Q. Please explain how the DCFC expenditures meet the test of being used and useful in the provision of service as set out in sections 64, 68 and 78 of the *Public Utilities Act*? Please provide any supporting legal and regulatory precedent.

A. **A. Background**

Legislative Framework

The *Public Utilities Act* (the "Act") provides the Board with a broad range of powers and duties in regulating the service provided by a public utility.

Section 78 of the Act permits the Board to fix and determine the rate base of a utility. In fixing a utility's rate base, the Board is to consider the value of the property and assets as determined under section 64. Under section 78(h), the Board may also include in rate base other fair and reasonable expenses which the Board assesses to be appropriate and basic to the utility's operation.

Section 64 establishes how the Board may determine the value of the property and assets of a public utility. Section 68 requires a public utility to make provision for proper and adequate annual depreciation of its property and assets. Both sections 64 and 68 apply to property and assets that are used and useful in providing service to customers.

The *Electrical Power Control Act, 1994* (the "ECPA") establishes the power policy of the province. Section 3(b) of the EPCA states that all sources and facilities for the production, transmission and distribution of power should be managed and operated in a manner that would result in, among other things:

(i) The most efficient production, transmission and distribution of power; and
(ii) Power being delivered to consumers in the province at the lowest possible cost consistent with reliable service.

Section 4 of the EPCA requires the Board to apply tests consistent with generally accepted sound public utility practice.

Previous Orders of the Board

The generally accepted test for determining whether an asset should be included in rate base is whether an asset is "used and useful" in providing service. The Board has historically applied 2 considerations in assessing whether assets are used and useful:

(i) There must be some imminence and certainty to an asset's use before it can be included in rate base; and
(ii) The "service" referred to in section 64 is taken to mean the electrical power supplied to customers.[1]

[1] Order No. P.U. 6 (2001-2002), page 8.

In considering section 78(h) of the Act, the Board has again determined that the rate base of a utility is to include only those assets and expenses that are related to the provision of electrical service.[2]

Newfoundland and Labrador Hydro ("Hydro") filed an application with the Board in June 2020 regarding the provision of EV charging services in Newfoundland and Labrador. Hydro submitted that EV charging services are akin to post-meter activities, do not attract concerns regarding monopolistic utility behaviour, and are not a regulated service as contemplated by provincial legislation.[3]

Following consideration of Hydro's application, the Board found:

> *"Based on the evidence provided the Board is satisfied that the regulation of the provision of EV charging services in this province is not required at this time to protect the public interest or to be consistent with sound public utility practice. The Board believes that the provisions of the Act and the EPCA in their entire context and in the grammatical and ordinary sense, and considering the object and intention of the legislation, do not require that the Board approve rates, tolls or charges for the provision of EV charging services. The Board does not believe that in the circumstances EV charging services are public utility services which should be subject to the requirements set out in the Act. The Board does not make a finding as to whether EV charging services are subject to the legislative authority of the province but finds the Board's approval of a rate, toll or charge for EV charging services at this time is not required."* [4]

B. Assessment

Public Policy Context

In assessing whether Newfoundland Power's proposed construction of DCFC infrastructure should be included in rate base, the issue of imminence is not in question. There is reasonable certainty that the DCFC infrastructure would be in use before it is included in rate base.

The central issue before the Board is whether the DCFC infrastructure would be used and useful in providing *electrical service* to customers. Assessing whether DCFC would be used and useful in providing electrical service requires consideration of the unique public policy context in Newfoundland and Labrador.

Following commissioning of the Muskrat Falls Project, the quantity of electricity generated in Newfoundland and Labrador is forecast to exceed domestic requirements, resulting in a surplus of approximately 3.5 TWh. Orders in Council effectively require

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2 Ibid.

3 See Hydro's *Application Regarding the Provision of Electric Vehicle Charging Services,* Schedule 2, pages 7 to 8.

4 See Order No. P.U. 27 (2020), page 5.

the recovery of all Muskrat Falls Project costs from customers on the Island Interconnected System, the majority of whom are served by Newfoundland Power.[5]

On September 5, 2018, the Provincial Government issued a reference to the Board on Muskrat Falls Project rate mitigation.[6] In determining rate mitigation options and impacts, the Board was directed to consider the surplus electricity available from the Muskrat Falls Project and whether it is more advantageous for customers to maximize domestic load or maximize export sales.[7] The Board found that:

> *"[M]aximizing domestic load through electrification, improving energy efficiency and using demand response to reduce peak and allow for increased export sales leads to the best outcomes for customers."*[8]

Newfoundland Power has proposed the construction of DCFC infrastructure as part of a portfolio of customer electrification programs designed to maximize the value of surplus electricity from the Muskrat Falls Project. These programs primarily focus on increasing the province's adoption of electric vehicles ("EVs"). An analysis by Dunsky Energy Consulting determined that the construction of DCFC infrastructure is the most impactful and cost-effective measure available to increase EV adoption in the province.[9]

Newfoundland Power's proposal to include its planned DCFC infrastructure in rate base reflects the rate mitigating benefit that these assets would provide to customers.

The rate mitigating benefit of electrification programs, including DCFC infrastructure, was assessed through a net present value ("NPV") analysis. The analysis determined that electrification programs will provide a rate mitigating benefit for customers of approximately 0.5¢/kWh by 2034.

Newfoundland Power concurs with the Board's determination that the charging service provided by DCFC infrastructure is not a "service" within the meaning of the Act. However, this does not mean that proposed DCFC infrastructure is not used and useful in providing electrical service.

