

Requests for Information

1 NP-CA-001           **Reference: *Comments on Newfoundland Power’s 2022 Capital Budget***  
2 ***Application, Elenchus Research Associates Inc., August 13, 2021, page***  
3 ***8, lines 9-13.***

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5                           ***“Consistent with GARP, regulators expect the utilities they regulate to***  
6 ***adopt the least cost option for meeting the needs of their customers***  
7 ***(primarily adequate and reliable service) unless a higher cost is justified***  
8 ***as necessary to meet specific government policy objectives (e.g.,***  
9 ***renewable targets) or to achieve identified and quantified external***  
10 ***benefits.”***

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12 **QUESTION:**           **Is Elenchus Research Associates Inc. (“Elenchus”) aware of any**  
13 **Canadian jurisdictions where DER projects are proceeding as**  
14 **alternatives to traditional utility investment without the requirement**  
15 **to meet specific government policy objectives? If yes, had the utility’s**  
16 **regulator and other interested parties previously agreed upon how**  
17 **other quantifiable benefits could be used to justify the higher cost?**

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19 **RESPONSE:**           As far as Elenchus is aware, DER projects are recommended by utilities  
20 and approved by regulators only on the basis that they are the least cost  
21 alternative for providing a safe and reliable electricity supply to customers.

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23                           For example, the Ontario Energy Board (OEB”) approved two Energy  
24 Storage Systems (“ESS”) proposed by Toronto Hydro in its 2020-2024 rate  
25 application.<sup>1</sup> The Grid Performance ESS project uses batteries to remediate  
26 power quality issues, improve reliability, and increase feeder capacity at  
27 peak periods. The Renewable Enabling ESS uses batteries to absorb excess  
28 energy from renewable generators to maintain an appropriate generation to  
29 load ratio.<sup>2</sup> Toronto Hydro also proposed a third ESS project which would  
30 install batteries behind customer meters to improve power quality and  
31 reliability, as well as provide financial benefits from peak-shaving. The  
32 OEB decided that behind-the-meter storage is considered a non-rate  
33 regulated activity under current regulations, but the issue should be  
34 considered as part of the OEB’s ongoing Responding to Distributed Energy  
35 Resources consultation.<sup>3</sup>

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37                           In Arizona, the Punkin Center Battery Energy Storage System was  
38 undertaken to shave peak demand in a remote community, allowing feeder-  
39 level wires and generation capacity investments to be deferred. The project

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<sup>1</sup> EB-2018-0165.  
<sup>2</sup> The majority of the Renewable Enabling ESS funding was provided by the province.  
<sup>3</sup> EB-2018-0165, Decision and Order dated December 19, 2019. The “Responding to Distributed Energy Resources” consultation has since been renamed “Framework for Energy Innovation: Distributed Resources and Utility Incentives” (EB-2021-0118).

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1 was considered the least-cost option and won a competitive bidding  
2 process.<sup>4</sup>

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4 In Washington and Oregon, the Bonneville Power Administration deferred  
5 a planned 80-mile transmission line with a combination of two non-wires  
6 alternatives to reduce summer peak demands: demand response and  
7 generation redispatch. The transmission line was expected to cost over \$1  
8 billion. The project, known as the South of Allston Portfolio, successfully  
9 met peak summer demands at a cost less than the transmission line budget.<sup>5</sup>

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11 In Maine, GridSolar used a combination of non-wires alternatives to  
12 address load growth concerns. The Boothbay Pilot Project used a 500kW  
13 battery energy storage system, 250 kW of thermal storage units, a 500kW  
14 diesel-fueled back-up generator, energy efficient commercial lighting, and  
15 rooftop solar systems to avoid new transmission upgrades. GridSolar  
16 intervened in the Central Maine Power Company's ("CMP") case to build  
17 a \$1.5 billion transmission upgrade and convinced the Maine Public  
18 Utilities Commission that large portions of the upgrade could be avoided at  
19 a lower cost with the NWAs. The project was later terminated because the  
20 load growth did not materialize. Despite the project's cancellation, the  
21 project reduced the cost of CMP to ensure grid reliability by over \$12  
22 million, and possibly avoided long-term transmission investments that were  
23 not needed.<sup>6</sup>

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<sup>4</sup> *Non-Wires Alternatives: Case Studies from Leading U.S. Projects*, Chew, Brenda, et al, pages 42-44.

<sup>5</sup> *Ibid*, pages 45-48.

<sup>6</sup> *Boothbay Sub-Region Smart Grid Reliability Pilot Project Final Report*, Docket No. 2011-138.