MWSS
REGULATORY OFFICE

TECHNICAL AUDIT GUIDELINES

MWSS REGULATORY OFFICE TECHNICAL AUDIT GUIDELINES ON CAPITAL EXPENDITURES

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I. INTRODUCTION

The Technical Audit of Capital Expenditure (CAPEX) Projects of the Concessionaires is one of the basic components of a Rate Rebasing exercise. The process of Technical Audit necessitates the services of an independent Auditor engaged by the MWSS RO to perform a thorough evaluation of all CAPEX projects based on a set of guidelines that was previously presented and discussed with the two Concessionaires and approved by the MWSS RO.

The Technical Audit Guidelines shall provide the Metropolitan Waterworks & Sewerage System Regulatory Office (MWSS RO), Maynilad Water Services, Inc. (MWSI) and Manila Water Company, Inc. (MWCI) a set of guidelines to ensure consistency in the technical audit of CAPEX projects and the application of parameters in the rating for Prudence and Efficiency.

The Guidelines contain the objectives, scope of the technical audit, audit parameters, procedure of conducting CAPEX audit, forms to be used, the rating system and the process flow of the technical audit. The definitions, criteria, values and procedures presented in this Guidelines were adopted based on careful evaluation of available references, situations and/or conditions subject for further improvement as the concession progresses.

The legal bases in formulating this Guidelines are stipulated in the Concession Agreement (CA) by and between the Metropolitan Waterworks and Sewerage System (MWSS) and the two Concessionaires, Manila Water Company, Inc. (MWCI) and Maynilad Water Services, Inc. (MWSI). Significant Sections of the CA are as follows:

A. Section 9.3.4 - General Rates Setting Policy/Rate Rebasing Determination

"…the rates for water and sewerage services provided by the Concessionaire shall be set at a level that will permit the Concessionaire to recover over the 25-year term of the Concession (net of any grants from third parties and any possible Expiration Payment) operating, capital maintenance and investment expenditures efficiently and prudently incurred, …… "

B. Section 6.5 - Asset Management Obligations

"…the Concessionaire, during the term of the Concession, have obligations concerning the management of the Facilities:

(i) operate, maintain, renew and, as appropriate, decommission Facilities in a manner consistent with the National Building Standards and best industrial practices so that, at all times, the water and sewerage system in the Service Area is capable of meeting the Service Obligations (as such obligations may be revised from time to time by the Regulatory Office following consultation with the Concessionaire);

(ii) repair and correct, on a priority basis, any defect in the Facilities that could adversely affect public health or welfare, or cause damage to persons or third-party property; and

(iii)ensure that at all times the Concessionaire has sufficient financial, material and personnel resources available to it to meet its obligations under this Agreement.

C. Section 6.5.3 - Audit

"The Regulatory Office shall have the right at any time to commission an independent technical audit of the accuracy and completeness of any Asset Condition Report and/or the Concessionaire's compliance with its obligations under Section 6.5.1 above. The Concessionaire shall cooperate fully with any such audit. The cost of any such audit shall be borne by the Concessionaire and treated as an Expenditure."

D. Section 6.8 - Compliance with Laws

"The Concessionaire shall comply with all Philippine laws, statutes, rules Regulations, orders and directives of any governmental authority that may affect the Concession from time to time."

E. Section 6.10 - Procurement

"During the course of the Concession, other than with respect to existing Projects, the Concessionaire shall make available for public tender any contract involving the procurement of goods or services, in one or more installments, having a value in excess of P 250,000,000.00, which amount shall be adjusted on January 1st of each year by the percentage change in the Consumer Price Index for the preceding year. The Concessionaire, at its sole discretion, shall determine the specifications upon which contractors will bid and the criteria, including price and quality, by which the winning bid is selected."

II. OBJECTIVES

The following are the objectives of the Technical Audit Guidelines:

- To facilitate consistency in the implementation of CAPEX audits.
- To provide a comprehensive and detailed approach in conducting technical CAPEX audits.
- To guide the Auditor in the conduct of their audit functions.
- To provide the Concessionaires adequate information on the technical audit being conducted by the MWSS RO.
- To illustrate a structural method of assessing the extent of utilization of the assets, conformance to MWSS Technical Standards and Specifications, and the physical conditions of such assets to last during the concession period.
- To be utilized as a main tool by the MWSS RO staff for audit preparation and conduct of the audit review.

