

G:GENESIS

Ports Regulator of South Africa: Comments on Regulatory Manual

Anthony Felet

Presentation to the Ports Regulator of South Africa

31 October 2016

Table of Contents

Introduction

Regulatory Asset Base

Weighted Average Cost of Capital

Operating expenditure

Regulatory Control Period

Introduction

- Genesis Analytics is privileged to have the opportunity to comment on the PRSA's Regulatory Manual
- The Regulatory Manual is for the Tariff Years 2015/16 - 2017/18, and outlines the National Ports Authority's tariff setting methodology used to determine annual tariffs
- Our comments on the Regulatory Manual focuses on four key elements:
 - The Regulatory Asset Base (RAB)
 - Weighted Average Cost of Capital (WACC)
 - Operating expenditure
 - Regulatory control period

Regulatory Asset Base (RAB): Introduction and CWIP component

- The Regulator proposes the following equation to determine the closing balance of the RAB:

$$RAB_{c,y} = RAB_{o,y}(1 + CPI_Y) + CWIP_Y - D_y$$

- Definition of the Capital Works in Progress Payable ($CWIP_Y$) and Depreciation (D_y) inputs appear problematic.
- **CWIP payable:** The Regulator proposes to include a provision for capital expenditure into the CWIP payables variable that will be estimated at 1/12th of the capital expenditure for that year. However:
 - Working capital is calculated with regard to trade receivables, inventories and payables only and not lumpy capex. Arithmetically, the CWIP definition assumes that capex occurs evenly throughout the year
 - It is likely that the pre-payments on capital expenditure will outweigh payables on capex projects.

Regulatory Asset Base (RAB): Depreciation

- The proposed Depreciation calculation is as follow:

$$Depreciation = \left(RAB_{(0,y)} + (RAB_{(0,y)} \cdot CPI_{(y)}) + \left(\frac{Capex_{(y)}}{2 \cdot CPI_{(y)}} \right) \right) / 40$$

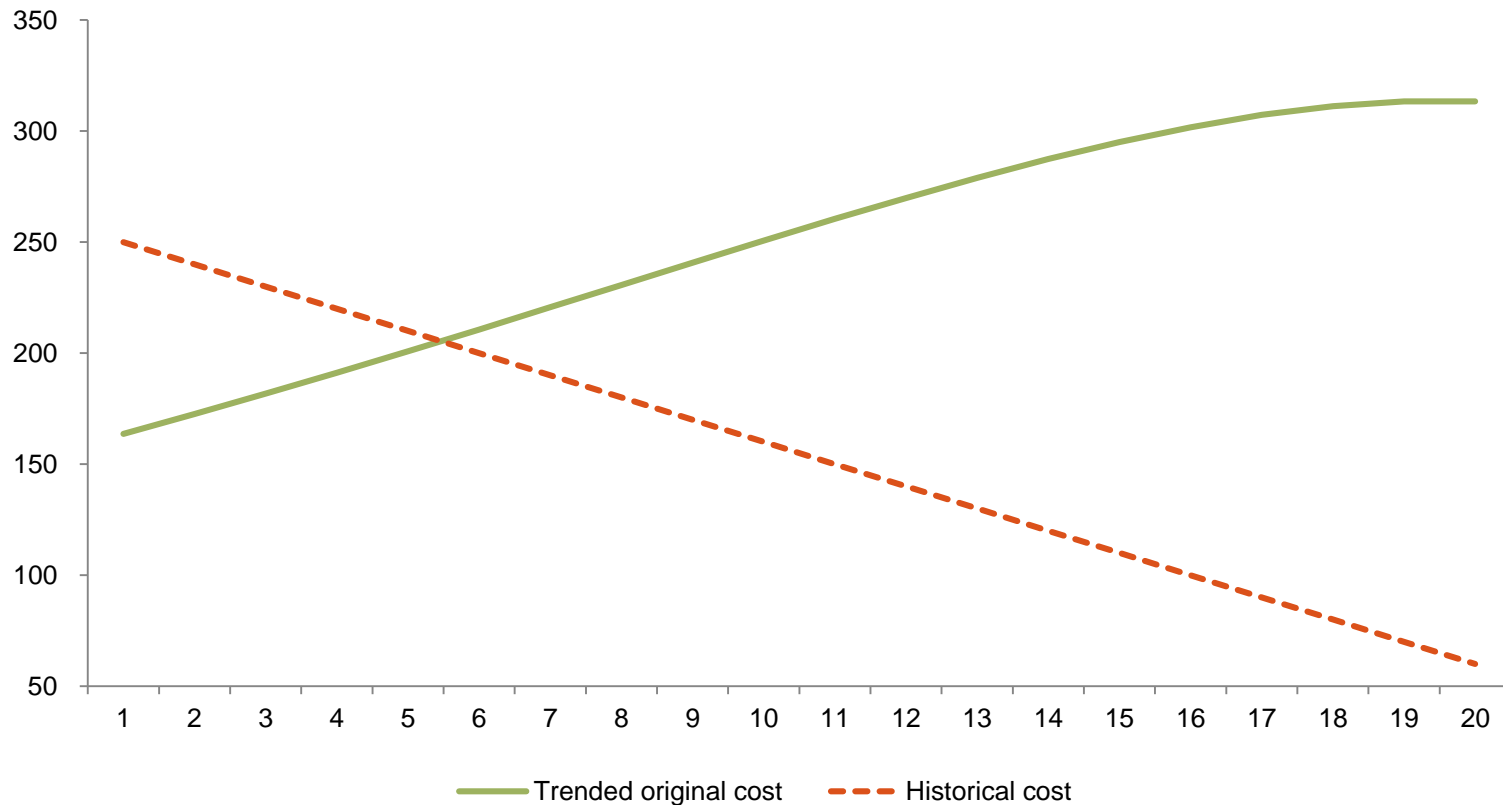
- We note the following:
 - It is not clear that the weighted average life of Transnet's assets is 40 years. For example, certain assets such as land (a large portion of the RAB) has an infinite life.
 - Capex should be depreciated only when it has been commissioned and not when it is incurred.

