickly progressing towards COD, having achieved our 'first-power-to-grid' milestone on November 3 at Clydesdale 1 and on November 21 at Clydesdale 2. We are on pace for achieving commercial operation by the original schedule date of December 31, 2022. Our forecasted final cost for Clydesdale Solar remains consistent with our Q1 project update. A recent project cost analysis revealed that COVID-related materials and shipping impacts were responsible for virtually all of the cost overruns. Capital Power, therefore, remains confident in our ability to assess project capital cost going forward.

We are currently negotiating a contract for the substantial portion of the remaining output for the Clydesdale solar project, which Steve noted, is expected to reach COD later this month. Together with the previously announced contract with Labatt's, we expect almost all of the Project's 75 MWs will be contracted.

Slide 42

We have also recently executed a long-term agreement for our Halkirk 2 wind project with an investment-grade counterparty with further details to be provided shortly. Our Halkirk 2 Wind project is progressing though late-stage development as we optimize layout, embark on technology selection, and begin geotechnical testing. Our AUC amendment application was submitted in October and approval is expected in Q2 or Q3 of 2023, to align with the beginning of civil construction. The lion's share of construction will occur in the summer of 2024, leading to COD in December 2024.

Slide 43

In summary, Capital Power remains on track to meet our off-coal commitment by December 2023. We continue to successfully progress our diverse development pipeline; we remain confident in our ability to successfully design and construct solar projects and to secure long-term contracts with credit worthy off-takers for our generation assets.

Slide 44

I will now be speaking about Capital Power's growth – briefly discussing our track record then focusing on our development pipeline, highlighting a number of near-term opportunities. I will also talk about our current opportunities in Ontario and discuss our recent acquisition of Midland Cogeneration Venture and the MISO region which is the most recent example of executing on our mid-life gas strategy.

Our growth strategy remains the same. We continue to pursue both renewable and natural gas opportunities. On the renewables side we are focused on development of wind, solar and storage projects underpinned by long term contracts. At the same time, we continue to pursue strategically important mid-life gas assets in markets with strong fundamentals that support recontracting. We also continue to invest in our assets. The repowering underway at Genesee is a prime example. As Brian and Sandra will be discussing later, we are also pursuing carbon capture at Genesee. I will be highlighting additional investments that we expect to make at our Ontario facilities to position those assets for recontracting

Slide 45

Our contracted growth has been through a combination of acquisitions of renewable and natural gas assets and the development and construction of renewable projects. Since 2013, we have added 7 gas facilities and 11 renewable facilities, 9 of which were constructed by Capital



Power. All of these assets are supported by longterm contracts with strong counterparties. Together, these assets are forecasted to contribute \$885 million of EBITDA in 2023. We are well positioned to continue this growth trajectory, with many actionable near-term opportunities.

Slide 46

The Inflation Reduction Act in the U.S. and recent proposals by the Canadian Government will further accelerate renewable and storage deployment across North America. In August, the U.S. Congress passed the Inflation Reduction Act which was then signed into law by President Biden. The IRA, touted as the single largest investment in climate and energy in American history contains a number of provisions to stimulate additional renewable deployment, including: a stand-alone ITC for storage and extension of ITCs and PTCs through 2032, with Enhanced tax credits for domestic content and for projects located in areas identified as "energy communities". Although the IRA did not make the renewable tax credits refundable, it does include provisions for the transferability of tax credits, which, pending finalization of enabling regulations, may offer an attractive alternative to traditional tax equity.

In Canada, the Fall Economic Statement included a proposed Clean Technology ITC, providing a refundable tax credit equal to 30% of eligible investment in wind, solar and storage projects. Given our pipeline in Canada and the U.S., we are well positioned to participate in the accelerating build out of renewables and storage.

Slide 47

Capital Power's robust development pipeline includes significant wind, solar and storage opportunities as well as expansion at some of our existing gas facilities. The 4.7 gigawatt pipeline includes over 1800 MW of opportunities in Canada and 2800 MW of opportunities in the U.S. Many of our U.S. sites are located in energy communities which will qualify for the enhanced ITC.

We expect to continue to add to our renewable development pipeline and building on our success

contracting our Canadian renewables projects, we are increasing our U.S. origination capabilities. As highlighted by the map, we have significant growth opportunities in Western Canada, Ontario and the Northern MISO region. With an excellent pipeline and a strong track record of development, Capital Power is well positioned to continue to meet and exceed our committed capital target of \$600 million.

Slide 48

The pipeline includes a number of near-term renewable opportunities that we expect to be marketing in 2023 and which could receive a final notice to proceed within the next 18 months. These projects include the 400 MW Aldersyde Solar project; Whitla Solar, which will share interconnection infrastructure with Whitla Wind; and Rolling Hills Wind.

Each of these projects could reach COD in 2024 or 2025. As with other Alberta renewable projects, including Clydesdale Solar and the Halkirk 2 Wind Project, both of which were advanced on a merchant basis and have been or will soon be contracted. If the economics are supportive, we will consider advancing these project on a merchant basis, while continuing to market both energy and renewable attributes. To date, we have approved approximately 420 MWs of renewable projects in Alberta on a merchant basis and subsequently contracted 336 of those MWs.

Saskatchewan, like other regions is planning for the transition of its power system. By 2030, SaskPower is planning to retire 1,400 MW of coal, while adding 3 gigawatts of wind and gas. We expect a RFP from SaskPower in 2023 seeking 700 MW of renewables including 400 MW of wind and anticipate bidding our two winds sites into that process

Slide 49

In the United States, we also have a number of near term opportunities some of which we have highlighted here. In the Pacific Northwest, Nolin Hills is a large opportunity consisting of 300 MW of wind, 300 MW of solar, and potential for battery storage. We are currently discussing the project with commercial offtakers. In MISO we have a number of near-term development sites, which we



are currently marketing and which we plan to offer into RFPs in 2023. The Ironwood project located in Florida, is a large development opportunity that we acquired as part of a larger pipeline. Given the dynamics in that region, the project is expected to be developed on a build transfer basis. Capital Power would collect a substantial development fee that we would expect to reinvest in our renewable pipeline.

Slide 50

Shifting to Ontario, last year we commented on the looming capacity gap in the Province. To fill that gap, the IESO is embarking on its largest capacity procurement in over a decade seeking to procure 4000 MW of new capacity by 2026, including 1500 MW of new natural gas and 2500 MW of battery storage. The IESO has announced three procurement streams pursuant to which it expects to procure capacity in 2023: First, Same Technology Upgrades which involve uprates at existing facilities targeting 300 MW of incremental natural gas with uprated projects eligible for contract extensions though 2035.

Second, the IESO is running an Expedited Long-Term RFP process designed for on-site expansions and new greenfield resources that can deliver projects in 2025 targeting 1500 MW, including up to 600 MW of new gas. Third, is a Long-Term RFP process which like the Expedited process is designed for on-site expansions and new greenfield resources but with a delivery date in 2026 targeting 2500 MW, including up to a maximum of 600 MW of new gas capacity.

Under the Expedited and Long-Term RFPs, gas units will be contracted through 2040 and batteries will be eligible for contracts through 2047. Capital Power is well positioned to successfully participate in each of these procurements.

Slide 51

Our existing Ontario thermal fleet is well position on the Grid, located in areas where the IESO has identified capacity needs. East Windsor is located in the Windsor-Essex area and both York and Goreway are east of the FETT interface in the GTA where most of the new supply is needed to support growth. Given their favorable position and the benefits of using existing site infrastructure, we expect to be successful in the IESO processes.

Across our three thermal sites, subject to confirmation of interconnection capacity, we have identified up to 660 MW of battery and natural gas capacity, including uprates and up to 395 MW of new capacity at Goreway, up to 165 MW of batteries and uprates at York; and up to 100 MW of new capacity at East Windsor. The current opportunities at our existing Ontario assets highlight the value of owning strategic, wellpositioned assets. We expect that our most recent acquisition in MISO will yield similar opportunities in the future.