III. SCOPE OF AUDIT

The scope of the audit is limited to CAPEX projects only, which are categorized as On-going, Completed and Closed projects based on status of project implementation. Table 1 presents the categorization of CAPEX projects based on status of project implementation.

Table 1 – Categorization of CAPEX Projects based on status of implementation

Status	Definition
1. Ongoing	• Contract awarded to a contractor, consultant, or supplier with an ongoing physical and financial accomplishment • For infra, civil works ongoing; for IT and other equipment, installation ongoing • Testing and commissioning stage
2. Completed	• Physically and technically completed but still within financial progress • Process proving stage
3. Closed	• Physically and technically completed and financially settled • With duly approved closed-out documents (i.e. as-built plans, certificate of acceptance, approved variation orders if any, internal and external communication, and all other documents listed in Concessionaire's closed-out approval) • Utilized project (project which already serves its purpose)

The Audit shall involve the assessment and evaluation of the different stages of development of a CAPEX project from inception to implementation.

Completed and closed projects will be audited for both Prudence and Efficiency while Ongoing projects will undergo Prudence test only. Should an On-going project obtain a Prudence rating equal or greater than 60%, the total amount disbursed shall be recoverable.

IV. FREQUENCY OF AUDIT

The technical audit shall be conducted every five years as part of the Rate Rebasing exercise. However, for efficient conduct of audit considering the large number of projects of the Concessionaires, a mid-term audit may be conducted as deemed necessary by the MWSS RO.

V. PROJECT CLASSIFICATION

To have uniformity in the classification of Maynilad and Manila Water CAPEX projects, the MWSS RO classified the projects according to Headlines and Size/Scale.

A. Headline Projects

Headline projects are group of projects based on the main programs and services agreed to be delivered under the Concession Agreement that mainly focus on water supply, wastewater collection and treatment, sanitation services, support projects and land acquisition. Under each Headline, there are sub-headlines in which projects were further categorized based on the specific purpose it serves in relation to its headline. Project classification according to headlines is shown in Table 2.

Table 2 – Headline Project Classification

Headlines	Composition
1. Water Projects	
a. Water Sources and Treatment (WST)	Raw water supply; Include headworks, raw water transmission mains, and treatment plants
b. Pump Station & Reservoir (PSR)	Pump Stations and/or Reservoirs (Pump Station with or without Reservoir or Stand-Alone Reservoir)
c. Pipe Laying (PL)	Pipe laying projects in order to deliver 24 hours of water supply at the required minimum pressure throughout the concession area (primary and secondary distribution lines, service expansion, service connections, and water appurtenances)
d. Non-Revenue Water Control Projects (NRW)	Pipe replacement and any projects related to monitoring and reducing NRW
2. Wastewater Projects	
a. Treatment Plant (STP/SpTP)	Projects for treatment of sewage and septage
b. Sewage Conveyance (SC)	Pipes, lift stations, and all other necessary structures in order to convey sewage/septage from households or interceptors to treatment plants

Headlines	Composition
c. Sanitation Projects (SP)	Projects related to evacuation and transportation of sludge from septic tanks to septage treatment plant
3. Support Projects	
a. Information Technology (IT)	Projects involving the application of information technology to improve the delivery of service obligations (GIS, telemetry, customer service improvements, etc.)
b. Resiliency / Reliability (R)	Projects which have the ability to bounce back once failure has occurred. Refers also to projects in compliance to new government laws, adaptation to climate change and engineering standards (retrofitting, rehabilitation, improvements, repair works).
c. Building projects (B)	Generally building projects which are needed by the Concessionaires for efficient & convenient delivery of service (warehouses, office buildings, renovations)
d. Special projects (SPR)	All projects which are not covered by the above headlines will be treated as special projects

B. Size / Scale

Size / Scale is a classification of projects based on contract costs. Conducting an audit on all projects awarded within a certain period would definitely take time to accomplish, thus the audit coverage was focused on big projects. **Table 5.2** shows the classification, amounts, and coverage of projects in terms of size/scale.

Table 3 – Size / Scale of Projects

Size	Contract Amount	Audit Coverage
1. Big Projects	PhP 100 M or greater	100% audit coverage
2. Small Projects	Less than PhP 100 M	Statistical sampling coverage of each Project Headline based on ISO 2859-1.