Weighted Average Cost of Capital

- **Vanilla WACC v pre-tax WACC:** The Regulator has opted for a separate tax expense in the determination of the revenue allowance rather than including notional tax in the WACC:
 - Significant tax allowances in early years will have significant impact on revenue allowances over life of asset in present value terms
 - Tax allowance calculation (page 16) should include claw-back in latter years
 - Calculating tax separately is complex, even more so on an ex-ante basis
 - Applying pre-tax WACC to the RAB will remove the circularity

Weighted Average Cost of Capital

- **Real v Nominal WACC:** The PRSA is correct in employing a Real WACC against the trended historical cost of assets to calculate the annual tariffs. This approach allows for a smoother and more reasonable upward moving tariff path over the life of the asset.



Weighted Average Cost of Capital

- However the Regulator's proposed approach to calculating the real WACC is incorrect.
 - There are two ways to calculate the real WACC, namely the:
 - Reverse transformation approach that starts with a real risk free rate (adopted by the PRSA)
 - Market transformation approach that converts the nominal WACC into real terms using the Fisher equation.
- The Reverse transformation approach will result in an over-recovery of capital costs over the life of the assets.
- Under the Market transformation approach, there is PV revenue parity between the nominal WACC @ HC RAB and real WACC @ TOC RAB.

Weighted Average Cost of Capital

- **Incorrect approach to the cost of debt:** There are three main shortcomings of the PRSA's proposed approach to the cost of debt calculation:
 - The yield on market traded debt should be used and not the interest rate on Transnet Group's accounting interest costs
 - Transnet Group cost of debt will be influenced by group factors and sovereign debt ratings that is not specific to the NPA business
 - Should be clear link between the cost of debt and the assumed gearing ratio (i.e. 50%). Cost of debt for a firm with a 50% gearing ratio can be obtained from the credit rating agencies

Operating Expenditure

- PRSA has stipulated that it would analyse the operating expense estimates on a line by line basis, including requesting “detailed and complete” motivations from the NPA.
- Role of regulator is not to micro manage a regulated entity by scrutinising every cost item line by line. Rather, a holistic approach to operating cost determination is preferable to allow NPA flexibility to structure its operations as it sees fit.
- Opex largely made up of labour, maintenance, energy, rates and taxes, and group costs
 - Energy and rates and taxes are largely uncontrollable
 - Group cost allowance should be set at incremental/avoidable costs levels, not full allocation
 - For labour and maintenance, PRSA must describe how it will determine “efficient” level – quantitative benchmarking techniques?

Regulatory control period

- The PRSA has indicated that a three year tariff control period with annual adjustments will provide sufficient certainty from a planning and investment perspective. We suggest removing the annual review process and adopt a longer regulatory control period with the option for a “re-opener” of the tariff determination under exceptional circumstances. Advantages include:¹
 - **Greater incentives to improve performance:** Gains early in the period are retained for a longer period of time.
 - **Improved financeability:** A longer control period will increase the planning horizon for capex and the associated funding arrangements.
 - **Lower regulatory risk:** PRSA is committing to the revenue decision over a longer period of time, which reduces cost of capital.
 - **Innovation and dynamic efficiency:** Firms encouraged to seek innovative solution to achieve efficiencies at the start of a longer control period. Thereby promoting dynamic efficiency

¹ Sources: Regulated Industries Commission. 2011. Determining the length of regulatory control period, p. 4, Reckon on behalf of Ofgem. 2009. Longer-term price controls, p.5-6. Northumbrian Water. The duration of price controls: To change or not to change?, p. 2-3