Slide 52

On September 23, we announced the acquisition of Midland Cogeneration Venture along with our partner Manulife Investment Management. MCV is a strategically significant 1633 MW cogeneration facility located in Midland, Michigan which provides steam to important industrial customers and 1240 MW of capacity and energy to Consumers Energy. Excess capacity and energy are sold into the MISO market. MCV is a critical resource providing reliable, dispatchable generation, which will become even more important as more coal is retired and renewable penetration increases in Michigan. In 2023, MCV is expected to contribute approximately \$85 million to AFFO.

Slide 53

With a population of 10 million people, the state of Michigan has a slightly larger power load than Alberta. Michigan's energy production has historically been from 60-70% coal and nuclear. Going forward, this provides a favorable dynamic as the older coal and nuclear facilities are retired and replaced with renewable resources.

Summarizing the most recent capacity auction that saw a number of regions, including Zone 7 where MCV is located clear at the price cap. MISO noted although installed capacity has increased in the last five years, accredited capacity has decreased due to thermal retirements and the increasing transition to renewables, resulting in higher capacity prices.



This trend is expected to continue until more reliable generation is added. The strong pricing reflects the substantial value large reliable gas facilities provide to transitioning power grids.

Slide 54

Continuing coal retirements expected in MISO and specifically in MISO Zone 7, along with the expected acceleration of renewable deployment create a very positive recontracting environment for MCV. Given its criticality to the grid and importance to local industry. MCV has a long history of successful recontracting, including the recent 10-year extension signed in 2021. MCV has multiple avenues for future recontracting.

There are two large investor-owned utilities in Michigan, both of which are expected to require additional capacity in the middle of this decade. Michigan is also home to many municipal utilities and co-ops which will also require capacity. Competitive retailers serve approximately 10% of the Michigan retail market. Finally, there are liquid bilateral capacity markets and annual Planning Resource Auctions in MISO. As noted, the most recent auction resulted in several MISO zones, including zone 7, clearing at the price cap.

Slide 55

MISO market dynamics, with significant coal and nuclear retirements, position us well to advance our MISO renewable development pipeline, including a concentration of sites in the Northern MISO region. Capital Power has over 600 MW of solar and storage sites in Northern and Central MISO, including sites in Michigan, Indiana, and Illinois, some of which could COD as early as 2025.

We are currently preparing offers for RFPs and seeking Commercial and Industrial customers to contract the projects. There is also the potential for a significant expansion at MCV with an opportunity to add approximately 500 MW of new reliable, flexible gas generation. Given its strategic location and existing infrastructure, expansion at MCV is expected to be attractive to potential offtakers. Additional generation could reach COD as early as 2026. Capital Power's gas strategy involves identifying assets like MCV that are critical resources in markets with strong fundamentals; assets that are well positioned on the grid with a high likelihood of recontracting. We optimize and add value to our natural gas assets through our engineering, operations and commercial expertise. Last year during Investor Day, I discussed the recontracting that we had accomplished at Decatur extending that contract through 2032. I also indicated that we were discussing a potential contract extension for Island Generation and that we were bullish on the prospects for recontracting Arlington Valley.

Subsequently, in January we executed a six-year extension to the tolling agreement for Arlington Valley extending that contract through 2031. In May, we announced a 4.5-year extension of the Island Generation contract and continue to pursue a longer term extension.

As noted during my discussion of our Ontario assets, Goreway, East Windsor and York are well positioned for contract extensions through a combination of uprates and expansions either through the addition of new gas units or batteries. Our natural gas assets will continue to provide reliable dispatchable power to facilitate the energy transition. As Kate's presentation highlighted, in the future we anticipate having options to decarbonize our assets capitalizing on the valuable existing site infrastructure and existing interconnections.

<u>Slide 57</u>

Capital Power has a very robust opportunity set providing significant opportunities for further recontracting and growth. We expect to reach Final Notice to Proceed on at least two renewable projects in 2023. In Ontario, we are well positioned to extend the contracts at our facilities and add additional capacity.

In MISO, we see significant opportunities to optimize MCV, advance our solar and storage projects and potentially add incremental gas generation. In Alberta, we are progressing our Genesee 1 and 2 repowering project; continue to pursue CCS; and advance and contract our renewable projects. Finally, we continue to grow

Slide 56



through accretive natural gas acquisitions. Our prospects for future growth are bright.

Slide 58

Thank you Chris. Capital Power's Genesee carbon capture and sequestration project has reached a major milestone. Based on work to date and meeting internal criteria, Capital Power's Board of Directors has approved a limited notice to proceed.

Slide 59

Those criteria, which we have been very public about, have been met. We still have a long way to go to make a final investment decision, but every element continues to be promising. In terms of the Front-End Engineering Design or FEED study, it is progressing well. This mid study review did result in an increase in cost of approximately 10% to \$2.3 billion largely driven by increasing our cost of materials and labor. We have also concluded, given government funding is involved and the construction cost pressures, we should move the full notice to proceed to Q3 2023 when we would have greater certainty around costs.

The work with Enbridge is also going well. They are commencing the required geological testing to prove out the integrity of the pore space. The various forms of Government support we were anticipating is materializing including the stabilizing of carbon pricing. In addition to the significant carbon reduction benefit the project represents a \$2.3 billion investment with almost 600 person years of construction per year over the three years of construction and approximately 50 permanent jobs.

Slide 60

The technical side of the project is going well with Kiewit and Mitsubishi continuing to execute the FEED study based on Mitsubishi's amine technology. To date they have not encountered any showstoppers. However, there remains significant technical aspects to be confirmed through the FEED study. These include cycling capability and steam utilization. As the bulk of the FEED study moves to completion next summer, we will negotiate performance guarantees for the facility. We expect performance guarantees relating to cycling, cost performance and a carbon capture rate which we expect to be at least 95% under a full load.

An important part of Capital Power's due diligence is understanding the Petra Nova carbon capture and utilization project. The Petra Nova project utilizes the Mitsubishi technology and is the closest in size to each of our two trains. We are comfortable that it had worked as expected which was confirmed by a U.S. Department of Energy Review. The reason why it operated for such a short time was the performance of the enhanced oil recovery element of the project. A Capital Power team visited the facility and validated that it did operate as expected.

<u>Slide 61</u>

The Enbridge Open Access Wabamun Carbon Hub was one of the first hubs approved by the Alberta government and is approximately 10 kilometers from Genesee. Enbridge has completed a class 5 engineering study and we have reached a commercial arrangement with Enbridge for the geotechnical due diligence. Enbridge also has an agreement with Indigenous communities for an ownership position in the hub.

Slide 62

From the outset, Capital Power has experienced significant engagement and support from the Federal Government. A key component of that support was the 50% refundable Investment Tax Credit. We have had extensive conversations with Innovation, Science and Economic Development Canada and applied to the SIF Net Zero Accelerator process. We received approval November 8th to move to the next round which would result in a letter of intent for preferred financing, with further due diligence leading to a term sheet. We have also been in very active discussions with the Canadian Infrastructure Bank which has also been very constructive.

The last element of support we have been seeking was an agreement on carbon price assurance. We and others have been referring to this as contract for differences. In the Fall Economic Statement, the Canadian Government indicated that the Canada Growth Fund would be established to provide contractual carbon



assurances. So how do these financial initiatives come together?

Slide 63

This pie chart lays out what we expect to happen and parallels our application to the SIF process. The ITCs are expected to cover approximately 42% of the capital cost based on 85% of project costs meeting the ITC gualification. Beyond ITC's, we expect government sources collectively through the SIF and CIB components to cover half of the remaining project or 29% of total capital requirements. We expect that the government funding would be committed at final notice to proceed. Therefore, the remaining funding requirement, is around \$600 to 700 million, or equivalent to around one year's growth financing, which would be funded by a combination of Capital Power and an Indigenous ownership participation.

