Site C
Technical Briefing

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Deputy Minister to the Premier
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BRITISH COLUMBIA

After review by BCUC, meeting with Treaty 8 First Nations, advice from independent experts and lengthy deliberation

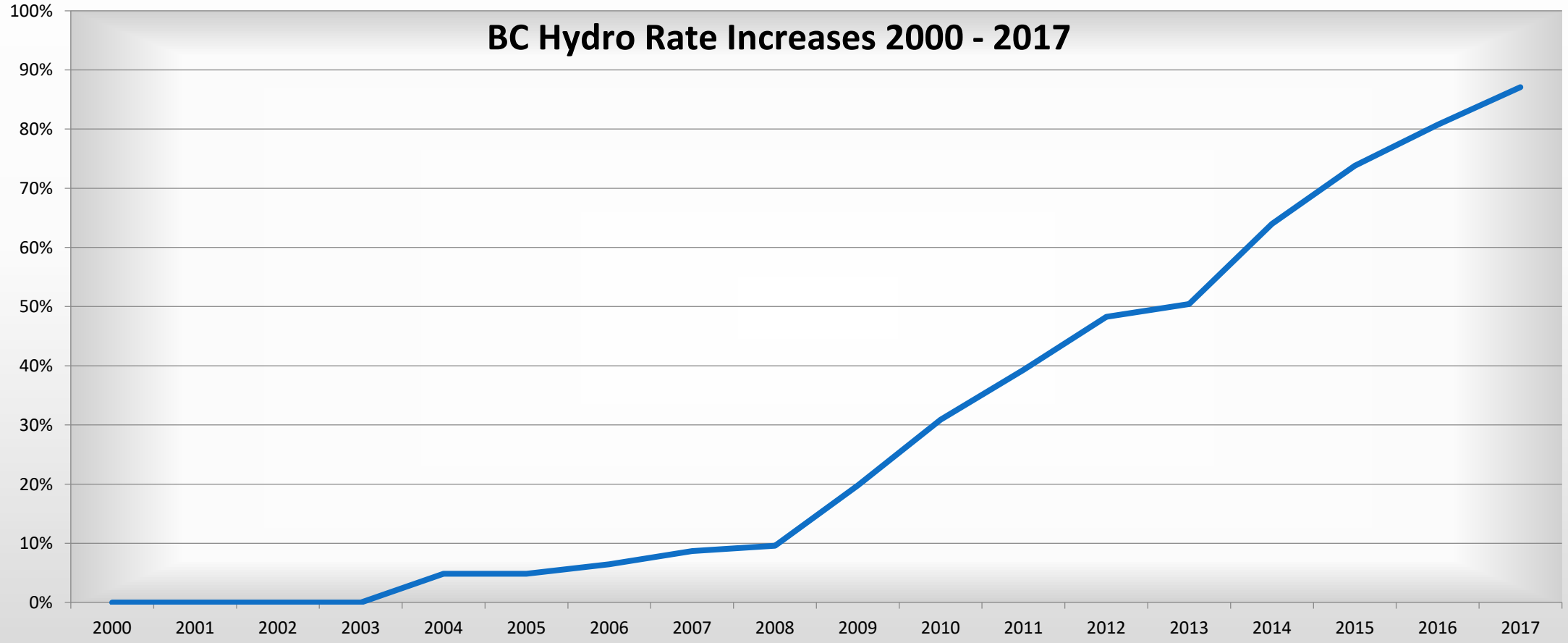
Cabinet has made the difficult decision to complete Site C construction

Outline of Technical Presentation

I. Historical Context
II. Government's Decision Criteria
III. Revised Cost Estimates
IV. Ratepayer Impacts
V. Fiscal Impacts/Risks
VI. Concluding Comments