The sampling and recoverability of Capital Expenditures for Small Projects shall conform to ISO 2859-1 under normal inspection levels with a confidence level of 90%. For the audit of Small Projects, one Project Headline will be considered as one lot.

VI. CAPEX AUDIT PARAMETERS

CAPEX projects shall be audited based on prudence and efficiency to be entitled for full cost recovery.

A. PRUDENCE

Prudence is a parameter measured during the project inception and procurement stage. It is defined as making decisions in a reasonable manner considering the conditions and circumstances which were known or reasonably should have been known when the decision was made. A CAPEX is considered prudent if the following conditions are achieved:

A.1. Relevance to service obligation
A.2. Adequate planning
A.3. Risk assessment and mitigation
A.4. Procurement process
A.5. Cost within benchmark

A.1. Relevance to Service Obligations

"Service Obligations" are the obligations of the Concessionaires set forth in Articles 5 and 6 in the Concession Agreement. Relevant provisions to this parameter are as follows:

Article 5 – Service Obligations of the Concessionaires
5.1 General Obligations Regarding the Provision of Water Services
5.2 General Obligations Regarding the Provision of Sewerage Services
Article 6 - Other Obligations of the Concessionaires
6.5 Asset Management Obligations
6.8 Compliance with Philippine Laws

Relevance to service obligations is viewed as the significance of the project to the compliance on the said obligations. The audit and evaluation procedure for this parameter is shown in **Table 4.**

Table 4 – Relevance to Service Obligation Rating

Parameter	Conditions	Ratings %
Directly or Indirectly Relevant	• Project is included in the Approved Business Plan (ABP) • Components of a System Project in the ABP	30

	• Project is not clearly indicated in the ABP but relevant to the delivery of the Service Obligation • Projects which are not directly related to Service Obligations but supports the delivery of water and wastewater services	
No relevance	• Project is outside the concession area • Corporate Social Responsibility projects • Project is not indicated in the ABP and done without prior approval of the MWSS	Recovery disallowed/Audit discontinued

A.2. Adequate Planning

Adequate planning is an acceptable preparation that foresees the possibilities toward its goal. It is demonstrated when the project was developed out of careful planning, alternative options were considered and when the best option was adopted. As such, the use of feasibility study, business case study, project study and/or cost-benefit analysis is deemed necessary. Shown in **Table 6.2** are the conditions in rating this parameter.

Table 5 – Adequate Planning Rating

Parameter	Conditions	Ratings %
Adequate Planning	• Availability of necessary studies during planning stage which are required prior to implementation or delivery of the project/contract (i.e. Feasibility study, Business case study, Detailed Engineering Design, Project Study) • If during planning stage, options have been considered	10
Poor Planning	• Unavailability of necessary study during planning stage which are required prior to implementation or delivery of the project/contract • If no options have been presented in the Feasibility Study	0

For proper implementation of the rating, **Table 6** shows all the possible list of necessary planning documents per type of project.

Table 6 – Required Documents for Adequate Planning

Type of Project	Required Documents/ Activities
1. Design & Build Projects (D&B)	• Feasibility Study • Detailed Engineering Design • For New Technology, Pilot Project or Scale Model or Plant Visit
2. Pipe Laying / Facilities / NRW Management / Renovations / Raw Water transmission	• Feasibility Study / Project Study / Cost Benefit Analysis / Business Case Study • Detailed Engineering Design
3. Supplies Procurement / IT / Consultancy	• Feasibility Study / Project Study / Cost-Benefit Analysis / Business Case Study

A.3. Risk Assessment and Mitigation

Risk assessment is the evaluation of the probability or threat of damage, injury, liability, loss, or any other undesirable occurrence caused by external or internal vulnerabilities that may be avoided through pre-emptive action. In this regard, the conduct of risk analysis and development of mitigating measures is important to ensure successful completion and continuous operation of the project. **Table 7** shows the conditions in rating this parameter.

Table 7 – Risk Assessment and Mitigation Rating

Parameter	Conditions	Ratings %
With Risk Analysis and Mitigation	• Availability of necessary risk analysis and mitigation-related documents during planning stage which are required prior to implementation or delivery of the project/contract • All possible risks have been identified and mitigated during planning stage	10
Without Risk Analysis and Mitigation	• Unavailability of necessary risk analysis and mitigation-related documents during planning stage	0

Parameter	Conditions	Ratings %
	which are required prior to implementation or delivery of the project/contract	

Major risks such as environmental, health and safety, traffic, socio-economic, permitting, and other possible pertinent risks which may result to delayed delivery of the project or may result to additional costs during implementation must be properly addressed in the analysis with respective mitigating measures. to ensure successful completion in case unfortunate events occurred.