The carbon price assurance piece significantly reduces the risk of the project and is seen as a mechanism to achieve required returns. At this point, the expected level of carbon price assurance necessary to make the project work is well below the 2030 Federal \$170 per tonne carbon tax. At this point we see the project risks related to project size and technology that are higher than our current business and therefore would seek contractual support to provide risk mitigation and levered returns that are commensurate with the risk profile.

Slide 64

In summary, we are very pleased to announce today that we have limited notice to proceed on the Genesee CCS project based on very good progress to date. Our ambition is to become a leader in Canada on CCS and the government programs though the ITC and CCFDs, and funding through CIB and SIF, support the project economics.

Slide 65

The Alberta power market is poised to move through its normal cycle over the next few years. Heading into 2023, forward prices continue to move around in a wide band that has ranged between \$125-150/MWh over the last few weeks. Demand growth is forecast to increase modestly year over year which makes the bigger storyline the supply side where approximately 6800 MW of new supply is under construction and expected to enter the market over the next few years. Without increased demand, these additions will disrupt the supply stack. Capital Power is well positioned to excel in the market in both the near and longer term.

Slide 66

Third party forecasts and the forward prices observed in the market show high power prices continuing into 2023. A lack of liquidity beyond 3-4 years makes forward prices less reliable as denoted by the dotted line from 2026 onwards. The strong prices in the near term are underpinned by higher carbon costs, natural gas prices remaining strong and incumbent generators bidding strategies as older units approach the final years of their economic useful life.

Market prices are expected to moderate when additional supply is added around mid-decade. The most notable thermal additions in the forecast include Cascade and Genesee repowering in 2024, and the Suncor Cogen project in late 2025. Over the same two-year period, there are approximately 2,600 MW of renewables scheduled to come on-line.

Capital Power's execution of long duration origination deals is how we are reducing price risk during this period of lower prices. After reaching a low in 2026, the market will continue to progress through the cycle with supply-demand balance being restored by 2028. Power prices in the back end of the decade also reflect higher carbon price and an expectation of a modestly more stringent baseline as well as volatility from the increase in renewables in the system.

<u>Slide 67</u>

The market tightness, measured by the number of hours when the reserve margin is less than 12%, was much tighter in 2014 before the 800 MW Shepard facility came on-line. While the market isn't experiencing the same level of tightness today, as mentioned, the higher prices are driven by other factors beyond market fundamentals. Healthy market dynamics will mean that the



supply additions and slower demand growth will lead to retirements.

<u>Slide 68</u>

The timeline of unit additions and retirements from 2015 to 2032 is shown on this chart. Over that time horizon, most of the activity is in the five-year period between 2021-2025. In 2021 and 2022, you see coal facilities being retired or converted from coal to gas. In 2023, Genesee 1 and 2 retire as coal units.

The bright green bar represents the growth in renewables and the orange bars show the additional gas supply additions which in 2024 include Cascade and Genesee repowering. The Cogen in the teal bar reflects Suncor in 2025, as the last major addition to the system. In the end, Capital Power's portfolio will be very well positioned occupying the bottom of the gas supply stack.

<u>Slide 69</u>

The change in supply mix from today to 2025 to 2030 is shown on the pie charts. Today approximately 25% of generation is supplied from coal and converted gas units. In 2025, the supply mix has only 3% of generation coming from converted gas units while efficient natural gas increases from 60 to 67%, and wind and solar double to 21% and 4%, respectively. Looking out to 2030, converted gas drops to only 1%, wind and solar contribute a combined incremental 5%, making up 29% of generation and unabated natural gas declines to 55% with Capital Power's Genesee CCS facility supplying 10% of forecast generation. As Kate mentioned, natural gas is the backbone of the system for the near future.

<u>Slide 70</u>

There are currently 34,000 MW of projects in the AESO queue with approximately 6800 MWs under construction. Over 20% or 1300 MWs of construction belongs to Capital Power. We continue to lead capital investments in Alberta, committing more than \$3 billion in capital since 2012. The recently announced ITCs in Canada is expected to accelerate the timing of the buildout of renewables. However, projects will be transmission constrained which will limit the number of renewables that can be built, absent major infrastructure additions. The frequency of both low-price hours and high-price hours will increase with higher renewable penetration since wind and solar supply are very highly correlated in their generation in Alberta. Capital Power's highly efficient and responsive fleet is well-positioned to capitalize on the price volatility having the capability to ramp down during low-price hours and ramp up quickly in high-priced hours.

Slide 71

Genesee Repowering will significantly reduce carbon emission and increase competitiveness as depicted with a pre- and post-repowering view of variable cost in this comparative illustration. Assuming a modest assumption for an increasingly more stringent carbon pricing framework and escalating carbon price, carbon compliance costs will increase, however, Genesee competitiveness will increase relative to marginal thermal unit. Efficient Capital Power units will experience margin expansion even as power prices decline.

Slide 72

In summary, as the Alberta power market cycles through the decade, Capital Power's highly efficient and responsive fleet and hedging strategy will increase our competitive position in the market as we continue to thrive as a market leader, even through the period of lower prices.

Slide 73

Now I'd like to talk about our financial performance. Today you have heard how Capital Power is pursuing initiatives that will move us towards net zero by 2045. Our accomplishments to date are delivering an average annual Total Shareholder Return of 14% since our inception in 2009, which is above our long-term target of 10% to 12%.

As 2022 draws to a close, strong fleet wide performance has led the Company to materially outperform our targets. 2023 is expected to carry that momentum forward with financial targets above the 2022 forecast. This strong cash flow will fund committed growth capex, the annual dividend and strengthen the investment grade credit metrics which positions us well to execute on a growth target of \$600 million.

Slide 74



Our financial strategy remains consistent with the principles we have shared with you in the past. In addition to taking actions to de-risk our cashflows, liquidity from cash on hand and capacity on our \$1 billion of credit facilities and a well-laddered debt maturity profile provides financial stability and strength moving forward.

Our priority is to fund a net zero future in a costeffective manner. Our capital allocation model continues to direct 50% of AFFO towards funding growth with the balance going towards dividends. Our access to capital markets remains sufficient to fund our growth. In September, we issued the first hybrid green bond in Canada that raised \$350 million to fund eligible renewable projects as outlined in our green framework.

Our investment grade credit rating remains a top priority for Capital Power as it provides stability to the dividend and allows access to the capital markets at competitive prices. Credit metrics are exceeding rating agency thresholds for our current rating. Disciplined growth and financing plans are centered around the objective to remain investment grade. Dividend stability is important to our investors, making it a key component of our financial strategy. The dividend is supported by reliable cashflow and has a targeted payout ratio range of 45 to 55%.

Slide 75

I would like to briefly touch on the balance of 2022 before moving on to the outlook for next year. After the release of our Q3 earnings, we increased our guidance for the second time this year, which moved AFFO and adjusted EBITDA up 31% and 16%, respectively from our original guidance at last year's Investor Day. Increased scope of work, supply chain and inflation pressures resulted in higher sustaining capex that was more than offset by higher operating results. With one month left in the year, based on current forward prices, we are projecting to finish at the upper end of the guidance range for AFFO and adjusted EBITDA.

Slide 76

In the five years since 2018, adjusted EBITDA and AFFO have grown at a 15% and 16% compound average growth rate, respectively.

During that time, we have averaged approximately \$685 million in growth capex per year to drive the growth and as Bryan discussed, continuous optimization of our fleet has added to our value creation.

In 2023, the year over year increase in adjusted EBITDA of 13% is driven by the contributions from a full year of Midland Cogen and Clydesdale Solar. The 2023 AFFO guidance of \$805 to 865 million is 6% above the midpoint of the revised guidance and 38% above the midpoint of the guidance provided this time last year. Later, I will speak about the offsetting impact that tempers AFFO growth relative to adjusted EBITDA.

On an AFFO per share basis, the 5-year compound average growth rate in is 8%. Over the same 5-year period, the average annual total shareholder return is 25%, as Brian noted earlier. Consistent with prior years, the financial targets do not include contributions from new growth that may arise in the year, which in 2022 for example, increased Q3 guidance by \$35 million of adjusted EBITDA with the acquisition of Midland.

