

# BACKGROUND

## COMPARING THE OPTIONS

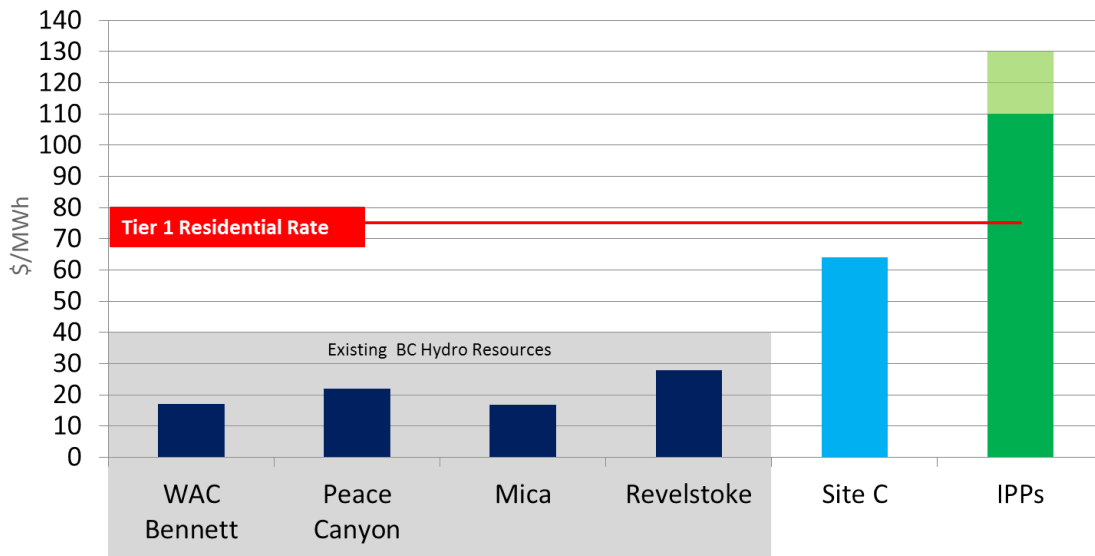
Site C provides the lowest cost electricity compared to alternatives and will deliver significant benefits for ratepayers.

### Hydroelectric Dams are Cost Effective

Large hydro projects are cost-effective because after an upfront capital cost, they have low operating costs for more than 100 years and their costs to ratepayers decrease over time.

Today, the cost of electricity produced by B.C. Hydro’s large hydroelectric facilities is far lower than the rate that residential customers pay for their power. BC Hydro’s large hydroelectric facilities offset the costs of other more expensive new generation in the system.

Site C will provide more than a century of the same affordable, reliable and clean electricity that the W.A.C. Bennett, Peace Canyon, Mica and Revelstoke dams provide today, and will help keep overall electricity costs down and rates low.