I. Historical Context

Hydro Rates Have Been Rising Significantly Since 2003



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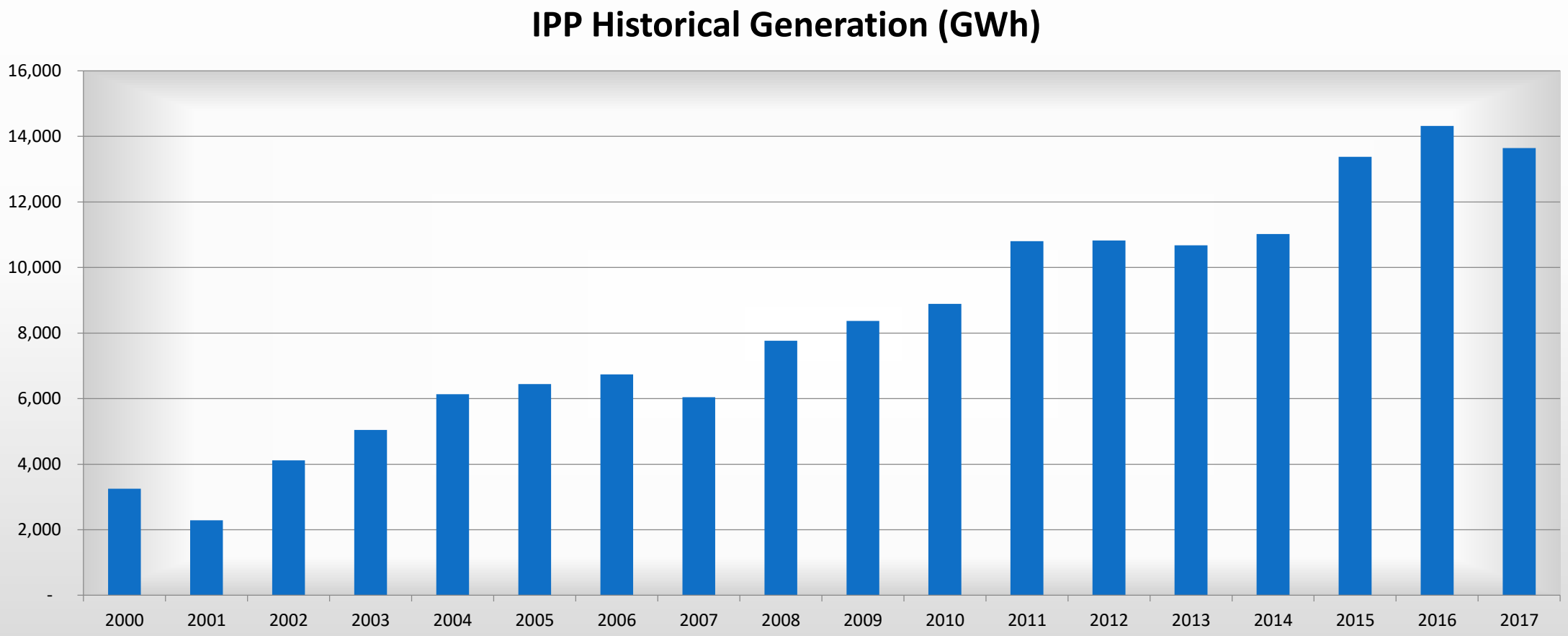
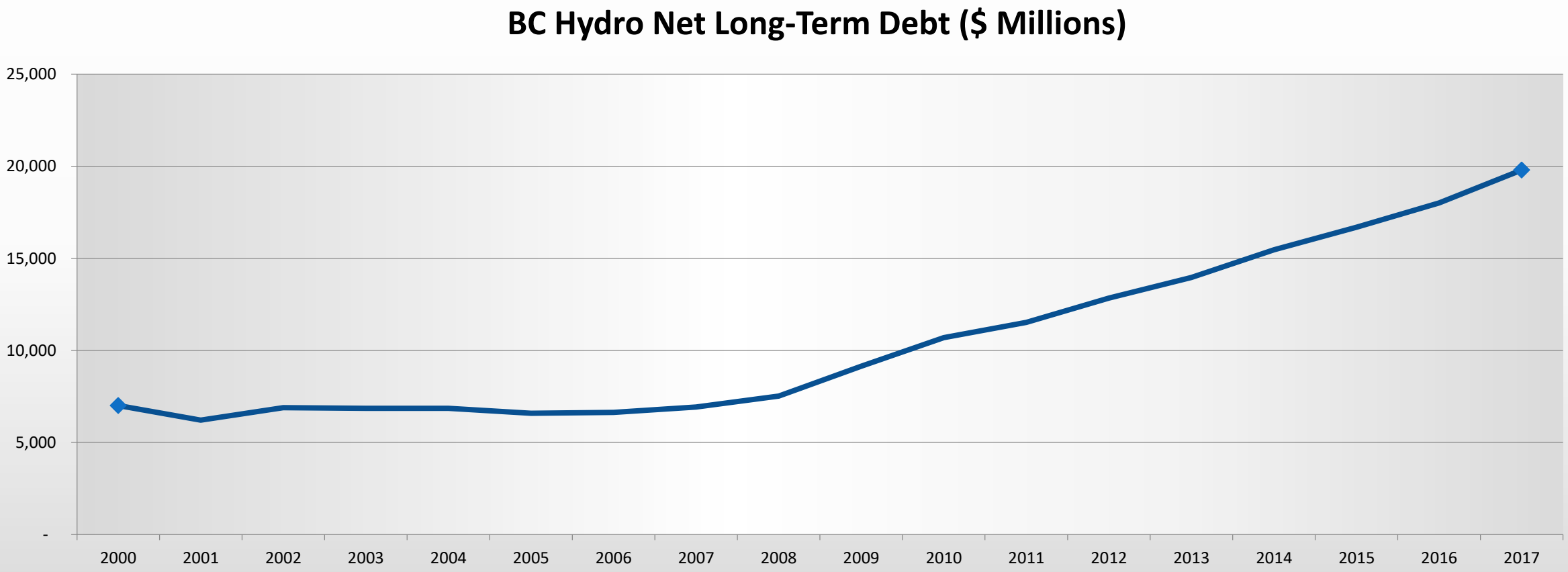
New Power More Expensive Than Heritage Assets