There is a direct connection between the proposed DCFC infrastructure and the rates to be paid by customers for electrical service. The DCFC infrastructure, and all planned electrification programs, will maximize the value of surplus electricity from the Muskrat

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5 Order in Council OC2013-343 requires the cost of supply from the Muskrat Falls Project, including the Muskrat Falls generating facility, Labrador-Island Link and the Labrador Transmission Assets, to be recovered in full through rates charged to customers on the Island Interconnected System.

6 References to the Board are completed pursuant to Section 5 of the EPCA.

7 The Reference Questions were: (i) options to reduce the impact of Muskrat Falls Project costs on electricity rates; (ii) the amount of energy and capacity from the Muskrat Falls Project required to meet domestic load and the amount available for export or load growth; and (iii) the potential electricity rate impacts of identified options. See correspondence from Minister Siobhan Coady to the Board, dated September 5, 2018.

8 See *Reference to the Board: Rate Mitigation Options and Impacts, Muskrat Falls Project – Final Report*, February 7, 2020, page iii.

9 See the *2021 Electrification, Conservation and Demand Management Application,* Volume 2, Schedule C, page 145 of 325.

Falls Project. By maximizing the value of surplus electricity from the Muskrat Falls Project, these programs will ensure all sources and facilities are managed and operated in a manner that results in the most efficient production, transmission and distribution of power, and in power being delivered to customers at the lowest possible cost.

The proposed DCFC infrastructure is therefore used and useful in providing efficient, least-cost electrical service to customers.

Regulatory Precedents

The proposed treatment of costs associated with electrification programs is consistent with the Board's historical treatment of costs associated with conservation and demand management ("CDM") programs.

Newfoundland Power and Hydro have jointly delivered CDM programs to their customers since 2009. The technologies installed by customers through CDM programs are not directly related to the production, transmission or distribution of electrical service within the meaning of the Act. However, these programs contribute to reduced system costs.[10] The Board has therefore determined that these costs are reasonable and prudent in providing service to customers.[11]

CDM and electrification programs provide similar customer benefits. CDM programs reduce system costs, which results in lower customer rates. Electrification programs maximize the value of surplus electricity, which also results in lower customer rates.

CDM programs are included in rate base from 2 perspectives.

First, CDM program costs are included in the CDM Cost Deferral Account. The inclusion of deferred charges in the calculation of regulated rate base is consistent with the Asset Rate Base Method. In Order No. P.U. 32 (2007), the Board approved Newfoundland Power's calculation of regulated rate base in accordance with the Asset Rate Base Method.

Second, while Newfoundland Power does not construct, own or operate infrastructure as part of its CDM programs, its customer energy conservation website is a capital asset.[12] This capital asset is included in the Company's rate base.

The cost recovery mechanisms proposed for electrification programs are consistent with the existing cost recovery mechanisms for CDM programs, including the treatment of DCFC infrastructure as a capital asset and the recovery of program costs through the Electrification Cost Deferral Account.

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[10] System costs to Newfoundland Power's customers have been reduced by approximately $137 million since 2009 as a result of CDM programs. See the *2021 Electrification, Conservation and Demand Management Application,* Volume 1, Evidence, page 5.

[11] See Order No. P.U. 13 (2009), page 2.

[12] See Newfoundland Power's *2021 Capital Budget Application,* Volume 1, Schedule B, page 80 of 98.

There are regulatory precedents in other jurisdictions with respect to the inclusion of DCFC investments in a utility's rate base. In Canada, FortisBC currently owns 30 public DCFC stations. The British Columbia Utilities Commission approved the inclusion of these assets in the rate base of FortisBC.[13] The inclusion of DCFC investments in the rate base of FortisBC reflects the policy goals and legislation in that jurisdiction.[14]

This is reasonably comparable to the circumstances of Newfoundland Power, where the construction of DCFC infrastructure is proposed to achieve the policy goal of customer rate mitigation and is consistent with the legislative requirements of efficient, least-cost service delivery.

C. Conclusion

Including the proposed DCFC infrastructure as an asset in rate base meets legislative requirements.

Similar to CDM programs, the costs of electrification programs, including DCFC infrastructure, are reasonable and prudent. DCFC assets are used and useful in managing sources and facilities for the production, transmission and distribution of electricity in the most efficient and least-cost manner.

The benefits of electrification programs, including DCFC infrastructure, are a direct result of the surplus electricity available from the Muskrat Falls Project and the legislated requirement to recover project costs from Island Interconnected customers.

While the circumstances in this province are reasonably unique, there are precedents in other jurisdictions where DCFC infrastructure are permitted to be included in rate base because they reflect the public policy goals and legislative requirements of that jurisdiction.

Newfoundland Power is aware that Hydro has proposed to recover costs related to its DCFC infrastructure through a deferral account. Deferred cost recovery is conceptually similar to capitalization. Both approaches require the utilities to finance the up-front cash outlay of the DCFC infrastructure. The cash outlay under both methods is included in the utilities' calculations of rate base until the amounts are recovered through customer rates.[15] In Newfoundland Power's view, the costs proposed by both utilities are reasonable and prudent and should be recovered from customers.

[13] See British Columbia Utilities Commission Order G-215-21 with Reasons.
[14] See Province of British Columbia, Order in Council No. 339.
[15] See response to Request for Information PUB-NP-061.