A.4. Procurement Process

The procurement process is considered transparent and competitive if the winning bid reflects the true measure of the market benchmark for the goods and services covered by the contract. Thus, if the procurement was done through transparent and competitive bidding and/or in conformance to the Concessionaire's procurement policy, the full grade shall be awarded to the project. Measures in rating the procurement process are shown in **Table 8**.

Table 8 – Procurement Process Rating

Parameter	Conditions	Ratings %
Compliant	• Public bidding was undertaken for the procurement of projects costing more than the Threshold Value. • Procurement documents are available for projects costing less than or equal to the Threshold Value.	20
Non-Compliant	• No public bidding was undertaken for the procurement of projects costing more than the Threshold Value. • Procurement documents are **unavailable** for projects costing less than or equal to the Threshold Value.	0

At the time of the formulation of this Guidelines, all projects having a value in excess of PhP 685 Mil (CPI adjusted value from 1997)[1] shall undergo public bidding. **The Threshold Value shall be adjusted by the percentage change in the Consumer Price Index (CPI) at January 1st of**

[1] The value is based from the PhP 250 Mil Threshold Value provided in Section 6.10 of the 1997 Concession Agreement adjusted by the CPI at January 1, 2019.

each year as provided in Section 6.10 of the Concession Agreement. For projects below the Threshold Value, procurement shall be transparent and in conformance to Concessionaire's Procurement Policy. Any revisions in the procurement policy of the Concessionaires must be properly conveyed to MWSS RO for reference.

A.5. Cost within Benchmark

Benchmark Cost is an estimated range of unit prices for each item of work based on previous projects and standard commercial rates. It shall be used in determining the Approved Budget for the Contract (ABC).

Cost within Benchmark is a parameter to determine whether the contract amount is aligned with the established benchmark cost for such project. This is also a process of comparing the contract amount of a certain project with other projects of the same nature, and whether the unit cost used is within the range of standard commercial rates. **Table 9** shows the criteria for rating this parameter.

Table 9 – Cost within Benchmark

Conditions	Ratings %
Contract Amount as awarded is less than or equal to the Approved Budget for the Contract (ABC) based on Benchmark Costs for each work item.	30
Contract Amount as awarded is greater than the Approved Budget for the Contract (ABC) based on Benchmark Costs for each work item.	0

In the absence of an established Benchmark Cost, the DPWH Construction Materials Price Data Standard for the quarter when the ABC was approved.

For projects involving new technology where no benchmark costs can be applied yet, such projects shall be evaluated by the third party consultant hired by MWSS RO based on parameters as may be agreed upon by the Concessionaires and MWSS RO.

B. EFFICIENCY

Efficiency is the measure of whether the expenditure reflects the best way of meeting the services needed after considering all the options available. CAPEX is considered efficient if the following conditions are achieved:

B.1 Timeliness
B.2. Safety
B.3. Specifications / Quality Control
B.4.Final Costs
B.5 Utilization/Usefulness

B.1. Timeliness

Timeliness is the conformity to the scheduled project implementation and delivered in accordance to the prescribed contract period. It is measured as the percentage of slippage or delay in the completion of a project. Computation of the completion date and slippage are as follows:

- **Project Completion Date** = Original Number of Days of Completion + Approved Time Extension
- **Actual Completion Date** = No. of Days elapsed to complete the contract (from Notice to Proceed up to achievement of technically/substantially completed status)
- $\boldsymbol{Slippage} = 100 - \left(\frac{Project\ Completion\ Date}{Actual\ Completion\ Date}\ x\ 100\right)$

Parameter ratings for Timeliness are shown in **Table 10**.

Table 10 – Timeliness Rating

Parameter	Conditions	Ratings %
On-time	• On-time	25
Partially Delayed	• Slippage below or equal to 15%	15
Delayed	• Slippage greater than 15%	0

The Guidelines recognize that slippages are likely to occur during project implementation. **Table 11** is the list of justifiable causes of delay that may warrant time suspension and/or time extension.

