



**COMPANHIA DE SANEAMENTO DO PARANÁ - SANEPAR
LISTED COMPANY**

Registration at CVM no. 01862-7 CNPJ no. 76.484.013/0001-45

RELEVANT FACT

Companhia de Saneamento do Paraná – Sanepar, addressing the dispositions of CVM Instruction no. 358/2002 advises its shareholders, investors in the market in general that the State of Paraná Regulatory Agency - AGEPAR (Agência Reguladora do Paraná), issued Official Notice no. 345/2017/GAB on November 09, 2017, attached hereto, addressing Sanepar's request for clarification on the tariff deferral model described in Final Technical Note 01/2017, presenting the formula for the calculation of the tariff deferral rate as established by AGEPAR for the annual pass-through of the financial component in the time frames defined.

Curitiba, November 09, 2017.

Paulo Rogério Bragatto Battiston
Director of Finances and Investor Relations

Official notice no. 345/2017/GAB

Curitiba, 09 de novembro de 2017

Dear Director,

In addressing SANEPAR DFRI LETTER 076/2017, through which said company requests *“clarification on the tariff deferral described in the Final Technical Note, with a view to leaving no doubts as to the model adopted by AGEPAR for the annual pass-through of the financial component in the time frame established”*, after appropriately instructed with the analysis and information from the competent technical area, with subsequent analysis, deliberation and approval by this Regulatory Agency’s Board, the following must be stated:

With a view to addressing the above request, the guidelines defined in AGEPAR Final Technical Note 01/2017, for the deferral of the percentage defined in the First Periodic Review of SANEPAR must be informed.

Further, item IX.3 of said document expressly states that:

“the repositioning percentage deferred in 8 (eight) years, with 8.53% (eight point five three percent) being applied in bills invoiced starting 30 (thirty) consecutive days from the date of publication of AGEPAR Decision, and the remainder distributed linearly in 7 (seven) years including the appropriate financial and economic compensation.

This effective rate (eff. rate) of 8.53% stems from the total tariff repositioning rate of 25.63% (twenty-five point six three percent) that deducted from the inflation rate (infl. rate) for the preceding year of 6.29% (six point two nine percent) measured using the IPCA, with the balance representing the total rate (total rate) excluded the inflation being divided into 8 (eight) equal installments resulting in 2.11% (two point one one percent) a year to which the corresponding financial and economic correction (compensation) is added. (...)”

To Mr.

Paulo Rogério Bragatto Battiston

Director of Finances and Investor Relations

Companhia de Saneamento do Paraná - **SANEPAR**

In this Capital

According to item IX.3.2. Of the Final Technical Note, the economic and financial compensation mentioned in the previous item, must be calculated by “*applying the average weighted annual rate for daily financing obtained from the Special Liquidation and Custody System (Sistema Especial de Liquidação e Custódia - Selic) on the difference between the required annual revenue and the annual revenue achieved.*”

Thus, the necessary assumptions have been defined: the approved repositioning rate of 25.63%, the number of consecutive installments (8), the rate for the first installment (8.53%) and the rates for the remaining installments, these resulting from the difference between the annual required revenue and the annual revenue achieved corrected using the Selic.

In accordance with the above stated assumptions, in a very objective manner, the deferral rate can be calculated using the following expression:

ANNUAL DEFERRAL RATE (ADR)

$$ADR: \left[\frac{(TA + TF)}{TA} - 1 \right] \times 100$$

Where,

ADR: Annual Deferral Rate. This rate is comprised by the constant portion of 2.11% and the variable compensation portion.

Tariff Achieved (TA): the actual tariff charged

Tariff Financial (TF): the portion of the tariff (financial + economic), that zeros the flow in 2024. This portion is the monetary value that maintains the deferral percentage constant in the following years.

It must be highlighted that the correction rate (Selic) is already foreseen in the calculation of the *TF*, given that this is the tariff that should zero the flow owed at the end of the 8 years of deferral. Likewise, it is worth mentioning that the constancy mentioned in the above description of the *TF*, stems from the requirement of linearity for the installments, in the terms defined in item XI of the Final Technical Note.