Heritage Assets	Average of IPP	Projected Site C
$32 / MWh	$100 / MWh	$60 / MWh

IPP Share of Supply Growing



BC Hydro Debt is Growing



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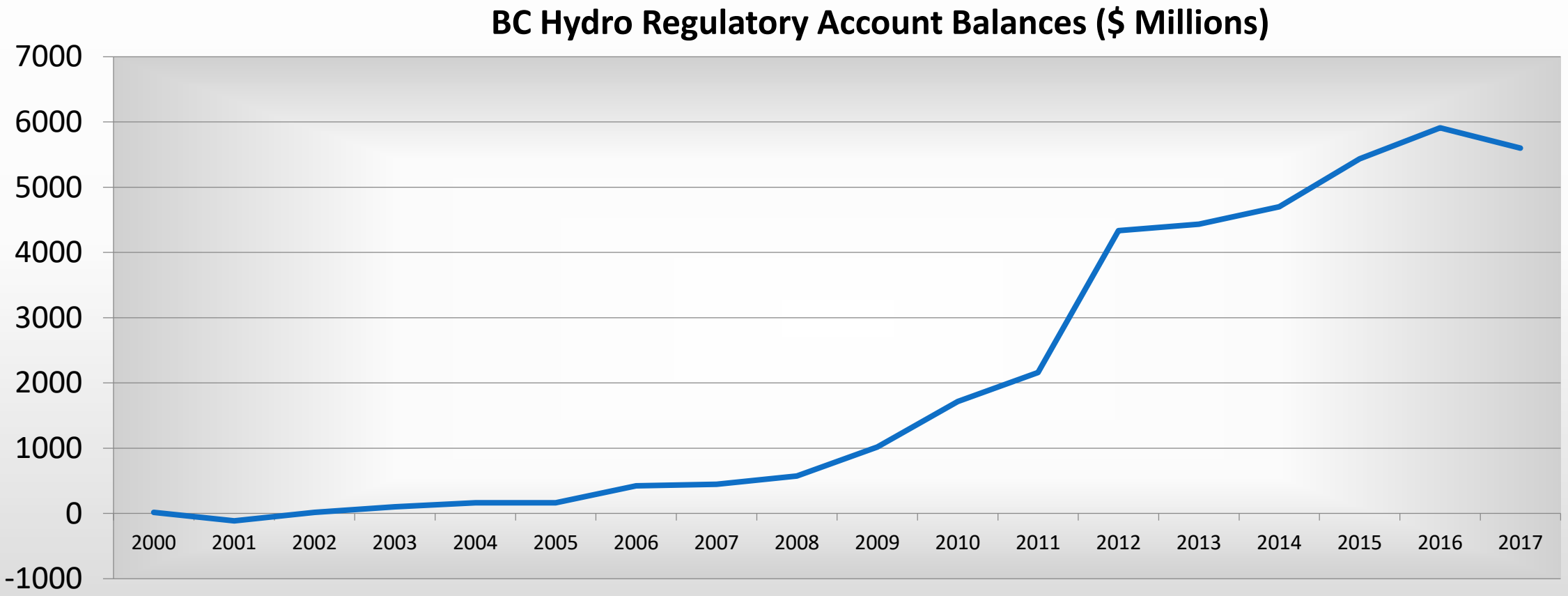
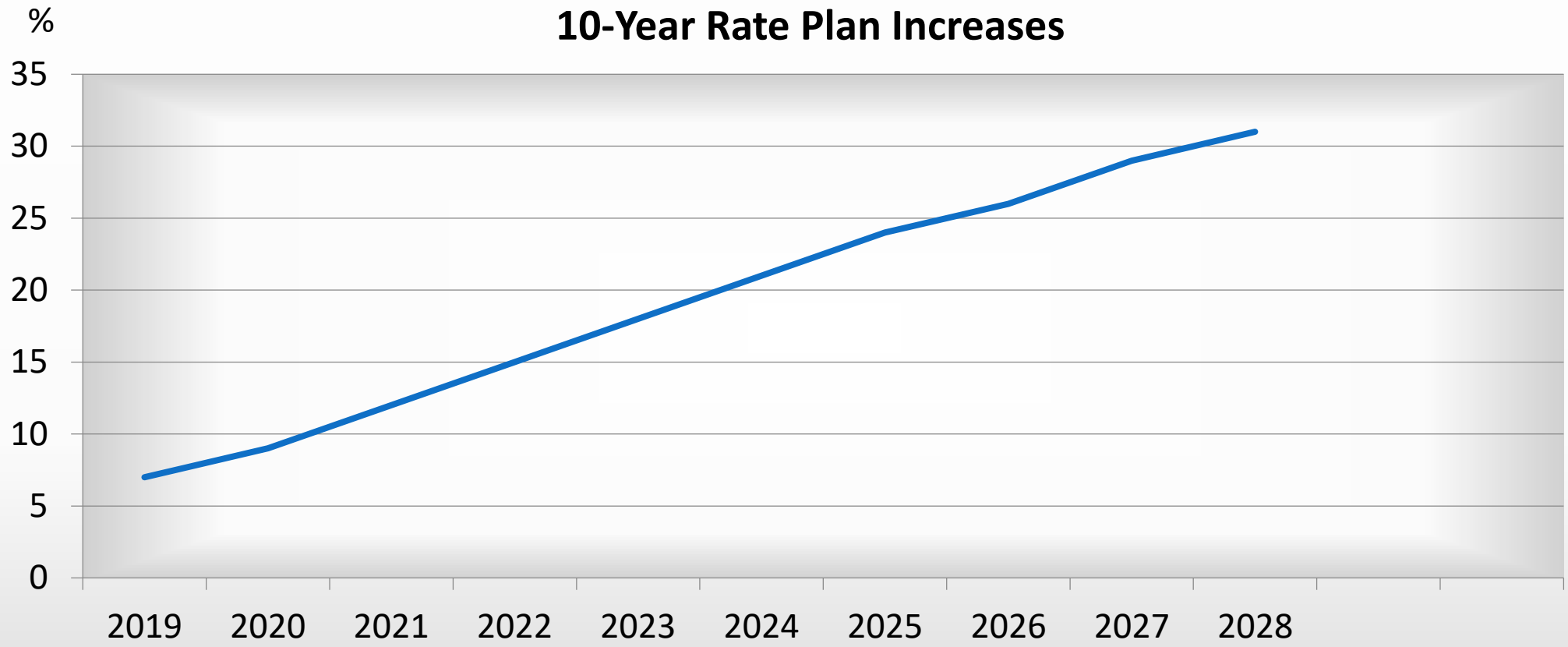
BC Hydro's Regulatory Account Balance Is Growing