<u>Slide 77</u>

2022 is trending to be our strongest year for financial results since our inception in 2009, eclipsing 2021. In 2023, results will further raise this high-water mark with an increase in adjusted EBITDA of approximately \$165 million compared to the midpoint of our revised 2022 guidance, which represents a 13% increase over 2022. The guidance for next year is based on forward power prices of \$136/MWh and results would fluctuate by \$25 million with a \$10/MWh change, based on our current position. At this time, we are well over 80% baseload hedged, which reduces the volatility in our results. The year over year changes in adjusted EBITDA are made up of several factors as shown on the waterfall chart.

Firstly, new assets in 2023 include the full year of Midland and Clydesdale solar. These facilities will contribute approximately \$115 million in adjusted EBITDA compared to 2022. The Alberta portfolio will see an overall increase of approximately \$75 million, which includes the optimization of GHG credit inventory discussed as part of our Q3 results. These uplifts are partially offset by



contracting and re-contracting activity. Most notably the blend and extend contract at Decatur and the contract renewal for Island Generation. The last block represents expected escalation of G&A costs such as property tax, insurance, and salaries, which also reflects headcount increases to address the volume and level of complexity of work that the company will experience over the next few years.

Slide 78

The original 2022 AFFO guidance had a midpoint of \$605 million, which was increased by 31% to \$790 million in Q3 of this year, as shown on the first bar of the chart. The waterfall chart shows that for 2023 the year-over-year AFFO increase is up modestly to the 2022 revised guidance. Beyond the large uplift from adjusted EBITDA, the most significant variance year-over-year is higher current tax expense to be paid in 2023.

Strong earnings in 2022 resulted in a higher tax expense, which is payable in 2023 and therefore, reduces AFFO in the year paid. As Capital Power became cash taxable in Canada partway through 2021, the year over year variance for AFFO's current tax expense is a one-time step up impacting 2023.

Capital Power's business model avails the company of various tax opportunities that are expected to reduce current tax in the upcoming years. In Canada, this includes: the accelerated tax depreciation on capex for wind, solar and battery developments; investment tax credits for wind, solar and battery investments; carbon capture ITCs and Scientific Research and Experimental Development ITCs.

Lastly, the increase in financing cost in 2023's AFFO is mainly due to the full year of interest on the hybrid bond issued in the third quarter of 2022. As this offering replaced the two series of preferred shares that were redeemed, the higher interest is offset by the lower preferred share dividends.

<u>Slide 79</u>

On this slide you will see our updated presentation of the Alberta Commercial Portfolio's forward position presented with hedged volumes versus hedged percentages. The change in disclosure is expected to provide increased clarity of our hedged position. The chart shows hedge volumes and forwards prices as of mid-November. Since that time, we have seen higher forward prices relative to the \$136/MWh.

The current hedge position for 2023 is 10,000 gigawatt-hours (GWh) in the high-\$70/MWh range. Hedging has increased for 2024 to 6,500 GWhs in the mid-\$60/MWh range and 2025 is 5000 GWhs hedged in the mid-\$60/MWh range. In addition to the remaining open baseload position, gas peaking and renewable assets are available to capture the higher power prices. The hedge strategy provides stability by reducing fluctuations in cashflows and optimizing price and volume positions that mitigate against price changes and market illiquidity.

The hedged position includes longer duration Origination contracts as another mechanism to manage price risk. The graph on the left shows the relative magnitude of hedges that are long duration and extend out to the years where we will see lower prices. Although the position has been hedged more than this time last year, financial results remain sensitive to movement in the Alberta power price.

Natural gas prices will have an increasingly more material impact on our financial results as we transition off coal. Natural gas volumes of 50,000 TJs in 2023, 60,000 in 2024 and 50,000 in 2025 have been hedged at favourable prices relative to the forwards. Over the next three years, our exposure has been hedged at a price below \$3/GJ compared to forwards above \$4/GJ.

<u>Slide 80</u>

At Investor Day last year, Capital Power provided dividend guidance for a 5% increase per year out to 2025. In July, when we announced our 9th consecutive annual dividend increase, we raised it to 6% and changed our annual guidance to 2025 to remain at 6%. The payout ratio, excluding incremental growth, is forecast to average 40% over that period which is below the target AFFO payout range of 45-55%.

Slide 81



The financial outlook for 2023 provides sufficient funding for financial obligations and growth capex from AFFO without needing to access the capital markets. The forecast assumes a modest draw on our \$1 billion of credit facilities to manage any incremental spending. Financing in 2023 is limited to the Series 3 and 5 of preferred shares which are expected to reset at a level that would be inside a new issue.

Executing the growth target of \$600 million will alter our financing plans and as you would expect, will be dependent on transaction timing and whether we see development projects or an acquisition. The capacity available on the credit facilities allows for opportunistic timing to put permanent financing in place should we continue to see volatility in the capital markets next year. The recently announced ITCs in Canada are expected to be in the Federal Budget next spring and will have a positive impact on our funding program for renewables.

<u>Slide 82</u>

The capital program for Genesee repowering and the renewable development projects Chris and Steve spoke to earlier, have \$1.3 billion of spend remaining. This is spread over the next two years with \$545 million forecast for 2023. The capital program has the U.S. renewables projects that would seek a Tax Equity partner early in 2025, based on the original timeline and may fund approximately 50% of the project, depending on ITC qualifications. As Chris and Steve mentioned, the decision around the North Carolina solar projects and the battery solution at Genesee are subject to change which could alter the amount and timing of spend related to these announced projects.

Slide 83

Capital Power has well spread-out debt maturities having pushed out the tenor for recent issuances beyond 10 years, in the historic low interest rate environment and has flexibility for tenors in a rising rate environment. There are no debt maturities in 2024 and the company has substantially hedged the underlying Government of Canada rates for the 2024 and 2026 refinancing's at levels well below the current rates. As noted earlier, we have strong liquidity with full availability of our \$1 billion sustainability linked credit facilities which were extended through mid-2027. Capital Power has maintained strong credit metrics that are well above rating agency thresholds for our current rating.

Slide 84

In summary, we expect to finish the year at the upper end of our updated guidance ranges for AFFO and adjusted EBITDA. 2023 will see extremely strong cash flow leading to a year over year increase in adjusted EBITDA of over 13%, with AFFO up 6% from the midpoint of 2022's revised guidance. We will fund growth capex with internally generated cash flow, without the need to access the capital markets making us well positioned to execute on our growth target of \$600 million. And finally, we have maintained our guidance of a 6% annual dividend increase through to 2025. I'll never turn it back over to Brian to close.

<u>Slide 86</u>

Thank you, Sandra. This morning you heard Kate speaking to the magnitude of the challenge we all face with climate change but also the critical role natural gas has in decarbonization. Chris spoke to the tremendous opportunities we have in front of us with both renewables and natural gas generation growth. What you heard on what's evolving at Genesee is simply amazing. Bryan spoke to the continuing drive we have on operational excellence. You heard from Sandra how well positioned we are in the Alberta market including our aggressive hedging and how we will continue to be the best positioned in the Alberta market for years to come. This all comes in part from a resilient strategy, but also from the fact that optimization, or the drive to do better in all parts of our business, and innovation, or doing smart things with the technology available to us, is actually in our DNA.

<u>Slide 87</u>

This translates into great operations from well positioned assets which leads to a very strong financial outlook. Sustaining capex is rising associated in part with inflationary pressures but also additional assets in the fleet. Facility availability at 94% is modestly higher than 2022. Adjusted EBITDA is up over \$300 million from levels we were talking about this time last year



and over 13% higher than our revised guidance for 2022. A similar story for AFFO.