With a view to clarifying any doubts that might result in connection with the above formula, below a table is provided with a model of application of the deferral, considering all the necessary variables:

Elements and Calculation to gauge the Deferral

Year	1	2	3	4	5	6	7	8
Market (M) ^{*1}	M_1	M_2	...	...	...	...	...	M_8
Tariff Required (TR) ^{*2}	TR	TR	...	...	...	...	...	TR
Initial Tariff Verified (ITV) ^{*3}	ITV	ITV	...	...	...	...	...	ITV
Revenue Required (RR)	$RR_1 = M_1 \times TR$	$RR_2 = M_2 \times TR$	...	...	...	...	...	$RR_8 = M_8 \times TR$
Revenue Achieved (RA)	$RA_1 = M_1 \times TVI$	$RA_2 = M_2 \times TVI$	...	...	...	...	...	$RA_8 = M_8 \times TVI$
Financial (F)	$F_1 = (RR_1 - RV_1)$	$F_2 = (RR_2 - RV_2)$	...	...	...	...	...	$F_8 = (RR_8 - RV_8)$
Updated Financial (UF)	$UF_1 = F_1 \times (1 + Selic_1)$	$UF_2 = (FinAc_1 + F_2) \times (1 + Selic_2)$	...	...	...	...	...	$UF_8 = (FinAc_7 + F_8) \times (1 + Selic_8)$
Amortization (A) ^{*4}	0	$A_2 = (TF_2 \times M_2)$	...	...	...	...	...	$A_8 = (TF_8 \times M_8)$
Accumulated Financial (FinAc) ^{*5}	$FinAc_1 = FA_1$	$FinAc_2 = (FA_2 - A_2)$	...	...	...	...	...	$FinAc_8 = (FA_8 - A_8)$
Tariff of Accumulated Financial (TF)	0^{*6}	TF_2^{*7}	...	...	...	...	...	TF_8
Tariff Achieved (TA)	$TA_1 = ITV$	$TA_2 = TA_1 + TF_2$	...	...	...	...	...	$TA_8 = TA_1 + TF_8$
Annual Deferral Rate (ADR)	ADR_1^{*8}	$ADR_2 = \{[(TA_1 + TF_2) / TA_1] - 1\} \times 100$	...	...	...	...	...	$ADR_8 = \{[(TA_1 + TF_8) / TA_7] - 1\} \times 100$

Note: This model addresses only the deferral of the PTR established in Final Technical Note 01/2017, therefore, the calculation of IRT and the consequent application of Factor X were not included.

^{*1} For annual projection purposes, market volumes and Selic shall be adopted for the preceding year, except for year 1, whose values will already be known.

^{*2} Value already defined TR = 4.417 as per AGEPAR Final Technical Note 01/2017.

^{*3} Value already defined ITV = 3.816 as per AGEPAR Final Technical Note 01/2017.

^{*4} There will be no automatization in year 1, given this will only start happening in 2018.

^{*5} Since year 1 (2017) is the first year and the cycle, the Accumulated Financial (**FinAc**) is exactly equal to the Updated Financial (**UF**). In year 2024, the Accumulated Financial (**FinAc**) should be equal to zero.

^{*6} For year 1, 8.53% was authorized and for the purposes of drafting the flow this installment is not considered as TF for this year.

^{*7} This is the portion of the tariff (financial + economic) that zeros the flow in 2024. This portion is the accumulated monetary value, that maintains the deferral percentage constant for the following years. This value is fine by applying a transformation algorithm, or in supplements of calculation spreadsheet editors, such as, for instance, *Solver* in *Excel*.

^{*8} Value already defined $ADR_1 = 8.53\%$ as per AGEPAR Final Technical Note 01/2017.

The variables considered in the above spreadsheet, were defined as follows:

Market (M): Volume of water + sewage billed, expressed in m³.

Tariff Required (TR): balance point tariff calculated in the Periodic Tariff Review process (PTR).

Revenue Required (RR): $M \times TR$.

Revenue Achieved (RA): $M \times ITV$.

Financial (F): $RR - RA$.

Selic: Rate defined in the Final Technical Note for correction of the installment deferred.

Updated Financial (UF): $[F \times (1 + Selic)]$.

Amortization ($A_{t=2018}^{2024}$): $TF \times M$.

Financial Accumulated ($FinAc_{t=2017}^{2024}$): $FinAc_2 = (FA_2 - A_2)$.

Tariff Achieved (TA): Actual tariff charged.

Tariff Financial (TF): This is the portion of the tariff (financial + economic) that zeros the flow in 2024. This portion is the accumulated monetary value, that maintains the deferral percentage constant for the following years.

ADR: Annual Deferral Rate. This rate is comprised by the constant portion of 2.11% and the variable compensation portion.

Thus, through the above presented data, we feel that the appropriate level of detail for all the elements dealt with in the Final Technical Note 01/2017 with respect to the deferred tariff rate has been provided.

Sincerely,

CEZAR SILVESTRI
Director President

MAURÍCIO EDUARDO SÁ DE FERRANTE
Legal Director

JOÃO BATISTA PEIXOTO ALVES
Director of Institutional Relations and Ombudsman