Table 11 – List of Justifiable Causes of Delay

Justifiable Causes of Delay	Conditions
Force Majeure	Extreme weather conditions, floods, earthquakes, landslides, act of war, discovery of fossils, discovery of hazardous materials, fire
Permit / Right of Way (ROW) Issues	Delayed issuance of permits and clearances from external parties, land acquisition

Justifiable Causes of Delay	Conditions
Legal and Political Issues	Temporary restraining orders, litigation, orders from the relevant agencies, courts, or tribunals
Adaptation	Changes in government directives, regulations, policies, engineering codes and laws
Procurement / Supply-chain problems	Delayed delivery of supplies, closure of harbor, docks, canals, or other assistance of shipping or navigation
Unforeseeable obstructions	Obstruction at sites/underground utilities

In addition, other justifiable causes as indicated in the *Fédération International Des Ingénieurs Conseils* or FIDIC would be considered as justification to causes of delays.

All documents such as notice of claims, approved time extensions, clauses in the FIDIC, and letters/documents coming from external party requesting extension of time as may be required by the Auditor, must be readily available for review.

The Guidelines also listed unacceptable causes of delay as summarized in **Table 12**.

Table 12 – Unacceptable Causes of Delay

Unacceptable Causes of Delay	Conditions
Recurring / Repetitive Issues	These are issues which the Concessionaire have already experienced in previous projects but are still used as justification for time extension (i.e. same government unit which orders to work on night time basis only, same project area which experienced difficulty on acquisition of permits, and any projects in which MWSS RO considers as repetitive justification). If the reasons of the delay are not present during project inception, such can be a valid reason for time extension.

Unacceptable Causes of Delay	Conditions
Poor Planning and Risk management	Requests for time extension due to incomplete conduct of pre-implementation and risk mitigation studies

B.2. Safety

Safety is the control of recognized hazards to achieve an acceptable level of risk. This can take the form of being protected from the event or from exposure to something that causes health or economical losses. It can include protection of people or properties. In the audit and evaluation of a project, the implementation of safety standards and procedures, as well as provision of safety equipment to ensure hazard-free operation is considered. Ratings and conditions for this parameter are shown in **Table 13**.

Table 13 – Safety Rating

Parameter	Conditions	Ratings %
Compliant	• No major accident or less than 5 minor accidents	15
Partially Compliant	• No major accident or with 5-10 minor accidents	5
Non-compliant	• At least 1 major accident or more than 10 minor accident	0

For classification purposes, definition of major and minor accidents is summarized in **Table 14.**

Table 14 – Classifications of Major and Minor Accidents

Accident	Definition
Major	• Loss of life • Loss/Damage on major parts of the body resulting to disability • Damage to property costing PhP 100,000 and above
Minor	• Any accident which can be easily treated • Damage to property costing below PhP 100,000

B.3. Specifications / Quality Control

Specifications are the detailed description of the design and materials used to develop something. To implement a project, specifications are needed. Whereas, quality control refers to the monitoring of specific project results to determine if they comply with existing quality standards and identifying the ways to eliminate causes of unsatisfactory performance.

For the Audit, comparison between the design plans and the As-Built Drawing is done to determine design changes and/or variation orders. The plans/drawing/specifications are compared to what is constructed on site to verify compliance. Ratings and conditions for these parameters are shown in **Table 15**.

Table 15 – Specifications / Standards Rating

Parameter	Conditions	Ratings %
Compliant	• All are in accordance to plans, specifications, and quality standards	10
Non-compliant	• Observed items that are not in accordance to plans, specifications, and quality standards	0

B.4. Final Costs

The Final Cost is the total expenditure of the project when such project is considered closed. **Table 16** shows how this parameter is rated.

Table 16 – Final Cost Rating

Conditions	Rating %
Cost overrun is 15% and below	25
Cost overrun above 15% but not more than 30%	15
Cost overrun above 30%	0

All costs exceeding the contract amount must be supported by Approved Variation Orders and other policies as indicated in the FIDIC contract. It would be the main basis of the Auditor on the approval of the justification of final costs.

All documents (notice of claims, approved cost variation orders, clauses in the FIDIC, and any documents to support the request for additional

costs such as LGU ordinances and/or change in government policies, etc.) required by the Auditor must be readily available for review.

