Republic of the Philippines
ENERGY REGULATORY COMMISSION

Document	Article / Section	Discussion of Comment/s and/or Questions and Clarifications	Suggestions / Proposed Change/s
Annex B Regulatory Reset Issues Paper for the 1st Entry Group for the 4th and 5th RP	Issue #7 and Section 8.2.4 Changes to the Weighted Index	The ERC seeks comments on its view that changes in the PhP/US$ exchange rate will have a relatively minor influence only on operating and maintenance expenditure and that the weighted index used in the price control formula, in as far as it reflects these expenditures should therefore reflect changes in the CPI only. Likewise, Section 8.2.4 mentions that "the ERC is to review the values of the W1 and W2 indices to determine whether they appropriately reflect the proportions of the operating, maintenance and capital expenditure forecast for the Regulatory Period. The ERC may likewise change the relative weighting of the W1 and W2 factors which may be the same for the whole Regulatory Period or may differ between years, may also differ between Regulated Distribution Systems" The CWI adjusts the MAP at t-1 to prices that prevail at time t. Such adjustment is meant to restore the purchasing power of the cash flows of the investors of the regulated entity. W2 is presumably meant to	The ERC's implementation of Performance-Based Regulation (PBR) is aimed at making the rate setting mechanism, simpler, less complicated and more responsive to the evolving electricity industry. This is a statement made by the Commission in its draft resolution for the Issues Paper of the transmission. In line with its goal to simplify the rate setting mechanism, the Commission should consider the Consumer Price Index (CPI)-based inflation rate as the sole basis for the change in weighted index for regulatory year t (CWIt). Using the CPI-based inflation rate allows the revenues from regulated services to increase in accordance with the general rise in consumer goods in the country and, consequently, restores the purchasing power of the investors of the regulated entity.

Document	Article / Section	Discussion of Comment/s and/or Questions and Clarifications	Suggestions / Proposed Change/s
		restore the purchasing power of cash flows in replacing/putting up assets that are purchased in foreign denominated currencies. The MAP should be adjusted only to restore the purchasing power of the investors. As such, CWI should be limited to W1. The higher costs of imported equipment will still be fully recovered since these are valued in PhP and will be part of the asset base.	
	5.3 Weighted Average cost of Capital	The determination of the WACC should be properly guided by its purpose which is clearly stated by the Commission in the opening paragraph of Section 5.3: "The WACC will be determined such that ***it will encourage investment in electricity distribution assets, providing reasonable, but not excessive returns to investors***." (Emphasis provided.) In the determination of what is deemed "***reasonable, but not excessive returns***", it should be acknowledged that investors maintain a diversified portfolio of assets to eliminate idiosyncratic risks. Thus, the risk premium that an investor in a regulated power distribution firm in the Philippines should be limited to the compensation for non-diversifiable risk.	TransCo suggests that the ERC employ a conventional and internationally accepted method in estimating WACC. This yields a "reasonable, but not excessive net to investors". Also, we suggest to employ the equity-beta in the Capital Asset Pricing Model instead of the Risk-adjusted factor. We discuss this under Section 5.3.4.

Document	Article / Section	Discussion of Comment/s and/or Questions and Clarifications	Suggestions / Proposed Change/s
	Section 5.3.1	***The primary objective is to ensure that the regulated entities would be entitled to a full investment recovery of its regulated assets at an appropriate rate of return.*** ***It is recognized that using current data for short-lived assets provides efficient investment signals. However, it is also recognized that there are advantages in using long-term average data, which provide greater stability, reduce re-financing risks for long-lived assets***. ***"40. The ERC seeks comments on whether the WACC should be set at point value on the assets were acquired or multiple values every regulatory period."*** Employing current data results in a volatile estimate of the risk-free rate and, consequently, the WACC. If the WACC determination is based on a sample taken during a low-interest regime, the investors will unduly receive a low return for the entire duration of the regulatory period.	Employ a long averaging period in estimating the following variables: Risk-free rate and debt margin. The duration of the averaging period can be based on the regulatory period.

Document	Article / Section	Discussion of Comment/s and/or Questions and Clarifications	Suggestions / Proposed Change/s
		In contrast, if the WACC determination is based on a sample taken during a period when there is a transitory spike in interest rates, investors will enjoy a windfall profit for the duration of entire regulatory period. A long averaging period presents a stable estimate of the WACC. While such estimate may deviate from the prevailing market rates, it provides for a better signal to *long-run investors* in the regulated power distribution sector in the Philippines. A long averaging period based on the duration of the regulatory period also provides for a self-correcting mechanism to account for the volatilities in financial markets.	
	Section 5.3.2 Locked Parameters.	"For the Fourth and Fifth Regulatory Period, the following values have been locked in: . a) Market risk premium is set to 0.06 (6% p.a.) . b) 60% Funding by equity and 40% funding by debt is deemed reasonable, resulting in a debt/equity (DE) ratio of 0.67. ***The ERC***	**Market risk premium set at 6.00%.** Maintain the market risk premium at 6% pa. **Equity and Debt Gearing Ratios of 60% and 40% respectively; A debt-to-equity ratio of 0.67.** Maintain the 0.67 debt-to-equity ratio. In

Document	Article / Section	Discussion of Comment/s and/or Questions and Clarifications	Suggestions / Proposed Change/s
		however, will allow a ratio which represents the actual relationship for as long as this does not vary significantly with the debt/equity ratio of 0.67." In the previous rate resets, the market risk premium was set at 6.00 percent per annum. This remains reasonable: It represents the long-run market risk premium. The Country Risk Premium is embedded in the estimate of the risk-free rate since it is based in the yields of PH sovereign bonds. Country Risk Premium need not be incorporated in the estimate of the market risk premium. The 0.67 estimate for the debt-to-equity ratio remains relevant. This estimate represents what is deemed as the optimal capital structure of a regulated power distribution operator in an emerging market like the Philippines. The use of "***actual***" debt-to-equity ratio should be allowed only if such estimate represents what the	case an alternative debt-to-equity ratio is allowed, it may be based on actual relationship *provided such estimate represents what is deemed as the optimal capital structure of a power distribution operator*.