Slide 88

We expect 2023 to be a very significant growth year for Capital Power. In addition to maintaining our expectations on Genesee 1 and 2 repowering and the Halkirk 2 windfarm, we hope to move forward in 2023 on the Genesee CCS project and the Carbon Conversion Centre. From a more conventional perspective we expect to move forward on at least two renewable projects and be successful with our Ontario developments which would contribute to our \$600 million committed capital target. And as always, the potential for additional natural gas acquisition opportunities is in the background.

<u>Slide 89</u>

As Kate outlined, we are continuing to make great strides on the ESG front. Our outlook for technology and natural gas generation has evolved to where we are comfortable in moving to being net zero by 2045. We have a new Sustainable Sourcing Policy and one of our first steps is to target 5% responsibly sourced natural gas in Alberta. We have established a Green Financing Framework to utilize in addition to the sustainably linked financing we have in place. We have furthered our ESG targets including incorporation of our long- and short-term incentive targets and we are doing well against existing targets.

<u>Slide 90</u>

When you aggregate what Capital Power has achieved and what we have been saying and doing for the last number of years it has driven very strong, sustained total shareholder performance. On a 2022 year-to-date basis, we lead our peers at 20% while the average is minus 6%. Over five years, we are at an annual average of 25% versus a peer average of 9% and since inception we have delivered a 14% annual average TSR.

<u>Slide 91</u>

This strong performance is a result of a resilient strategy teamed with disciplined execution. As we look forward our natural gas strategy will continue to add value and we certainly see it generating growth in Ontario. We expect significant renewables growth in 2023 with an expectation that the growth thereafter should be escalating. We continue to be well positioned in the Alberta power market and our position will be greatly strengthened with the completion of Genesee 1 & 2 repowering. Our expectations of moving forward with Genesee CCS is among the reasons why we are a leader from an ESG perspective. We are taking action to move all three ESG dials. In summary, a proven track record, a stable, resilient strategy and the best outlook we have ever had, is why Capital Power is a very attractive investment opportunity today.

Question & Answer Session

Randy Mah

Okay, welcome back everybody. Before we start the Q&A session, we're going to have a few comments from Sandra, Chris and Brian. So over to Sandra.

Sandra Haskins

Hi, good morning, everyone. Thanks for coming out this morning. So a couple of things I just wanted to touch on before we open it up to broader Q&A. Firstly, just with respect to the Alberta power market. So you would have heard in my presentation that we prepared our guidance based on \$136 per megawatt Alberta power price. You go back a number of weeks ago at the beginning of the month, we were actually seeing prices hover around \$120 per megawatt hour. They then sort of climbed up to that mid-\$130s, at which point we kind of locked down our guidance for the year. Since that time and including today, we are seeing prices around \$150 per megawatt hour. So I just wanted to speak a little bit about the implications of that on our portfolio as well as on our guidance and kind of how we view the market and what you've seen in terms of forwards.

So firstly, I would just say that the fundamental view of power prices, whether you're looking at 2022 and certainly as you look out into 2023, they are being driven by a number of factors from bidding behavior, a view on weather, a view on supply additions and that's created a lot of volatility in the prices and moved it up to the \$150.

Likewise, in 2022, we are seeing that same sort of escalation in forward prices, but what we are



seeing is that prices aren't necessarily settling at that forward price point. In fact, the last number of months, coming to a year with a mark on forwards and the settles are coming in around 70% or 80%. So based on that, we do still see upside if we were to settle next year at \$150 per megawatt hour. The expectation is that it would be difficult from a liquidity perspective for us to really go out and transact necessarily at that price. So to sort of lock in that higher price right now is somewhat challenged. But we would have to see that captured on our wind facilities as well as our peaking facilities next year to really get the full upside to \$150.

So having said that, I would say that should we see continued prices at \$150 and not have them sort of revert back to \$130 or some other level that it would push us to be higher in our guidance range, absolutely. But from our perspective, just being able to transact at that level as well as the liquidity and the extreme volatility that we continue to see. So very easy for us to go from \$150 down to \$130 or even below that. So expect that as we go through next year, we will see a lot of volatility continue in our power prices but at a very high level. And as you would have heard, we feel that locking in our strategy where we are -- will create a very good year for us whether or not we're able to even capture more upside that's being presented by the \$150. So that's kind of our view on power prices and the volatility around the power prices that we're seeing and how that would impact our guidance. So from my perspective, I wouldn't look to change our guidance or our midpoint, but just indicate that not unlike 2022, if we do see those settles come to fruition, then we would certainly have a much stronger year than even what we are guiding to currently.

The second comment I wanted to make was just around Chris' comment that he made with respect to the levered returns that are being forecast for Genesee repowering. So back when we announced the project, we had indicated that we were seeing levered returns above 20% based on actual financing somewhere between our deemed structure and no equity depending on internally generated cash flow. As you know, over the last couple of years, as we've been working through that project, and we've seen very strong internally generated cash flow. And therefore, the equity that is actually being attributed to the project would be the issuance that we did last year of \$288 million plus the proceeds from the DRIP that we had for a number of quarters.

So when we look at those equity raises and apply it to the development capex, including repowering that we had in place, the actual equity component of the Genesee repowering is closer to about 20% as opposed to our original guidance would have been more around a 30% assumption on equity.

So that 35%-plus return assumes that our financing is based on our actual structure. The other thing that really has changed the economics as you may recall that when we announced that project, carbon tax was expected to go to \$50 and hold. So we've seen an uplift in the project economics based on current carbon tax policy, which makes it even more lucrative in the near term, in particular, with being more efficient and having --capturing that upside as well as power prices in the province. So it's a fairly different landscape. And all of the changes that we've seen in the market fundamentals are positive to that project as well. So that's kind of how you get to the above 20% to above 35% actual returns on Genesee repowering. So very deep in the money. The calculation also assumes that we are still proceeding with the battery. So there's capital costs included in that number that would relate to the spend on battery that as you heard this morning, there may be a path forward that would not include battery storage, and therefore, that would further move the economics around.

Randy Mah

Okay. Thanks, Sandra. Over to Chris Kopecky, who will be joining us virtually.

Chris Kopecky

Thanks Randy. Good morning, everybody. I just wanted to give a brief update on the Ontario procurement processes. Last night, we received deliverability results from the IESO. And based on



initial assessment of the results, we would expect to bid in a minimum of 300 to 350 megawatts of capacity in the form of operates, batteries and new gas across our three facilities. Our estimate would be an expected capital cost of between \$450 million to \$500 million for those projects. And as I suggested in my presentation, we think we're very well positioned for success across all of our facilities. Thanks.

Randy Mah

Okay. Thanks, Chris. Brian?

Brian Vaasjo

Thank you Randy. I did want to make some comments about the CCS project and FEED study and where we're at and sort of connect some of the dots as we sort of go down this path. So we announced that our forecast capital cost has moved up to about \$2.3 billion. And that actually was tremendous news to us. I think as many of you know, as you go through the project definition and FEED studies and so on, there's a lot of moving pieces. And when we first announced that the project was going to be in the order of \$2 billion, that estimate was plus or minus 40%. Actually, it was more plus than minus. And so when you come in at that close to that number, we were actually very, very pleased with that.

The other thing that you don't see is it also -operating costs are looked at again as they relate to the FEED study. And at this juncture, there was actually the equivalent, if you put it in a capital cost terms, a \$100 million reduction in operating costs. So net-net, the economics of it held pretty darn tight to where originally we thought. So right now, and just to put it into context, we've gone from plus or minus 40%. This estimate that we have now is probably plus or minus about 20%. So taken half the variability out of our cost down to a much lower number and when we get to a final notice to proceed, our expectation is that the numbers from a capital perspective will probably be in the order of about plus or minus 5%. So much, much lower. And that's one of the reasons why we moved from full notice to proceed in the summer to a little -- well, from actually, we're talking about June to more in the third quarter. And the reason for that is they

continue to refine numbers and to get them much, much tighter. And a lot of the reason for that is because there's obviously significant government involvement. And just to sort of connect the dots on how we look at it and how we expected it to come about. So first of all, any of the capital costs that we have, especially the increases will tend to be costs that are eligible for ITC. So right of the get-go, half of that would be funded through the ITC of any capital cost variance.