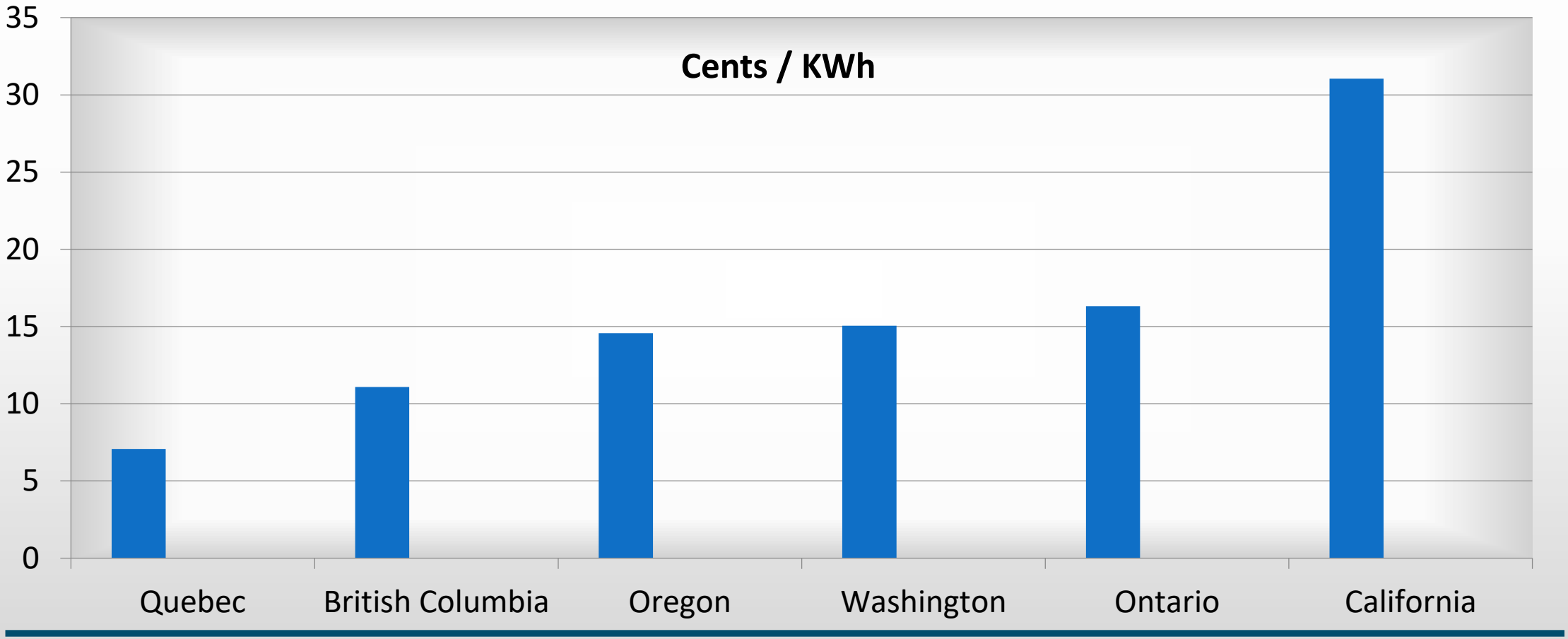


Current 10-Year Rate Plan Schedules Further Increases



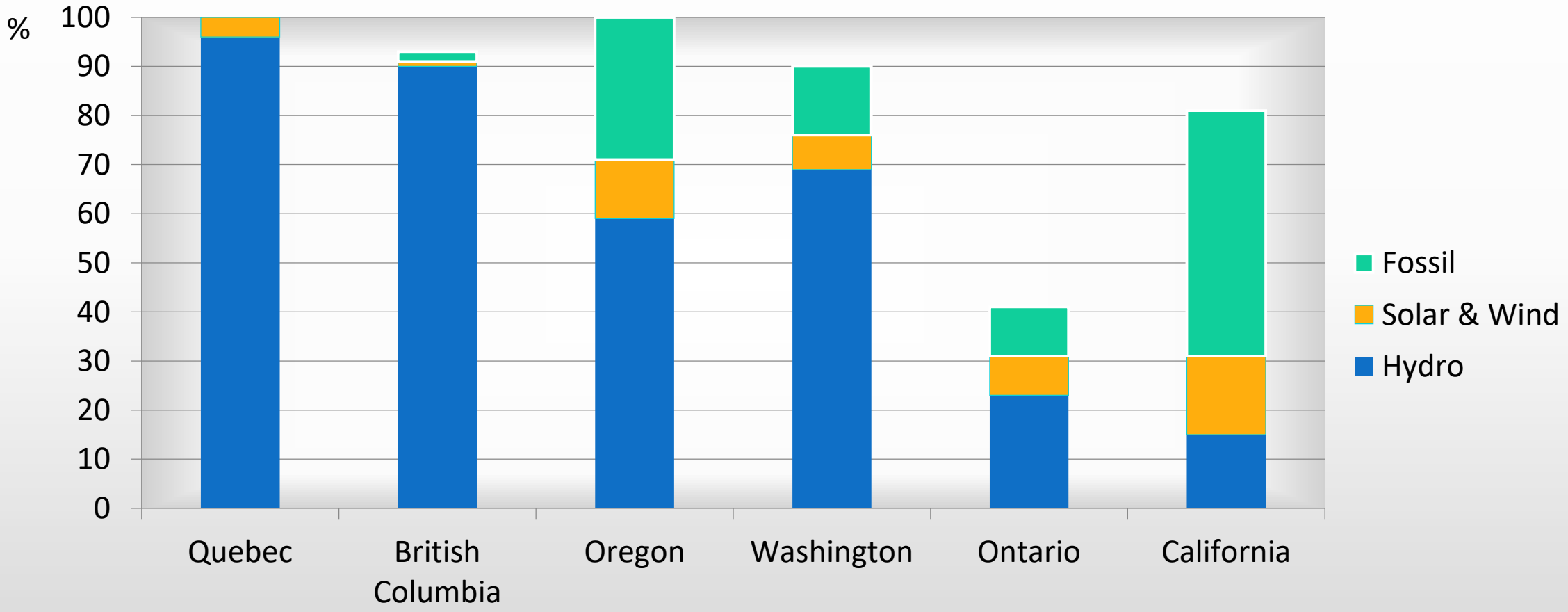
How Our Rates Compare, Residential

Source: Hydro Quebec, NRCAN, US EIA



Sources of Electricity

Source: Hydro Quebec, NRCAN, US EIA
Other sources to 100% includes biomass, nuclear



