



METROPOLITAN
WATERWORKS &
SEWERAGE
SYSTEM
REGULATORY
OFFICE

TERMS OF REFERENCE

PROJECT:

CONSULTANCY SERVICES FOR
THE FIFTH RATE REBASING

July 2021

METROPOLITAN WATERWORKS AND SEWERAGE SERVICES
REGULATORY OFFICE

TABLE OF CONTENTS

1.	Background	1
2.	Objectives of the Consultancy Services.....	3
3.	Scope of Work	4
4.	Deliverables	11
5.	Contract Duration.....	13
6.	Team Composition.....	13
7.	Constraints	19
8.	Terms of Payment.....	20
9.	Assistance to be Provided by the MWSS RO.....	22
10.	The Contract Award.....	22

1. Background

The Revised Concession Agreements (“RCA”) of the Metropolitan Waterworks and Sewerage System (“MWSS”) with Manila Water Company, Inc. (“Manila Water”) and Maynilad Water Services, Inc. (“Maynilad”) contain the provisions on tariff adjustments over the life of each of the concessions. An important provision thereof is the “Rate Rebasing”, an extensive rate review and evaluation exercise that is carried out every five (5) years.

Section 9.4 of the RCA outlines the processes involved in the conduct of the Rate Rebasing. The major activities therein are described in the following paragraphs.

The Rate Rebasing entails the audit and evaluation of the Concessionaires’ historical (actual) Cash Flows wherein the efficiency and prudence of incurred operating expenditures (“OPEX”) and capital expenditures (“CAPEX”) are assessed to determine possible disallowances. It also requires an evaluation of the Concessionaires’ compliance with Service Obligations and their performance on Key Performance Indicators/Business Efficiency Measures (“KPIs/BEMs”) based from the Business Plans approved in the preceding Rate Rebasing exercise. The Historical Cash Flows (“HCF”) of each Concessionaire is established and, using the preceding Rate Rebasing’s approved Appropriate Discount Rate (“ADR”), the Net Present Value (“NPV”) of the Opening Cash Position (“OCP”) is determined.

The Rate Rebasing likewise includes the evaluation of the Concessionaires’ new Business Plans wherein new Service Obligations and KPIs/BEMs targets as well as new sets of programs and projects for the ensuing Rate Rebasing period are reviewed. The Business Plans contain the projection of the Concessionaires’ Future Cash Flows (“FCF”), which include, among others, a reasonable approximation of future receipts as well as the determination of prudent and efficient OPEX and CAPEX. The projections of the annual Concession Fee payments (“ConFees”) and other foreign currency denominated cost streams in the FCF are also necessary. The validated FCF of each Concessionaire shall be discounted using the current Rate Rebasing’s ADR to arrive at its NPV.

“HCF” and “FCF” are defined in Article 1 of the RCA, as follows:

“Cash Flows” means (i) in the context of historical cash flows, both Receipts and Expenditures efficiently and prudently incurred by the Concessionaire in the course of carrying out its obligations under this Agreement, and (ii) in the context of future cash flows, (A) both anticipated Receipts and Expenditures efficiently and prudently incurred by the Concessionaire in the course of carrying out its obligations under this Agreement and (B) from and after the second Rate Rebasing Date, any Expiration payment agreed to be paid by MWSS to the Concessionaire on the Expiration Date pursuant to

Section 9.5; it being understood that Expenditures “efficiently and prudently incurred” does not include, among other things, payments for (X) Disapproved Assets or (Y) fees for management or consulting service required by the Concessionaire in order to carry out its obligations under this Agreement payable to any shareholder or affiliate of the Concessionaire to the extent, in the judgment of the Regulatory Office, that such fees do not represent the best value available in the market for such services.

An important aspect of the Rate Rebasing involves the determination of the impact of tariff, both to the customers and concessionaires, and review of the 12% nominal ADR to be applied on FCF. Article 1 of the RCA defines the ADR as follows:

“Appropriate Discount Rate” means (i) for the periods prior [effective date of this agreement], the approved rates by the MWSS; and (ii) from [effective date of this agreement date], is equal to nominal twelve percent (12%).