And then, of course, there's the funding that Sandra was talking about that we're expecting from the government. And again, we expect that to be reasonably flexible. I mean there's obviously a limit to what the government would support and would fund. But I think once you continue to be in the same zone, I think we're pretty comfortable that the governments will come along with us. And the other thing, when you start lining it up and then you think about what is the return, our return expectations, which will be based on, ultimately, the risks we'll have relatively low capital cost risk. We expect virtually no carbon price risk, et cetera. We'll have to make an assessment as to what would be the required return for you, for our investors for that kind of venture.

The last factor to kind of put into place is what is our carbon assurance and at what level. And that's what would sort of shore up the economics. So again, as long as these numbers stay within a reasonable zone, and I think as Sandra commented, we're looking at a -- let's call it, a stabilized carbon price at significantly less than \$170 a tonne. We'll have a project that moves forward, and we'll get government support and we'll drive the economics at the back end. So I wouldn't get overly concerned if you see numbers move around and we have different numbers as long as they're sort of in the zone and there's these avenues of government support that continue to support us. And I think you could tell from the news releases and I'd sav our conversations with the government is they are very, very pleased with this project and see it definitely being one of the ones that moves ahead very quickly in their processes. So all of that to say, I wouldn't get fussed by seeing modest



changes in numbers because there's a lot of factors that will sort of mitigate that from an investor perspective. So just wanted to sort of connect some of those dots and put the FEED study into context. Thank you.

Randy Mah

Okay. Thanks, Brian. We're ready to start taking your questions. There are a couple of roaming mics. So if you have a question, please raise your hand. And if I can ask you to identify yourself before asking your question.

Brian Vaasjo

Yes. We can't see you. This is like being cross examined by the police.

Robert Hope

Rob Hope from Scotia Bank. Thanks for hosting us once again in person. First question is just regarding if you've had any discussions with the Alberta government? They have been commenting on both potentially reviewing the electric market there as well as the MSA had noted that Q3 was quite impacted by market concentration issues and bidding behavior.

Sandra Haskins

Yes. So as far as discussions with the government, everything we're hearing is that the market is operating well. You have heard the government talk about introducing some relief for electricity bills, which we think will be on the retail side as opposed to the wholesale side. So not expecting anything there. I think what you see and what we spoke to this morning is that prices in Alberta are expected to come back to more normal levels once you see the supply additions come through. And so I think there's that view that the market will adjust. Longer term, will there be tweaks to the energy-only market with respect to some of the mechanisms? I think that's -- it's the market's been in effect for over 20 years. It's not unreasonable to assume that you might see something with respect to price floors, price ceilings or eventually a payment for capacity to make sure that you've got reliability in the system. So all of those things out in the future. But in terms of the near-term higher prices, it seems to

be more focused on support for retail prices versus the wholesale market.

Robert Hope

All right. And then maybe a follow-up question. Just in terms of the Genesee project, it looks like the cost increase was largely out of your control with the switchyard. But we are seeing cost increases at a number of projects in Alberta. So can you maybe walk us through whether there's a contingency there as well as kind of how you're dealing with labor issues at the site to ensure that it kind of remains on schedule and at the revised budget?

Steve Owens

Sure. I'll take that. So currently 95% of our costs are actually fixed under the (inaudible) agreements. So that reached a balance, which is typically considered OE response to project infrastructure management, stakeholder relations, IT, that type of thing. So we're quite confident that we have the majority of costs locked down. When it comes down to labour availability

Randy Mah

Rob, I'm not sure you heard that.

Brian Vaasjo

Actually, Steve, I think you have to do something. You're not quite coming through very clear.

Steve Owens

Okay. So let me reiterate then. About 95% of our costs are fixed under the EPC agreements. That leaves just the adverse cost effectively which is project reconstruction management, stakeholder relations and IDC, which is relatively small number. That being said, we do see labour availability as a key risk for the project going forward. We do have a program in place for retaining and attracting trades. We'll be keeping a (inaudible), further attract and retain or we still have the luxury of being able to put on things like night shifts and extended adverse (inaudible) to the ultimate schedule. But currently, we're trending on (inaudible) schedule of the month.

Brian Vaasjo



So maybe I can summarize. So the situation is 95% of the costs are locked, labor costs and labor availability, we think we've dealt with. We saw some challenges early in the project, and we took some action around premiums, et cetera, which seems to have dealt with that issue. But there is generally in Alberta and across Canada labour challenges. And so that may impact us later in the project, although we don't think so at this point in time. But that is the only variable that's out there, and that can impact a little bit on schedule as well if you don't have the labour there to actually execute the project. But we do believe we've got some slack in around the middle of the project that we could absorb some modest delays in timing and still meet our final completion of simple cycle units. So I think that pretty much summarizes where our risks are on it. But certainly, on like the steel, there's no risk anymore, virtually no risk.

Randy Mah

Okay. Next question.

Mark Jarvi

Mark Jarvi from CIBC. First question, maybe just Sandra, if you could clarify on the returns for Genesee. You talked about the levered return. What about unlevered just so we can take out sort of the change in the equity considerations there?

Sandra Haskins

Yes. I can get back to you on that if you want standalone economics on them.

Mark Jarvi

And then, Brian, in terms of some of the items you talked about to move forward on full notice to proceed on CCS. One of the items on that list is ITC eligibility. Can you clarify that? And what your updated views on that?

Brian Vaasjo

So that's simply -- we haven't seen the detailed rules that say this cost or that. So for example, a FEED study, we believe is excluded. And so it's just what's included and not included - very technical side of it. But the project itself is by and large, eligible for ITC. So that's just, I'd say, minor tax element of just seeing the detailed rules.

Mark Jarvi

Got it. And then in terms of the opportunities in Ontario and the contracting, which could include some uprates or capacity on the gas side, how do we think about the carbon exposure there in terms of contracts and what happens down the road as the sort of the stringency starts to change over time?

Brian Vaasjo

Generally, the carbon -- in our contracts in Ontario, the carbon exposure is actually the IESO's responsibility. There are some elements around ramping and so on in the setting up of intensity for the units. But generally speaking, that risk all flows back to the IESO. There are some, I'll call it, operational type aspects of it that would -- of the carbon side, that would fall to us, but it's not a material risk to us.

Mark Jarvi

So your understanding would be any new contracts awarded would still have that same...

Brian Vaasjo

Yes. I mean we think any contract that we'd enter into with new capacity would generally not result in a significant renegotiation of the existing terms and conditions, it would be more blend and extend or that kind of arena as opposed to fundamentally changing the agreements. If that issue was opened, we'd probably push for them having 100% of all responsibilities from the environmental perspective just simply because they run the dispatch. We don't dispatch these units in Ontario and therefore, whether you dispatch it efficiently or inefficiently, those decisions are theirs, not ours.

John Mould

John Mould, TD Securities. Maybe just starting with the CCS project. I'm just wondering what's looking like the gating factor to that project at this point. And I'm wondering in terms of being online end of 2027, I'm wondering if that's the CCS, the carbon transportation storage side, not maybe the Enbridge projects specifically, but just more your thoughts on whether the province as a whole is going to process that element of CCUS at a pace



that's going to get this online at the end of '27. Like how are you thinking about the risk of transportation and storage and your overall project valuation?

Brian Vaasjo

So obviously, when you look at our project, our piece of it just to start there. It's on our own land. We've got great relationships with our neighbors. We don't anticipate any local pushback whatsoever. And when you think of it, fundamentally, and where do you have often resistance in projects. First of all, we will have a significant indigenous participation. So would expect the indigenous community to be very supportive.

In addition to that, this is a good project. It's environmentally extremely positive as opposed to -- often the view on a number of different projects as they're negative. And so we don't see that there'd be any issues from our perspective. When you look at the Enbridge project, first of all, the length of pipe is only 10 kilometers, they won't have a big issue. And a lot of that's our land that it crosses and again with indigenous participation already in their project, we see that overall, it will have a lot of the same positive sentiments.

