Q. Newfoundland Power (Volume 1, Tab 2021 Capital Plan, Table A-3 on page A-3) indicates that an historical pattern is used as the costing method for 17 of the 40 capital projects and approximately 45% of the total proposed 2021 capital budget ($49.9 million of the $111.3 million). Some examples of annual projects that are based on historical expenditures with an adjustment for inflation include Extensions (Pooled) - $10,891,000 (Schedule B, page 29 of 98), Services (Pooled) - $3,110,000 (Schedule B, page 34 of 98), and Transformers (Pooled) - $5,945,000 (Schedule B, page 41 of 98). These particular examples include an estimate for customer growth and/or the accommodation of customers' increased electrical loads.

When using historical patterns to develop an estimate for the proposed capital budget, please discuss how Newfoundland Power combines the Province's past, current and forecast economic and demographic conditions when developing these estimates.

A. Capital projects based on historical patterns generally fall into 3 categories:[1]

(i) Responding to customers' service requests. This includes connecting new customers to the electrical system, upgrading plant to respond to customers' increased electrical loads, and completing third-party requests for plant relocations or replacements.[2]

(ii) Replacing plant that fails in service or is at imminent risk of failure. This includes plant replacements identified through routine inspections and operating experience.[3]

(iii) Upgrading or replacing large numbers of relatively small items used in day-to-day operations. This includes items that require replacement due to normal wear and tear, or upgrades resulting from changes in operational requirements.[4]

Economic and demographic conditions primarily affect growth-related capital projects, such as *Extensions, Meters, Services* and *Street Lighting*.

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1 Other capital projects that are based on historical patterns include the *Allowance for Funds Used During Construction* ("AFUDC") and *General Expenses Capitalized* ("GEC"). The estimate for AFUDC is based on an estimated $1 million monthly average of distribution work in progress and capital materials upon which the interest rate will be applied. The estimate for GEC is calculated in accordance with guidelines approved in Order No. P.U. 3 (1995-96).

2 Capital projects in this category include *Extensions*, *Meters*, *Services* and *Street Lighting*, among others.

3 Inspection-based capital projects include *Reconstruction*, *Rebuild Distribution Lines*, *Transmission Line Maintenance* and *Thermal Plant Facility Rehabilitation*. Capital projects where specific work requirements are based on operating experience include *Replacements Due to In-Service Failures*, *Additions to Real Property*, and *Allowance for Unforeseen Items*.

4 Capital projects in this category include *Tools and Equipment* and *Replace/Upgrade Communications Equipment.*

For capital projects required to connect new customers to the electrical system, cost estimates are developed in 3 steps to account for past, current and future economic and demographic conditions.

The first step is to determine historical unit costs based on previous expenditures. This would include, for example, the average cost of installing a meter to serve a new customer. The use of historical costs ensures projects reflect relevant past experience, including past economic and demographic conditions. Adjustments are made, when required, to account for extraordinary or one-off expenditures.

The second step is to determine adjusted unit costs. Adjusted unit costs are determined by inflating historical unit costs using the GDP Deflator for Canada.[5] Accounting for inflation ensures project cost estimates reasonably reflect current economic conditions.

The third step is to determine total project costs. Newfoundland Power forecasts new customer connections annually based on the Conference Board of Canada's forecast of housing starts and completions. This ensures project cost estimates reasonably account for future economic and demographic conditions.

The *Extensions* and *Services* projects also include expenditures to accommodate customers' increasing electrical loads. Estimates for customer load-related projects are based on an average of historical expenditures. The historical average is then inflation-adjusted using the GDP Deflator for Canada. This is also consistent with the methodology used to estimate costs for other capital projects based on historical patterns, including those related to plant replacement.

These costing methodologies provide reasonable cost estimates for capital projects proposed for 2021. Should customer or load growth vary from forecast or historical experience, so too will the capital expenditures that are sensitive to growth.

[5] Historical capital expenditures are inflation-adjusted to 2020 dollars using the GDP Deflator for Canada. In Order. No. P.U. 36 (1998-1999), the Board ordered the adoption of the GDP Deflator for Canada as an appropriate inflation index for forecasting Newfoundland Power's non-labour expenses.