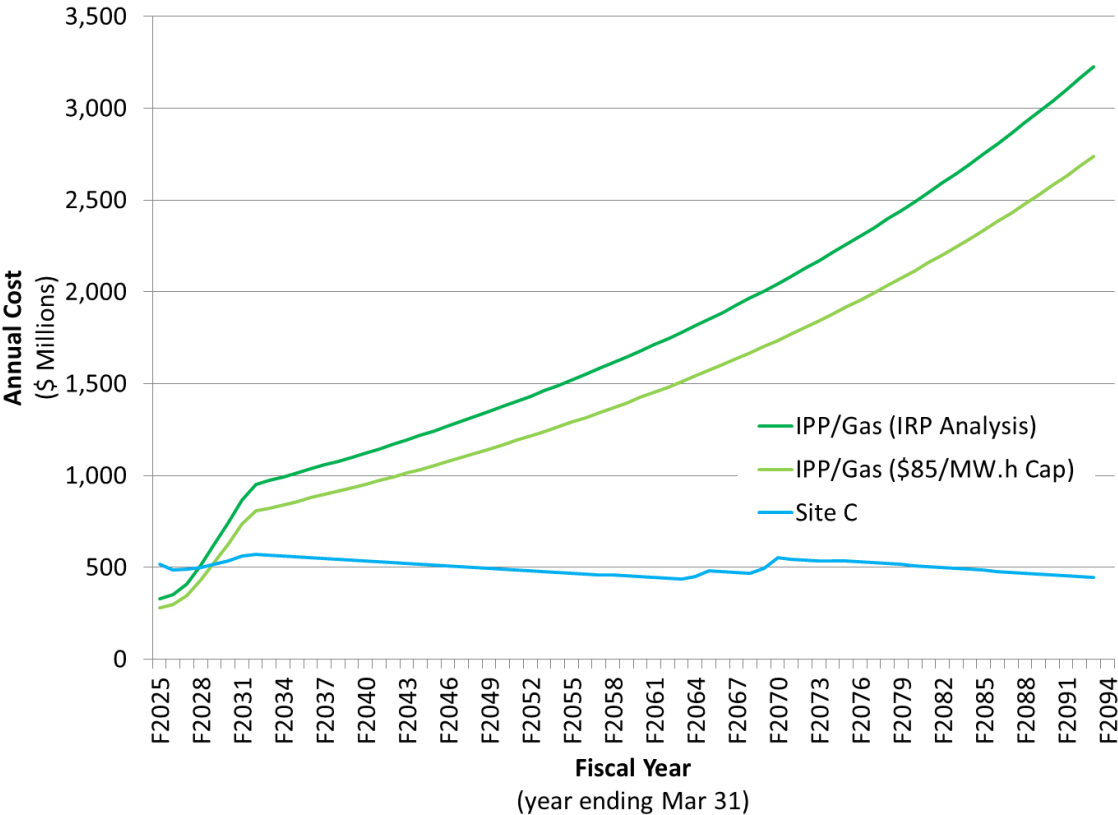


### Site C - Significant Ratepayer Benefits

Like BC Hydro’s other large hydroelectric facilities, the cost advantages of Site C will grow over time, resulting in significant benefits to ratepayers, compared to alternatives.

Over the first 50 years of Site C’s project life, ratepayers will save an average of \$650 to \$900 million each year, compared to a portfolio of Independent Power Projects (IPPs) backed up by natural gas. This amounts to average annual savings of approximately 6 to 8 per cent for the typical household, compared to alternatives.

Over the long-term, as the capital costs of the project are paid down, the annual ratepayer savings will continue to increase each year for more than 100 years.



**Impact on Ratepayers**

The cost to ratepayers of the energy produced by a project depends on the capital costs as well as the ongoing operating costs and expected service life.

The cost to ratepayers for Site C reflects changes implemented as part of the government’s 10 Year Plan for BC Hydro, as well as the updated capital cost estimate.

<b>Site C Cost to Ratepayers (before changes)</b>	<b>\$83 / MWh</b>
Under the 10 Year Plan, the amount of net income that BC Hydro is required to earn each year will now be tied to inflation and will no longer increase when new assets like Site C are added to the system.	<b>- \$26 / MWh</b>
The 10 Year Plan also reduced water rental charges for BC Hydro.	<b>- \$1 / MWh</b>
The capital cost estimate for Site C has been updated from \$7.9 billion to \$8.335 billion.	<b>+ \$2.25 / MWh</b>
Government has established a project reserve of an additional \$440 million to account for events outside of BC Hydro’s control that could occur over an eight-year construction period, such as higher than forecast inflation or interest rates. The reserve will be managed by the provincial Treasury Board.	<b>+ \$2.50 / MWh (if fully utilized)</b>
<b>Updated Site C Cost to Ratepayers</b>	<b>\$58 - \$61 / MWh</b>

BC Hydro's Integrated Resource Plan, approved in November 2013, calculated a cost to ratepayers for IPPs of \$96 / MWh. Government also conducted extensive consultations with the independent power industry to ensure its analysis reflected recent advances in technology and efficiency. Following these consultations, government adopted a cost of \$85 / MWh for IPPs in its analysis.

When considering the impact on ratepayers, the costs of delivering the electricity must be accounted for. In addition, as IPPs are intermittent, the cost of backing them up with firm energy sources (e.g., natural gas) must be included. Also, IPPs do not have the same ability to store energy and take advantage of high prices on the export market, which reduces trade revenues.

Accounting for all of these factors, the final cost to ratepayers is \$64 to \$67 / MWh for Site C and \$110 to \$130 / MWh for IPPs.

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