Moreover, this Guidelines also listed unacceptable causes of cost variation orders as summarized in **Table 17.**

Table 17 – Unacceptable Causes of Cost Variation Order

Grounds for Cost-Variation	Definitions
Recurring / Repetitive Issues	These are issues which Concessionaires already experienced in previous project but are still used as justification for cost-variation (i.e. re-blocking of concrete pavements, and any projects which MWSS RO considers as repetitive justification)
Poor Planning and Risk management	Any request for cost-variation order due to incomplete conduct of pre-implementation and risk mitigation studies
Permit Acquisition Issues	Requests from external parties without any relevance to the service obligation delivery (i.e. cash in exchange of clearances)

Cost overrun in excess of 15% up to 30% shall not be recoverable without valid justifications while those in excess of 30% shall not be recoverable.

B.5. Utilization and Usefulness

Effective Utilization is a parameter to determine if the design output of a project is utilized within the projected utilization period as reflected in the Approved Business Plan (ABP). For projects involving longer time of utilization that transcends two or more Rate Rebasing periods, the utilization targets must be reflected in the ABP.–Projects without utilization targets will be rated based on its usefulness. A project is considered useful when it is being used to support and enhance the delivery of a service obligation. Utilization as Efficiency Parameter is shown in Table 18.

Table 18 – Utilization / Usefulness as Efficiency Parameter

Parameter	Conditions	Ratings %
Effective / Useful	• More than 70% of target utilization	25

	• Already being used to support and enhance the delivery of service obligation	
Partially effective	• 50% to 70% of target utilization	15
Ineffective	• Less than 50% of target utilization	5
Not useful	• Not being used	0

Effective utilization will be rated based on target utilization rate as soon as the projects becomes operational. For MWSS RO's reference, Concessionaire is required to submit its target utilization rates for every project. In case of delays in the completion of the project, Concessionaire shall resubmit the calibrated target utilization rates

VII. CAPEX AUDIT RATING SYSTEM

A. Computation of Final Rating

A project is considered prudent and efficient if it attains a minimum total rating of 70% using the equation below.

$$Total\ Rating = \frac{Ratings\ for\ PRUDENCE + Ratings\ for\ EFFICIENCY}{2}$$

- Passing total rating for full cost recovery is 70% provided that no rating is lower than 60% on either prudence and efficiency.
- For total ratings which passed the prudence test but failed on efficiency, it would undergo Post-review stage.
- If a parameter is not applicable to a certain type of project, the total rating shall be the total percent rating obtained per applicable parameter over summation of ratings of the applicable parameters.

B. Post-Review Stage

For projects which passed the prudence test but failed on efficiency, the Concessionaire can remediate the deficiencies on correctible audit parameters such as timeliness, quality / standards, final costs and effective utilization. **Table 19** show how the Concessionaire can catch-up on the passing rate of efficiency.

Table 19 – Catch-up to Passing Rate on Failed Efficiency Parameters

Audit Parameter	Action plan to catch-up passing rate
Timeliness	Catch-up to passing rate can be attained through justifications subject for further review of MWSS RO.
Specifications / Quality Control	Compliance action plan (rectification, reworks, etc.) at the expense of the Concessionaire and shall not be recoverable.
Final Costs	Catch-up to passing can be attained through justifications subject for further review of MWSS RO.
Utilization / Usefulness	Proof of optimum utilization. If not optimally utilized, catch-up to passing rate can be attained through justifications subject for further review of MWSS RO.