II. Government's Decision Criteria

Criteria

1. Ratepayer Impact
2. Fiscal Impact / Risks
3. First Nation Impacts
4. GHG Targets
5. Agriculture / Food Security

III. Revised Cost Estimates

Projected Cost to Complete: $10.7 Billion

- 2014 approval was for $8.335 billion
  - With an additional $440 million risk reserve
  - For a total of $8.775 billion
- Costs to date have exceed budgeted amounts
- One-year delay of river diversion estimated to increase costs by $610 million
- Future contracts projected to be higher than budgeted amounts
- Current mid-point estimate is now $9.992 billion
  - $1.657 billion over 2014 estimate
- Given what has happened to date, risk reserve has been increased

Change in Cost Estimate

$ millions

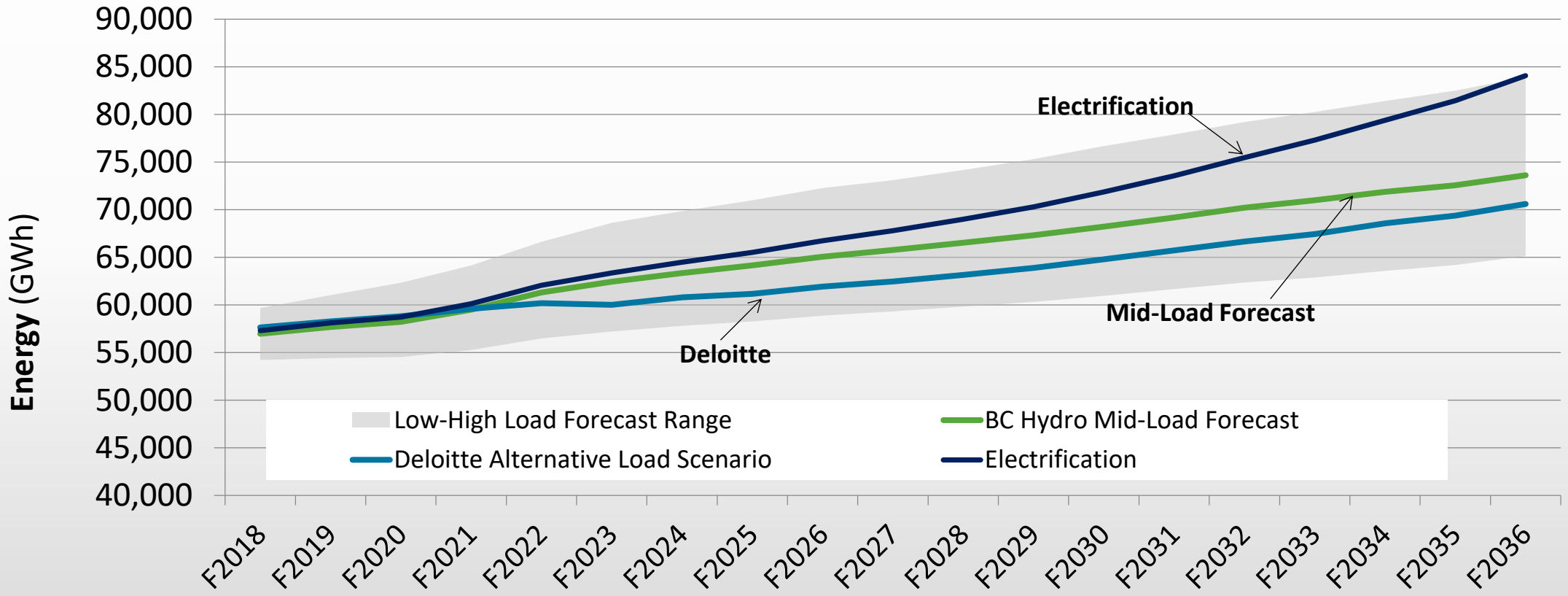
Cost	2014	Current
Direct Costs	4,940	5,839
Indirect and Overhead	1,194	2,010
Contingency	794	858
Interest before completion	1,407	1,285
Total Before Risk Reserve	8,335	9,992
Risk Reserve	440	708
Total	**8,775**	**10,700**

Comments on Cost Escalation

- Government will be putting in place enhanced oversight to ensure final costs are at or below $10.7 billion
- $10.7 billion is used in making comparisons of the continue versus terminate scenarios

