5. Ratio Calculations

Detailed calculations of each of the seven ratios are included in this section. The calculations are based on the extracts of financial information from annual financial statements or long-term and asset management plans included at section six (6) of this guideline.

Ratio Calculations are for the year 200Y

a) Current Ratio

$$\frac{\text{(Current Assets MINUS Restricted Assets)}}{\text{(Current Liabilities MINUS Liabilities Associated with Restricted Assets)}}$$

$$= \frac{(\overset{[1]}{8,156,143} - \overset{[2]}{6,728,955})}{(\underset{[3]}{2,033,690} - \underset{[4]}{644,160})} = \frac{1,427,188}{1,389,530} = \mathbf{1.03:1}\ \textbf{(or 103\%)}$$

[Numbers taken from statement of financial position and cash and cash equivalents note]

b) Debt Service Cover Ratio

$$\frac{\text{Annual Operating Surplus BEFORE Interest and Depreciation}}{\text{Principal and Interest}}$$

$$= \frac{(\overset{[5]}{20,707,319}+\overset{[6]}{44,048})\ -((\overset{[7]}{21,365,583}+\overset{[8]}{50,000}+\underset{[9]}{98,325})\ -(\underset{[10]}{6,907,407}+\underset{[11]}{96,257}))}{(\underset{[12]}{70,597} + \underset{[11]}{96,257})} = \frac{6,241,123}{166,854} = \mathbf{37.4}$$

[Numbers taken from statement of comprehensive income by nature or type and rate setting statement]

c) Own Source Revenue Coverage Ratio

$$\frac{\text{Own Source Operating Revenue}}{\text{Operating Expense}}$$

$$= \frac{(\overset{[13]}{8,165,843}+\overset{[14]}{4,999,717}+\overset{[15]}{498,964}+\overset{[16]}{55,200}+\overset{[6]}{44,048})}{(\underset{[7]}{21,365,583}+\underset{[9]}{98,325}+\underset{[8]}{50,000})} = \frac{\overset{[18]}{13,763,772}}{\underset{[17]}{21,513,908}} = \mathbf{0.64}\ \textbf{(or 64\%)}$$

[Numbers drawn from statement of comprehensive income by nature or type]

Ratio Calculations are for the year 200Y

d) Operating Surplus Ratio

$$\frac{\text{(Operating Revenue MINUS Operating Expense)}}{\text{Own Source Operating Revenue}}$$

$$= \frac{((\overset{[5]}{20{,}707{,}319}+\overset{[6]}{44{,}048}) - (\overset{[17]}{21{,}513{,}908}))}{\underset{[18]}{13{,}763{,}772}} = \frac{-762{,}541}{13{,}763{,}772} =$$ **-5.5% (or -0.055)**

[Numbers drawn from statement of comprehensive income by nature or type and Own Source Operating Revenue same as in c) above]

e) Asset Consumption Ratio

$$\frac{\text{Depreciated Replacement Cost of Depreciable Assets}}{\text{Current Replacement Cost of Depreciable Assets}}$$

$$= \frac{(\overset{[19]}{18{,}847{,}904}+\overset{[20]}{183{,}226{,}214})}{(\underset{[21]}{29{,}284{,}194}+\underset{[22]}{283{,}543{,}863})} = \frac{202{,}074{,}118}{312{,}828{,}057} =$$ **64.6% (or 0.646)**

[Numbers drawn from notes 7a. and 8a.]

f) Asset Sustainability Ratio

$$\frac{\text{Capital Renewal and Replacement Expenditure}}{\text{Depreciation Expense}}$$

$$= \frac{\overset{[23]}{660{,}185^*}+\overset{[24]}{2{,}031{,}457}+\overset{[25]}{46{,}798}+\overset{[26]}{2{,}976{,}240}}{\underset{[10]}{6{,}907{,}407}} = \frac{5{,}714{,}680}{6{,}907{,}407} =$$ **82.7% (or 0.827)**

*Note: while described as land and building in the rate setting statement, for the purpose of this example the expenditure is assumed to all relate to buildings.
[Numbers drawn from rate setting statement]

g) Asset Renewal Funding Ratio

$$\frac{\text{NPV of Planned Capital Renewals over 10 years}}{\text{NPV of Required Capital Expenditure over 10 years}}$$

NPV Planned from LTF Plan
NRV Required from AM Plan

$$= \frac{\overset{[27]}{67{,}398}}{\underset{[28]}{73{,}099}} =$$ **92.2% (or 0.922)**

[Numbers drawn from Long Term Financial Plan (planned renewals) and Asset Management Plan (required renewals)]