C. Projects Below Passing Scores

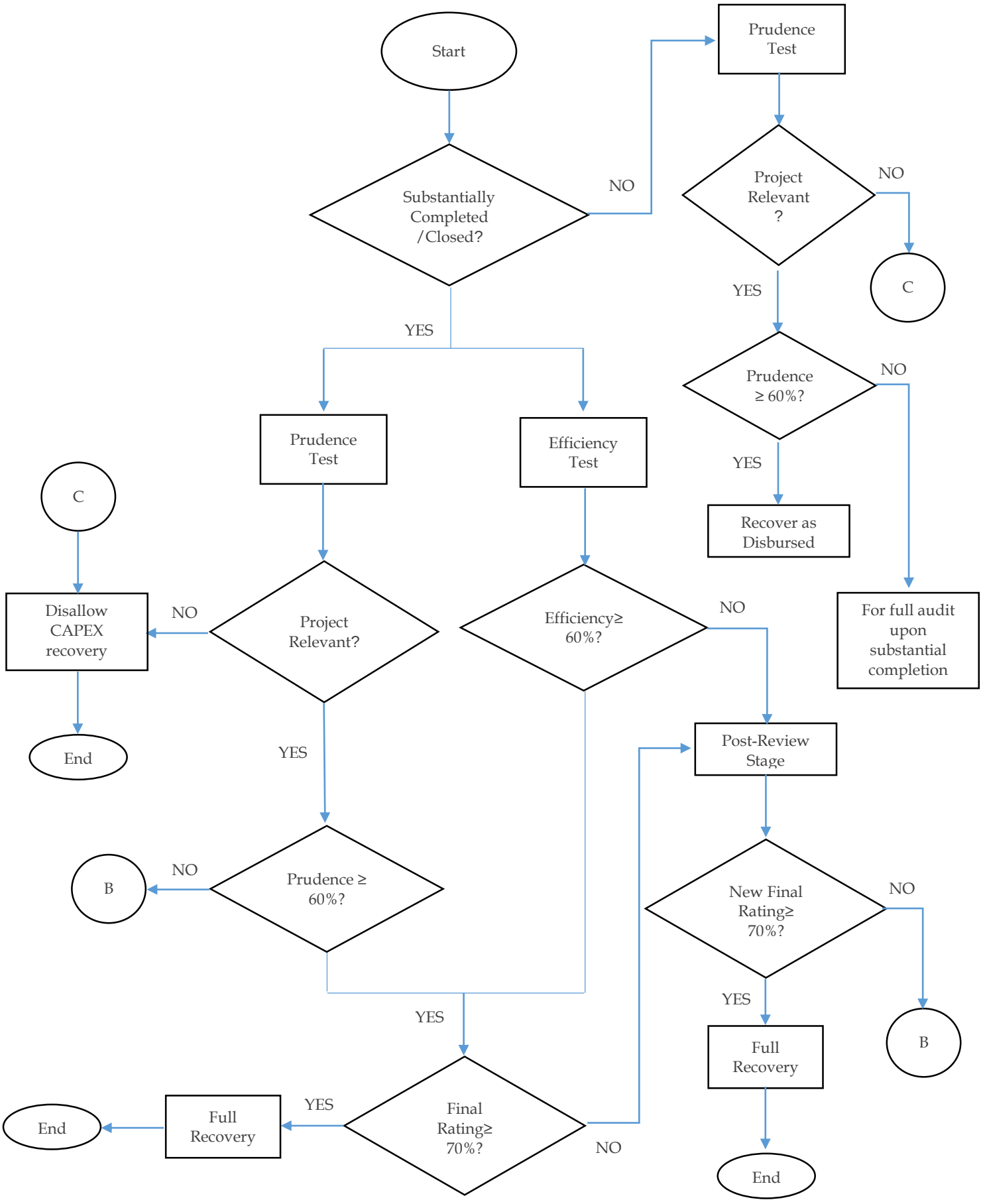
In case the Total Rating of the project falls below 70% or if either the Prudence or Efficiency of a project falls below 60%, Utilization and Usefulness are also measured to allow partial recovery of capital expenditures.

If the Utilization and Usefulness rating of the project reaches 70% of its target utilization, the Concessionaire may recover 70% of the Benchmark Cost or the Final Project Cost whichever is lower. In the event that the project is underutilized or is deemed not useful, the project will be set aside for the next audit. Presented in **Table 20** is the rating system for Utilization and Usefulness as a recovery parameter.

Table 20 – Utilization / Usefulness as Recovery Parameter

Parameter	Conditions	Remarks
Effective / Useful	• More than or equal to 70% of target utilization • Already being used to support and enhance the delivery of service obligation	70% Recovery
Not Effective/Useful	• Less than 70% of target utilization	Subject to Next Audit