IV. Rate Impacts

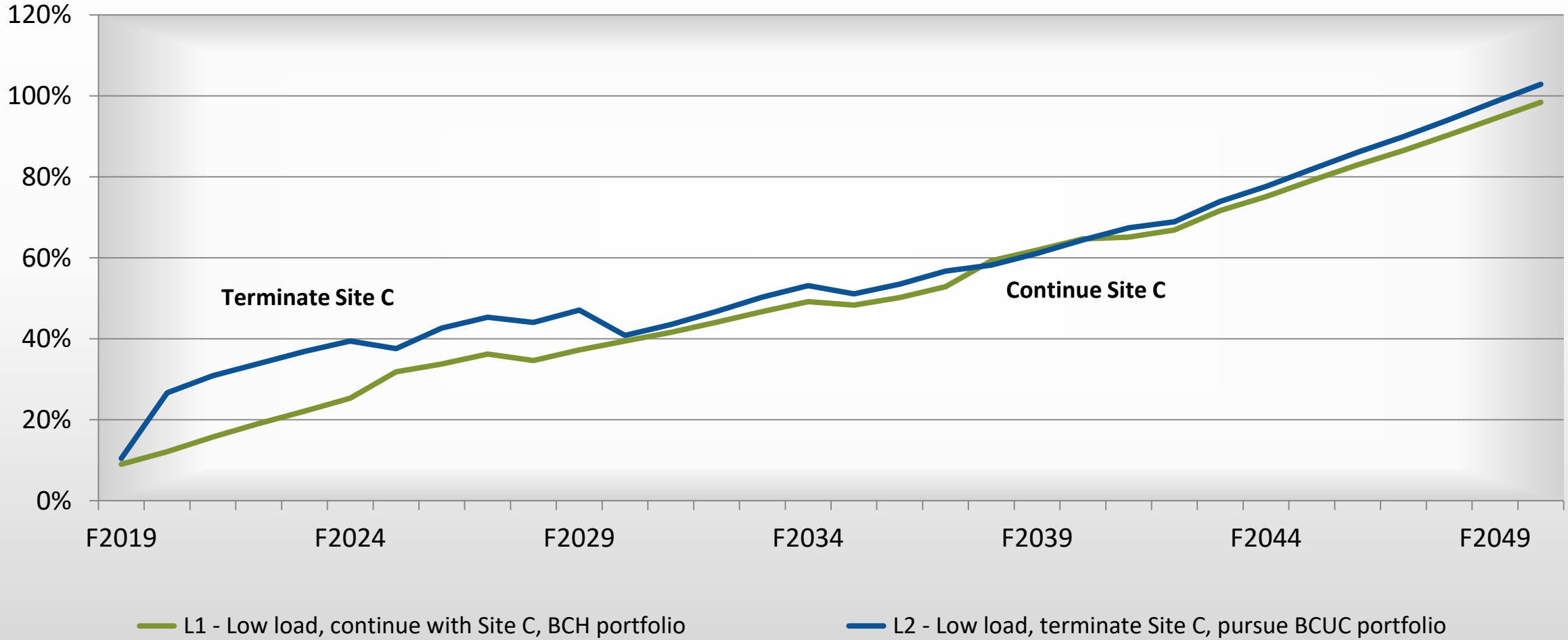
Comparison of Load Forecasts



Rate Impact Analysis Assumptions

- BCUC Low Load Forecast
- BCUC “Alternative Portfolio” assumptions
- $10.7 B Site C Cost
- 10 year amortization of $4 billion in termination scenario

Rate Impacts Under a Low Load Forecast



What Is The Impact On Ratepayers?

Complete Site C	Terminate Site C
• Rate impact 1.1% in 2025, and 1.1% in 2026 under a rate smoothing scenario over 10 years, then decreasing (assuming revised $10.7B project cost)	• Increases rates, starting in 2020 to recover sunk and termination costs • A 12% rate increase would need to be in place for 10 years