The idea of burying carbon in Alberta, it's already happening. There's already a pipeline now that I think they buried 4 million tons cumulatively, and that will continue, and there's a lot of projects hinged around that. And we're not seeing any pushback whatsoever so we think it's a relatively clear sailing. I mean there is an issue and the Enbridge is going through its geotechnical work or will be going through it to actually prove out and make sure that the formation that they're targeting is one that will sustain receiving and holding the carbon. But the geology underneath Genesee and in that area is very well understood because it's been an oil and gas field for many decades. So again, we're feeling pretty confident that, that part of it will go without issue or concern. And relatively clear sailing, we're just not seeing or hearing anything that would raise its head as a significant problem.

Okay. Great. And then maybe just moving on to sustaining capex, looking at last year's Investor Day deck, you showed a pretty big drop for '23 and '24, I think kind of \$55 million for this year, then \$69 million for '24 and you're guiding for about \$140 million next year. And I know you commented on additional assets, on inflation, I'm just wondering if you can kind of unpack that a little bit more for us where the puts and takes are. And kind of what the read-through is for a steady state kind of level of sustaining capex?

Sandra Haskins

Yes. So it absolutely is the LTSA on Midland that is the biggest year-over-year increase from what we would have guided last year. So continue to see sustaining capex as very fluid in terms as we forecast those projects, they tend to move between years and this year and -- this year being 2022 and 2023 are sort of the high watermarks. So expect it to come down a bit. What we are seeing is more and more of our maintenance capex is under LTSA. So we're seeing less volatility in those numbers. But the run hours drive some of that as well. So given that our assets are experiencing higher generation has increased the LTSAs as well. So that's sort of what's driving up 2023 in addition to Midland and see that we expect somewhat of a step down from 2024 onwards.

Maurice Choy

Maurice Choy from RBC. First question is on Genesee CCS. Sandra, in your prepared remarks, you mentioned that you aim to get a return that commensurate with the risk profile for this project. I guess if you look across the spectrum of risk and return for existing projects and assets from contract renewables, all the way to merchant thermal, where would you place this Genesee CCS project?

Sandra Haskins

Yes. So it would be higher than a merchant project as I think what we're sort of targeting at this point. Where we actually land is going to really depend on how the contractual elements of the project come together and what sort of risk mitigation is in any one of those given components. But at that point, we would have a

John Mould



financeable project but still seeing it's a project that is large in size. There's technology risk, there's construction risk. So given all of that, we would expect something that would come in above our merchant hurdle rate of 10%. So something north of that is probably where it will land. But as I said, there's a number of moving pieces on the financing side that will ultimately determine what we need to see for a return.

Maurice Choy

Speaking about moving pieces. What can you say about the carbon CFD, how that might be designed or implemented in practice, especially to help you maintain your projected returns if indeed costs do rise during construction?

Sandra Haskins

Yes. So what that actual mechanism would look like is unknown. We do know that the Canada growth fund is looking at being the counterparty. They don't see it as a one size fits all. So they will -- it will be project-specific. We'll start those discussions in the coming months. But as we've said, one thing that our modeling shows at this point is that the price would be below the \$170 carbon tax in 2030. And just exactly whether that's a collar or what have you, that's still to be determined. So from our perspective, there's a number of different approaches that would work. But still to be determined.

Maurice Choy

Great. And my second question, it's on CCS and more broadly, it's clear that you get good support for this project. And Kate, you mentioned that generation from unabated gas generation is about to reduce over time. I guess besides this project, are you expecting CCS to be deployed anywhere else in your portfolio? How do you factor it into your mid-life natural gas strategy as you acquire these assets?

Kate Chisholm

We do plan to deploy it in our portfolio, where and when is still the subject of much study and analysis, and so stay tuned.

Brian Vaasjo

One opportunity that is popping up, and I think you've probably seen it in the press and in federal announcements is that the Shepard facility is also at this point in time going through the process of commencing a FEED study. They've gotten provincial government support funding for a significant portion of that. And of course, we're 50% of that project. So they're leading it, and we're obviously involved in it. But I would say, in general, it's probably a year behind where Genesee is. So that may well come to fruition and be another asset of ours that has CCUS.

Randy Mah

Okay. Next question right in the middle there.

Ben Pham

Ben Pham from BMO Capital Markets. Maybe start off, Ontario. How would you characterize how competitive the RFP is going to be? Is it capacity-based revenues you're expecting? And then what's the biggest development risk you expect?

Chris Kopecky

We do expect to be very competitive process. As we suggested a number of times in the presentation and I'll reiterate now, we think there are significant advantages from having existing infrastructure and the ability to utilize existing interconnection positions. In addition, as we highlighted, we believe that our sites are extremely well positioned on the grid. When we factor in all that, we expect to be successful even though we expect it to be a very competitive procurement. And we do expect it to be -- as Brian suggested, for the contracts that are existing contracts, they will be -- we expect them to be just extension and refinement of those contracts rather than a whole new construct, still waiting on the construct for storage. The RFP has not been formally announced, but we do expect it to be capacity-based compensation.

Ben Pham

Okay. Maybe next question for Sandra. I'm curious, when you think about hurdle rates, returns, whether it's Genesee 1 or 2 or renewables, are you always making a decision based on your deemed capital structure? Are you



looking at actual structure when you make that allocation?

Sandra Haskins

Yes. When we're looking at a project, we'll look at the deemed structure just so that we have comparability across projects when we're looking at where to allocate our capital. But we typically would do an actual financing scenario as well based on what we're seeing. But yes, as far as capital allocation, we use the deemed structure just to have that baseline to compare various opportunities on an equal footing.

Brian Vaasjo

I think maybe to add to that, when we talk about meeting our hurdle rates, that's always on a deemed basis. That's not on an actual financing basis. So that is the discipline that we have. But obviously, when we're looking at accretion and other elements, the actual financing tends to be more relevant than the deemed.

Ben Pham

Maybe I can just squeeze one more in on renewables. Are you seeing any issues around procuring panels, turbines, any supply chain issues around renewables?

Steve Owens

Well, I can start. So currently, we're looking at a number of different options, especially on modules for U.S. projects versus a number of issues that our hurdles that have to be overcome. But we are in discussions with some domestic panel manufacturers that seem to have the capacity to meet our needs. From a wind standpoint, not at this stage, our discussions with the major suppliers seem to be that they're capable of meeting our needs as well. We are seeing some upward movement of pricing, but at the same time, they're looking at forwards. And they are anticipating anyway seeing some of those costs come down in the future.

Randy Mah

Okay. Next question.

Naji Baydoun

Good morning. Naji Baydoun, Industrial Alliance. Just starting with Midland. You mentioned potential expansion there. I think it's something that's been explored in the past, done successfully by the previous owners. Maybe you can just talk about what's changed at Midland or what different strategy you can bring to the table to pursue an expansion there?

Chris Kopecky

You are correct. I think it is something that has been pursued in the past. What we're seeing is as Kate has suggested growing recognition to gas is likely to be needed for a longer period, coupled with additional announcements of both coal and nuclear retirements. We view Midland as a very important and interesting asset, which has benefits from extreme flexibility. So we view it as something that's actually complementary to the build-out of renewables in MISO. And we think as the transition to more renewable grid continues to progress, the Midland is quite well positioned for future success.

Naji Baydoun

Just as a quick follow-up on that. Do you expect the completion of this sort of project in 2026? Or are you looking to maybe advance some contracting initiatives next year on Midland?

Chris Kopecky

Well, we have some excess capacity that is not contracted. So we are marketing that. I don't expect -- it's probably unlikely and premature to think that we would be in discussions to renew the largest contract there that was just renewed in 2021. But in terms of additional capacity, we would expect to be bidding into the RFPs and having a conversation around contracting the capacity in the near future.

Naji Baydoun

Okay. And then just the last question is on the increase in the committed growth capital, \$600 million instead of \$500 million. Just maybe more details on how you land in on that number and how you think about priorities in terms of either asset class or jurisdictional diversification?