VIII. TECHNICAL AUDIT FLOW



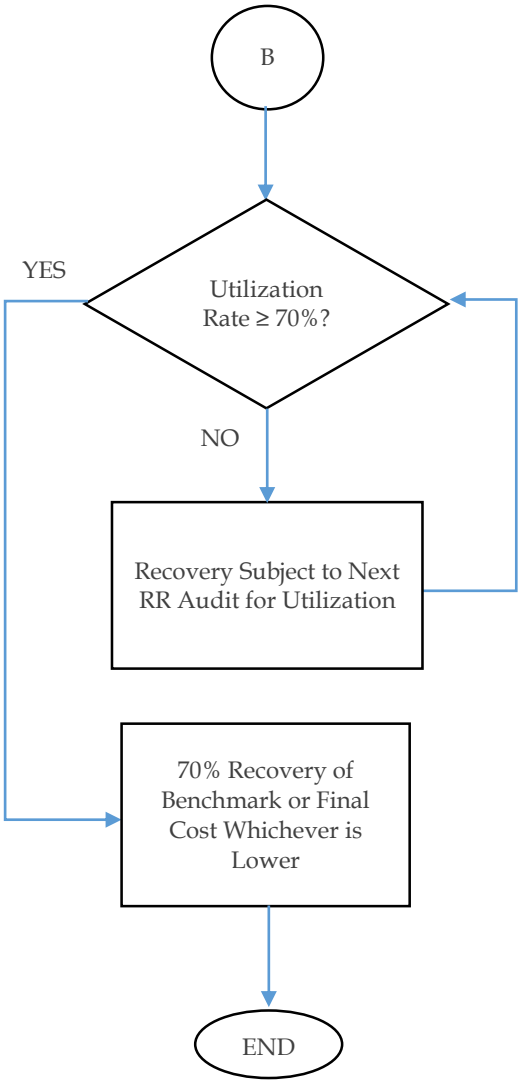


Fig. 1 – Technical Audit Flow

IX. PROCEDURE IN THE CONDUCT OF CAPEX AUDIT

A. Notification

The Auditor notifies the Concessionaire in writing, informing them of the conduct of the Audit. The notification should be properly acknowledged. Concurrence to such Audit is expected from the Concessionaire.

B. Kick-off Meeting

A kick-off meeting shall be conducted between the Auditor and the Concessionaire to inform the Concessionaire of the purpose of the Audit, methodology, data needs, schedule of audit, profile of Auditor, etc.

C. Audit Schedule

For effective coordination, the Auditor will provide schedules (i.e. Dates and Time) for the following audit activities, allowing adequate time for the Concessionaires to prepare:

1. Data collection in the "Data Rooms"
2. Plant (Water Treatment Plants, Sewage Treatment Plant, Septage Treatment Plant, Pumping Stations) inspections/ observations
3. Conduct of field surveys
4. Interviews of officials of the Concessionaires, as appropriate
5. Periodic coordination meetings

D. Concessionaire's Presentation

The Concessionaire generally presents the following to the Auditor:

1. Programs and Projects
2. Processes/Procedures
3. Policies and Standards
4. Others as may be required

E. Data Gathering

The Auditor secure documents in various methods, such as:

1. Data Collection in the "Data Room"
2. Field Visits and Observations
3. Interviews
4. Field Surveys
5. Data Collation and Analyses
6. Others as may be required

The "List of Required Data" is enclosed in the Guidelines as **Annex 1**.

F. Coordination Meetings

Coordination meetings among all project participants shall be held periodically to ensure efficient conduct of the Audit.

G. Reports

The Auditor prepares its CAPEX Audit reports and consolidates them into a Consultant's Draft Technical Audit Report subject to comments and/or approval from the MWSS RO.

H. Forms

The basic forms used to collect data and information relative to the Audit are shown in **Annex 2.**

I. Exit Conference with the Concessionaires

Prior to completion of the tasks of the Auditor, an Exit Conference is made for proper order and debriefing.

J. Final Report

A Final Technical Audit Report is submitted to MWSS RO incorporating Concessionaire's comments and suggestions which were found acceptable by MWSS RO.

X. EFFECTIVITY OF THE GUIDELINES

The effectivity date of this Guidelines is the date of the Final Approval of the MWSS Board of Trustees. The Guidelines shall be applied prospectively and will only apply to projects with Notice of Awards succeeding the effectivity date.

XI. TRANSITORY PROVISIONS

All on-going and completed projects prior to the approval of this Guidelines shall be audited based on the Methodology used by the Auditors during the last Rate Rebasing Exercise.

XII. AMENDMENTS

The Technical Audit Guidelines is a live document that will be subject to review and revision by the MWSS Regulatory Office. Any amendments made on this Guidelines are subject to MWSS BOT approval and will likewise be applied prospectively to projects with Notice of Awards succeeding the approval date.