Impact of Terminating Site C on Customers

Results in a rate increase of 12%, effective 2020

Single Family Home, Vancouver Island

- Annual hydro bill $1,650

+$198 / year

Lumber Mill, BC Interior

- Annual hydro bill $1.6 million

+$192,000 / year

Medium Data Centre

- Annual hydro bill $1.5 million

+$180,000 / year

Large Lower Mainland Hospital

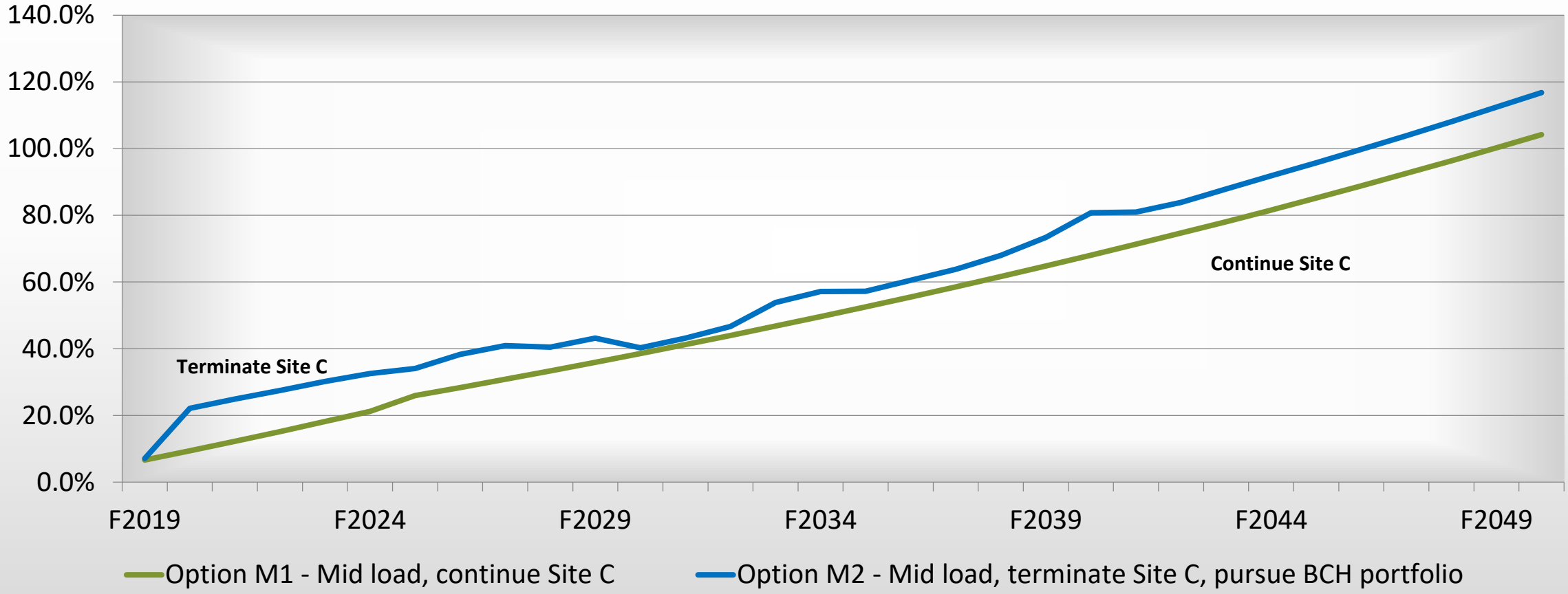
- Annual hydro bill $3.1 million

+$372,000 / year

Demand Affects Relative Rate Impact

- If demand exceeds low load forecast, relative advantage of complete scenario increases over terminate scenario

Rate Impacts Under a Mid Load Forecast



V. Fiscal Impacts / Risks

Some Inconvenient Arithmetic

- If government decided to terminate, $4 billion in debt has to be absorbed by someone
  - Ratepayers
  - BC Hydro
  - Taxpayers
- The previous section looked at the implications if ratepayers absorbed the cost

Could BC Hydro Absorb Termination Costs?

- They could
- But this would
  - Wipe out more than 80% of BC Hydro's equity
  - The $4 billion loss would still be consolidated on the books of the Government Reporting Entity
  - Involve ongoing debt interest costs of $120-150 million per year

Biggest Risk Of The Hydro Absorb Scenario

- In a scenario where BC Hydro was to absorb the $4 billion termination costs:
  - Credit rating agencies could determine that BC Hydro was no longer a commercially viable entity
    Resulting in $20 billion debt being reclassified as taxpayer-supported debt
    - Likely leading to a downgrade of the Province's credit rating
    - Resulting in higher interest costs for the (then) $65 billion in taxpayer-supported debt

Could the Minister of Finance Absorb Termination Costs?

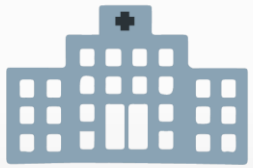
- Central Government's Consolidated Revenue Fund would take on the $4 billion of debt and recapitalize BC Hydro
- This would likely preserve BC Hydro's status as a commercial entity
- But…

Having the Minister of Finance Absorb Termination Costs Would

- Still entail a $4 billion loss in Government Reporting Entity
- Still involve $120-$150 million / year in interest costs that would have to be serviced
- Could lead to a credit rating downgrade, adding even more debt interest costs to taxpayers
- Crowd out room for new capital project spending
  - Schools, hospitals, housing, bridges, highways, etc.

What is $4 Billion Equivalent To?

66 secondary schools ($60 million each); or,



11 hospital projects similar to the North Island Hospitals (Province's share $365 million); or,

12 highway projects similar to the Okanagan Valley Corridor Project (Province's share $ 330 million); or,

3 Pattullo Bridges ($1.3 billion each).

VI. Concluding Comments

In Summary

- Very tough decision for Government
- Decision to proceed primarily driven by need to:
  - Minimize impacts on BC Hydro ratepayers
  - Preserve the fiscal room to build schools, hospitals, housing, bridges etc.


Questions?