Sandra Haskins



Sure. So the \$600 million, it's driven by a couple of things. First one, if you go back over the last number of years, our target has always been \$500 million, but our actual committed capital on an annual basis has been closer to \$700 million. So it's the high \$680s million or \$690 million per year. So the target sort of reflects more or less our run rate as well as just a recognition of our higher internally generated cash flow. So typically, we'd always looked at our capital allocation being 50-50 between growth and dividends and look at that, meaning that if you were to lever up that discretionary cash flow for growth, that got you to the \$500 million. With the increase in our discretionary cash flow, our payout ratio is actually lower. We have more internally generated cash flow to allocate to growth. So it felt like it was prudent to increase that target to sort of align with the funds that we have available as well as what we've been executing on as a part of our track record.

Patrick Kenny

Pat Kenny, National Bank. A question for Mr. DeNeve. Bryan, just wanted to clarify if the Data Operations Centre is incremental to that \$50 million EBITDA target from the Ops 2030 program. Maybe just a bit more color on how we should be thinking about quantifying the financial benefits of the Centre over the coming years.

Bryan DeNeve

Yes, it will be involved in both the optimization or betterment of projects as part of Ops 2030. So certainly, it is part of that evolution. But it also will create some additional value outside of Ops 2030. And a lot of that will come to cost savings we can realize through remote operation of some of our facilities, better and less risky turnarounds, and also more proactive maintenance that will help improve availability. We haven't quantified a number on that on an annual-benefit basis. But certainly, there are benefits incremental to Ops 2030.

Patrick Kenny

Okay. And then maybe just a quick follow-up on the North Carolina projects. And I'm not sure who wants to take it, but maybe just a bit more color on the options being pursued with Duke, how flexible the terms of the contract might be in order to mitigate some of the pressure here on returns? Or is there a way to settle with Duke and walk away or at least defer the project until the economics come back?

Brian Vaasjo

So generally speaking, we are in conversations with Duke and probably talking about it in public doesn't help us per se. So I think it's more stay tuned to where we go with that. I mean there are different things that are happening in the environment that help the project and others that don't help the project. So again, there's a lot of moving pieces and certainly wouldn't want to publicly comment on the discussions that we're having with Duke. Sorry, Pat, but I guess stay tuned.

Randy Mah

Any other questions? One on that side there.

Mark Jarvi

Mark Jarvi, again here, from CIBC. Just on hurdle rates, just curious, how would you frame the expectations for new capacity on gas in Ontario versus battery or new contracted renewables, how those square up?

Sandra Haskins

On -- sorry, a hurdle rate for gas versus battery?

Mark Jarvi

Yes or contracted renewables. I mean, if they're essentially 100% contracted, how do you square those up in terms of just the, I guess, the technology risk or terminal value risk on those?

Sandra Haskins

Yes. So for any technology or fuel type, we do risk adjust so we would have a specific hurdle rate for each technology. So we've worked through the various risks on the project, including the technology risk and adjust our hurdle rate. So the contracted hurdle rate would be down around the 6% to 7%, and then we would look on what -- if there are any project-specific risks related to that and adjust it, but they'd be sort of similar in terms of range.



Mark Jarvi

And then when you're thinking about the mid-life gas acquisitions, they've gone quite well in terms of the recontracting capabilities and optimization. So when you see how you've been able to drive returns on those, how has that framed your outlook in terms of what you're looking for in transactions? Are you, I guess, coming greedier and expecting more from those transactions as you do deals? And how does that framework evolve in terms of M&A pursuits?

Sandra Haskins

I think over the last number of years, we have started to get a little more optimistic on some of our assumptions just with respect to site value in recontracting where maybe originally, we were somewhat more conservative on the back end of those acquisitions, but certainly seeing now that there is a lot of terminal value in the sites and the recontracting ability of them is something else that we feel much, much stronger about than we may would have been, say, you go back 5 years when we sort of started down the mid-life natural gas strategy with Decatur, for example.

John Mould

Just a follow-up, John Mould, TD. On your 2023 financial guidance, just curious at Genesee. The amount of coal versus natural gas, you're expecting to comprise your generation, both at the units undergoing the repowering, but also at the unit 3 now that it's fully dual fuel.

Sandra Haskins

Yes. So for next year, we still do see the use of coal at the facility. So it's going to depend on where we see natural gas prices coming in as well as we do have a number of hedges. There is the ability at Genesee 3 to be both gas or natural gas through 2023, at which point we will be closing the mine and there will be no coal beyond that. So for Genesee 1 and 2, as you know, we're limited to 25% natural gas until they are repowered. So there is definitely a limit on how much natural gas we can burn at those facilities until repowering is complete later next year.

Randy Mah

Any final questions? Okay if not, I'll turn it over to Brian for closing comments.

Brian Vaasjo

Thank you Randy and thank you for everybody who's here with us today and certainly for those who are connecting with us virtually, very much appreciate you making the time today to listen to an update of the Capital Power story and where we're going and where we've been coming from. And I hope you sort of share our sentiments that we've had a quite a stable history in terms of what we're doing and what we're trying to do. And our story is not really changing that much. It's evolving. And as we've talked about the path to decarbonization and that road or some people call it a snake diagram, we've been following that and we're actually the early versions of that were 8 years ago.

And we're continuing down that path, and that path is accelerating every year a little bit more as evidenced by our move to being net zero in 2045, but also in terms of what we're doing from a technology perspective, going through CCS and seeing that evolve and getting significant support moving forward with our views on direct air capture and where we may be able to apply that. And we're doing things around our future. We're looking at oversizing the pipe that Enbridge might put in place so that we've got greater capacity to take carbon at that site and bury it, whether it's through direct air capture. We're doing something with Genesee 3, but just having greater capacity to sequester carbon.

So when we're looking at the Midland site, we're looking at what are the opportunities there. And what are the opportunities here in Ontario. We expect some significant work being done from a hydrogen perspective. So we see that as being a very, very significant part of our future. But underpinning that, our natural gas acquisitions that just make a significant amount of sense in the markets that we're in. But a lot of our narrative now has been on natural gas and carbon mitigation and so on.

But we also don't forget our renewable side. And as Chris laid out, we've actually got a tremendous



outlook for the renewables side. We've got a great pipeline that we've developed over the last couple of years, and I think a number of you have heard me in quarterly calls and on one-on-one sessions suggesting that we might have pulled the trigger on an additional renewables project this year. And from our perspective, it's just basically been timing. We're very, very optimistic about next year and our renewables growth and even more optimistic after that in terms of great growth. So we're sort of -- we're kind of seeing that we're running, basically each of our strategies is coming to fruition.

And our positioning in Alberta, as Sandra has identified and you kind of see through the eyes of the repowering of Genesee 1 and 2, it's a tremendous future. When you make an investment that takes a coal asset and converts it to natural gas, even without CCUS. And by the way, that 35% is with no consideration of CCUS. That's a stand-alone return associated with the repowering project, the positioning it at the bottom of the stack and having expanding returns associated with greater margins because of its efficiency. Here just -- again, we look down every single avenue of the corporation, things are looking tremendous, and our general outlook is, as you see in our financial expectations, and when we talk about our growth, we do see that the outlook for Capital Power has actually never looked better.

So again, thank you very much for your time today, and for those who are staying for the tour, I think you'll see an excellent asset, a great one for us here in Ontario. And again, very much appreciate your time today. And best of the holiday seasons for you all. And I think everybody, everywhere is deserving of a tremendous break. Everybody has been extremely busy, but again, best of the season to you, and thanks again for taking the time today to hear about the Capital Power story.

Randy Mah

Okay. Thanks, Brian. Just a quick schedule. The lunch is ready outside. The presentation by the guest speaker will start in noon. And then the bus will be ready for boarding for the Goreway tour starting at 1:00 o'clock and it will depart at 1:15. Okay, so we'll see you this afternoon.