Document	Article / Section	Discussion of Comment/s and/or Questions and Clarifications	Suggestions / Proposed Change/s
		Commission deems as the optimal capital structure.	
	5.3.3 Risk-free Rate in the Philippines	*"The ERC has used both methods* to obtain the most reasonable estimate of the risk-free rate for the Philippines."* **(direct and indirect methods)* Estimation methods • The direct and indirect methods in the determination of the risk-free rate yield different estimates. These methods can determine the upper bound and lower bound of the range for the risk-free rate estimate. **Direct method** • The proposed 10-year PDST-R2 yield rates is properly argued. The financial instrument considers the long-term nature of the investments in the power distribution sector. PH bonds with 10-year tenor have enough liquidity to indicate the return on a risk-free security. • The estimation method is silent on the averaging period. The rules can be more transparent by indicating the averaging period. As suggested, a	**Methods in estimating risk-free rate** • Use the direct and indirect methods to determine the upper bound and lower bound of the range for the risk-free rate estimate. **Direct method** • Maintain the use of 10-year PDST-R2 yield rates in estimating the risk-free rate. • Use a long averaging period based on the duration of the regulatory period. **Indirect method** • *USA Risk-free Rate*. Use yields of 10-year USD Sovereign Bonds. • *Inflation Rate.* Employ expected inflation rate based on the inflation targets of the Bangko Sentral ng Pilipinas and the US Federal Reserve. • *Country Risk Premium*. In the average yield difference approach in estimating the country risk premium, use yields of bonds that are

Document	Article / Section	Discussion of Comment/s and/or Questions and Clarifications	Suggestions / Proposed Change/s
		long averaging period is preferred as it tempers the volatilities in yields. **Indirect method** • USA risk-free rate. To be consistent with the direct approach, yields on a 10-year US bond should be used instead of employing different tenor periods of 5, 10, and 20 years. • Inflation rate. It should be underscored that bond yields are adjusted for "expected" inflation rate rather than the "historical" inflation rate. Using a 12-month average inflation rate implicitly assumes that the historical average represents price expectations. The implicit assumption that historical average reflects price expectations may not be properly grounded. In the Philippines, for instance, the 12-month average inflation rate in 2018 is unusually high due to supply constraints. This is not representative of the expected inflation rates over the regulatory period.	liquid.

Document	Article / Section	Discussion of Comment/s and/or Questions and Clarifications	Suggestions / Proposed Change/s
		The expected inflation can instead be based on the inflation target of the Bangko Sentral ng Pilipinas and the US Federal Reserve. • Country Risk Premium. One of the approaches in estimating the country risk premium is the average yield difference by maturity, particularly, 5, 10, and 15 years. This approach is premised on the view that these instruments are liquid. The use of yields of 15-year bonds in estimating the Country Risk Premium should be done only if it is established the yields of USD denominated PH bonds are liquid.	
	5.3.4 Return on Equity	"The RAf is the average risk factor determined for a specific regulated entity to be used as the multiplier to the Market Risk Premium (MRP), to obtain the estimated overall risk exposure for the regulated entity. " The adoption of RAf has key weaknesses: • The RAf is not properly grounded on theory. It is inconsistent with the CAPM: the RAf may include	Revert to the traditional equity beta estimate. With the use of RAf, the adjustment will always be more than 1, while the equity beta may be less than 1. Thus, the RAf will always adjust upward, which may not always be appropriate. Thus, the ERC should retain the use of equity beta.

Document	Article / Section	Discussion of Comment/s and/or Questions and Clarifications	Suggestions / Proposed Change/s
		idiosyncratic risks. • The RAf is based on subjective determinations on (1) the risk categories; (2) the weights of each risk category; (3) the upper bound and lower bound for the risk category; and (4) adjustment factor for each risk category. • The regulated distribution entities are allowed to submit their proposal on risk categories, weighting and preliminary adjustment factor; there is a great likelihood to overestimate the risks which the Commission cannot validate. • The RAf opens the possibility of providing additional returns for inefficiencies of a regulated distribution entity. The adoption of RAf as an approach in WACC determination is quite limited. There are few regulatory jurisdictions that employ RAf. Mature regulatory jurisdictions continue with the basic CAPM despite its limitations.	
	Section 5.3.7 Return on Debt	"The RWDR calls for a debt margin which is based on an efficient industry average rather than on the	Estimate the debt margin based on yield difference between 10-year bonds issued by utility

Document	Article / Section	Discussion of Comment/s and/or Questions and Clarifications	Suggestions / Proposed Change/s
		specific debt margin experienced by any particular business. " The principle in the determination of the return on debt is properly established: It is premised on the view that the regulated distribution operator is efficient. This principle should provide guidance on the appropriate level of debt margin. An approach in estimating an appropriate debt margin is the yield difference between 10-year bonds issued by utility firms and 10-year US government bonds. In case the debt margin is based on estimates of leading financial advisory institutions, it should be made clear that such margin should be applied to the risk-free rate exclusive of the country risk premium.	firms and 10-year US government bonds.