Following the above, the Rebasing Adjustment is determined. The determination procedure is outlined in Sections 9.4.2 of the RCA, which states the following:

“For the purposes of determining the Rates Adjustment Limit to apply to Standard Rates to come into effect on a Rate Rebasing Date commencing with the second Rate Rebasing Date, and the Rates Adjustment Limits for the following four (4) Charging Years, the Regulatory Office shall, by taking into account all information available at the time, and by making reasonable projections of all factors relevant to the future Cash Flows of the Concessionaire, [and in accordance with the formula set out in Schedule [15]] determine:

- (i) the Net Present Value, which may be either positive or negative, of the Opening Cash Position, as at June 30 following that Rate Rebasing Date;
- (ii) the amount, either positive or negative, which if made to the Rates Adjustment Limit for each of the five (5) Charging Years of the Rebasing Period would cause the Net Present Value of the Future Cash Flows, as at June 30 following that Rate Rebasing Date, to be equal but opposite in sign to the Net Present Value of the Opening Cash Position as determined in (i) above (the "Rebasing Convergence Adjustment").”

The Rebasing Adjustment, either positive or negative, shall be used for the purposes of calculating the Rates Adjustment Limit for each of the five (5) Charging Years of each Rebasing Period, in accordance with the provisions set forth above.

It is noteworthy that the rebased tariff shall be subject to the limitations of the ADR and Return on Rate Base (RORB) provided in Section 9.1 of the RCA. The same section refers to Section 12 of the MWSS Charter (Republic Act No. 6234), which provides as follows:

“Section 12. Review of Rates by the Public Service Commission. The rates and fees fixed by the Board of Trustees for the System and by the local governments for the local systems shall be of such magnitude that the System's rate of net return shall not exceed twelve per centum (12%), on a rate base composed of the sum of its assets in operation as revalued from time to time plus two months' operating capital.”

In addition, the Rate Rebasing should include a re-examination of its broad principles to arrive at enhanced frameworks for Rate Rebasing, including any process for the review of the Concessionaire's operation performance and historical cash flows subject to applicable COA rules and regulations, pursuant to Section 9.2 of the RCA.

Further, the Rate Rebasing should provide a venue for the contracting parties to discuss and thresh out issues and concerns that affect the Concessionaires' compliance with their contractual obligations and on tariff setting.

2. Objectives of the Consultancy Services

The Rate Rebasing is a thorough exercise that requires different fields of expertise such as Finance, Economics, Engineering, and Law. Thus, the MWSS Regulatory Office (“RO”) needs to procure the services (“Consultancy Services”) of various financial, economic, technical, and legal experts (“the Consultants”) for the Rate Rebasing. Aside from the fact that the manpower compliment of the RO is not sufficient to undertake the rate rebasing process, it is also the RO's view that engagement of a third-party through Consultancy for the conduct of the Rate Rebasing exercise is logical to avoid any perception of biases.

The general objective of the procurement of the Consultancy Services is to ensure the proper and successful conduct of the Rate Rebasing, specifically the following:

- a. The Rate Rebasing is methodical, fair, and equitable to all stakeholders;
- b. The process and the results thereof are consistent with the RCA;

- c. The RO's determination of the Rebasing Adjustment is defensible in any and all fora;
- d. A more relevant and systematic Rate Rebasing methodology is developed and implemented;
- e. All issues and concerns between the contracting parties (MWSS and Manila Water/Maynilad) are resolved;
- f. The processes and procedures undertaken are fully documented;
- g. The necessary amendments and supplements, if any, to the RCA and appropriate policies are identified;

3. Scope of Work

The Consultancy Services shall be provided by several Consultants in each field of expertise in accordance with Section 6 below to deliver the following scope of work:

