

Appendix 7 – K-bar calculation

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The accounting test that will determine the K-bar capital funding in PBR3 will be nearly identical to the accounting test that was used to determine the K-bar funding in PBR2, with the exceptions that the capital inputs will consist of a five-year average of actual capital additions from 2018-2022 and customer growth, discounted by 15 per cent, will be used instead of the Q factor. Further, an X factor of 0.1 per cent, not including the addition of the benefit-sharing premium, must be used in the K-bar accounting test.

To the extent that discrepancies exist between this appendix and previous AUC decisions, the directions from previous AUC decisions will prevail unless they have been specifically overridden elsewhere in this decision. The K-bar calculation is set out below.

The 2024 base K-bar amount will be calculated as follows:

Step 1: Calculate the revenue requirement that is recovered in rates for Type 2 K-bar projects or programs for 2024. Using the 2023 going-in capital-related revenue requirement, calculate the amount of revenue requirement by program or project that is recovered in base rates under the I-X escalation mechanism for 2024.

- (i) The amount of revenue requirement by program or project recovered in base rates under the I-X mechanism for 2024 should be determined in a manner consistent with the assumptions and use the same capital additions, retirements, depreciation parameters, and any other parameters utilized in the calculation of the going-in revenue requirement and going-in rates. Therefore, when identifying the portion of the rate base associated with the going-in rates for each Type 2 capital expenditure category, the mid-year rate base for the first component of the K-bar test should be the same as the mid-year rate base used to establish going-in rates. The revenue that is provided under I-X for Type 2 projects in 2024 is then calculated as the 2023 going in rates for each Type 2 capital expenditure category escalated by the approved I-X and customer growth escalator.

Step 2: Calculate the notional revenue requirement for Type 2 K-bar projects or programs for 2024.

- (i) As inputs into the K-bar formula, the distribution utilities will determine the actual capital additions for each K-bar project from 2018-2022 and convert the capital additions to 2023 dollars using the approved I-X index and customer growth escalator for each year.⁵²⁷
- (ii) Calculate the average K-bar capital additions, by program or project, in 2023 dollars for the 2018-2022 period.
- (iii) Inflate the average K-bar capital additions by project to 2024 dollars using the I-X index and the customer growth escalator approved for 2024.

⁵²⁷ As set out in Section 8.3, the distribution utilities must use the year-over-year change in average customer count reduced by 15 per cent for their customer growth escalator.

- (iv) Calculate the amount of K-bar capital for 2024, by project or program, based on the capital additions from Step 2(iii) and the 2023 mid-year rate base using the method for calculating incurred capital costs from the capital tracker accounting test approved in Decision 2013-435. The distribution utilities should use a five-year average of inflation-adjusted retirements from 2018-2022 as an assumption in the accounting test.

Step 3: Calculate the K-bar by subtracting the recovered capital revenue requirement (Step 1) from the notional revenue requirement (Step 2).

- (i) Calculate the difference between the 2024 K-bar capital-related revenue requirement required on a projected basis by program or project (from Step 2) and the 2024 K-bar capital-related revenue requirement recovered in the base rates by program or project (from Step 1). The result is the capital funding shortfall or surplus amount for each program or project for 2024.
- (ii) Sum the capital funding shortfall and surplus amounts, including both negative accounting test results and positive accounting test results without any materiality considerations, for all Type 2 projects and programs from Step 3(i) to get the total interim base K-bar for 2024.

For 2025 through 2028, the K-bar annual parameter adjustments use very similar steps to those described above, with adjustments made to account for the effects of inflation and productivity represented by I-X, customer growth, and changes to the WACC. These updated parameters will be used in the K-bar accounting test to calculate the amount of incremental capital funding for a given year.

Following the same three steps as above, use the K-bar accounting test to calculate K-bar funding in each of the years 2025 through 2028 is described below.

Step 1: Calculate the revenue requirement that is recovered in the base rates under the I-X mechanism for Type 2 K-bar projects or programs for each of the years 2025 through 2028.

- (i) Using the going-in revenue from Step 1 of the 2024 K-bar calculation as the starting point, calculate the amount of capital-related revenue that is generated under the going-in revenue by escalating it by the I-X index and the customer growth escalator approved for each year.

Step 2: Calculate the notional revenue requirement for Type 2 K-bar projects or programs for each of the years 2025 through 2028.

- (i) Using the notional K-bar additions calculated in Step 2, part (iii) of the 2024 K-bar calculation as the starting point, calculate the amount of notional additions for each year from 2025 through 2028 by escalating the average capital additions to that year's dollars by applying the I-X and the customer growth escalator approved for that year. Similarly, calculate the notional amount for retirements in each year, by using the approved I factor to convert the average retirements to that year's dollars.
- (ii) Calculate the depreciation expense and resulting accumulated depreciation that results from applying the most recent Commission-approved depreciation parameters to the notional rate base that results from adding the 2025 to 2028 notional additions and

subtracting the notional retirements from the 2024 notional rate base captured in Step 2(iv) of the 2024 calculation.

- (iii) Calculate the capital-related revenue requirement for each year from 2025 to 2028 using the 2024 notional rate base from Step 2(iv) of the 2024 calculation, notional annual capital additions and retirements from Step 2(i) and depreciation from Step 2(ii). The WACC to be used in the calculation will be based on the ROE and capital structure approved for that year, as well as the actual embedded cost of debt for that year. Any required income tax calculation should be consistent with the findings of Section 6.3 of Decision 22394-D01-2018.

Step 3: Calculate the K-bar.

- (i) Calculate the difference between the K-bar capital-related revenue requirement required on a projected basis by program or project (from Step 2) and the capital-related revenue recovered in the base rates by program or project (from Step 1) for each year from 2025 to 2028. The result is the capital funding shortfall or surplus amount for each program or project for 2025 to 2028.
- (ii) Sum the capital funding shortfall and surplus amounts, including both negative accounting test results and positive accounting test results without any materiality considerations, for all Type 2 projects and programs from Step 3(i) to get the total K-bar for each of 2025 through 2028.