Does FERC prohibit you from using a BCA less than 1.25?

No, FERC prohibits Transmission Planning Organizations from using a BCA of greater than 1.25. See the language from Orders 1920 and 1920-A below (footnotes omitted):

Order 1920, P 958: Provided that transmission providers' evaluation processes and selection criteria comply with the requirements that we adopt here, we provide transmission providers with flexibility to determine how they will evaluate whether Long-Term Regional Transmission Facilities more efficiently or cost-effectively address Long-Term Transmission Needs, including by using benefit-cost ratios, assessing their net benefits and selecting the Long-Term Regional Transmission Facilities that maximize those benefits, and/or using some other method. Consistent with Order No. 1000 regional cost allocation principle (3), and as further discussed below in the Regional Transmission Cost Allocation section, transmission providers may not impose as a selection criterion a minimum benefit-cost ratio that is higher than 1.25-to-1.00. We decline to reduce or increase the maximum benefit-cost ratio that transmission providers may use as a selection criterion in Long-Term Regional Transmission Planning. As the Commission found in Order No. 1000, requiring that a benefit-cost ratio, if adopted, not exceed 1.25-to-1.00 ensures that the ratio is not so high as to exclude Long-Term Regional Transmission Facilities with significant positive net benefits from selection.

Order 1920A, P 437: As to the requirement that transmission providers' evaluation processes, including selection criteria, must aim to ensure that more efficient or cost-effective Long-Term Regional Transmission Facilities are selected to address Long-Term Transmission Needs, the Commission explained that evaluation processes must: (1) identify one or more Long-Term Regional Transmission Facilities (or portfolio of Long-Term Regional Transmission Facilities) that address the Long-Term Transmission Needs that transmission providers identify in Long-Term Regional Transmission Planning; (2) estimate the costs and measure the benefits of Long-Term Regional Transmission Facilities that are identified or proposed for potential selection; (3) designate a point in the evaluation process that is no later than three years following the beginning of the Long-Term Regional Transmission Planning cycle at which transmission providers will determine to select or not to select identified or proposed Long-Term Regional Transmission Facilities; and (4) culminate in determinations that are sufficiently detailed for stakeholders to understand why a particular Long-Term Regional Transmission Facility (or portfolio of Long-Term Regional Transmission Facilities) was selected or not selected.[1161] The Commission also provided transmission providers with flexibility to determine how they will evaluate whether Long-Term Regional Transmission Facilities more efficiently or cost-effectively address Long-Term Transmission Needs, including by using benefit-cost ratios, assessing their net benefits, and/or using some other method. Consistent with cost allocation principle (3), however, the Commission prohibited transmission providers from imposing as a selection criterion a minimum benefit-cost ratio that is higher than 1.25-to-1.00.

There is a provision of Order 1920 that says a project must have a 1.25 BCA in every scenario to be selected (paragraph 968).

NorthernGrid is evaluating the requirement.

Curious if the B/C ratio for each scenario is being calculated as a simple average of the B/C ratios for each of the benefits within that scenario. Or if there is some other formula (weighted avg?) that might be used.

NorthernGrid is still developing a proposed methodology that is compliant with the requirements of the Order.