- a. Develop a detailed methodology for the conduct of the Rate Rebasing in light of the RCA and the RR Frameworks developed in the past and the demands of the current process, which includes the following tasks:
 - i. Prepare the process flow detailing the activities of the Rate Rebasing, including the Technical and Financial Audits that will be undertaken by identifying the dates for completion of the specific activities of the Rate Rebasing; and
 - ii. Assess current information on hand and determine additional information to be required from the Concessionaires, to the extent possible, using uniform templates or formats in order to facilitate proper benchmarking; and;
- b. Review and evaluate relevant reports (e.g., Water Demand Study and Regulatory Financial Audit/s) previously undertaken/submitted by other Consultants that will form part of the Rate Rebasing determination inputs;
- c. Establish the level of Compliance with Service Obligations under the RCA, by the Concessionaires by performing the following:
 - i. Validate the coverage targets for water supply, separate and combined sewerage and sanitation, as of end of CY 2021, as submitted by the Concessionaires based on updated PSA information on population and households;

- ii. Validate the compliance to 24-hour at 7 psi. water availability, water and wastewater quality standards, customer service standards for the Rate Rebasing Period CY 2018 to 2022, based on the KPI-BEMs reports submitted by the Concessionaires;
 - iii. Validate the performance on Non-Revenue Water ("NRW"), as of end of CY 2021, vis-à-vis the targets set in the latest approved Business Plans; and
 - iv. Conduct performance benchmarking on the level of compliance to the Service Obligations and determined causes of the significant variances;
- d. Audit and evaluate HCF, which include the following major tasks:
- i. Perform the Technical Audit of CAPEX using the approved Technical Audit Guidelines ("TAGs"), attached as Annex "A", and recommend adjustments to the Expenditures resulting from the same;
 - ii. Determine and ascertain "efficient and prudent" Cash Flows to be included in the OCP by performing Regulatory Financial Audit ("RFA") based on the Concession Accounting and Auditing Guidelines ("CAAGs"), attached as Annex "B", for years not previously covered by RFA and perform follow-up procedures to be identified as pending issues in previous RFA/s;
 - iii. Identify and determine completeness of the submitted list of all Recovered Assets, including supporting documents, based on the agreed criteria set by the MWSS and Concessionaires, if any. Validate if the legal title as well as rights, title and interest to all such recovered assets are transferred to the MWSS on or before such Rate Rebasing date pursuant to Section 6.13 of the RCA. If in case, there is no agreed criteria yet, formulate criteria on how to identify which assets may be classified as recovered, based on the definition of "Recovered Assets" under Article 1 of the RCA;
 - iv. Identify and determine compliance to the disposal of movable property in accordance with the applicable Commission on Audit Rules and whether the proceeds of disposal were remitted to the MWSS without need of demand pursuant to Section 3.4 of the RCA;
 - v. Identify and determine compliance of the submitted concessionaire debt and borrowing plans pursuant to Section 6.11 of the RCA;
 - vi. Analyze the effectiveness of Expenditures related to NRW reduction and management and recommend adjustments to HCF, if any;

- vii. Analyze the CAPEX and/or OPEX associated with the compliance with Service Obligations targets;
- viii. Perform benchmarking analysis on the HCF of the two Concessionaires;
- ix. Identify adjustments to the OCP submitted by the Concessionaires, identifying the basis of such adjustments. These adjustments shall be discussed with the Concessionaries involved for their comments. The summary of HCF adjustments shall contain the following information:
 - a) Balance submitted by the Concessionaire / Audited balances from previous RFA;
 - b) Adjustments or differences which should be classified as exclusions, inclusions, reclassifications, errors, etc.;
 - c) Audited or the Recommended Value and the calculation of the OCP;
 - d) Description of the adjustment or differences identified stating, among others, the rationale of the adjustment, key considerations adopted, audit parameters adopted, analytical procedures performed, etc.;
 - e) Initial responses/arguments of the Concessionaires relative to the adjustments identified in Item b in this section;
 - f) Audit Team's counter response/arguments to support its recommendation relative to the Concessionaires' initial responses identified;
- e. Establish Concessionaires' OCP, with the following major tasks:
 - i. Establish the Concessionaires' OCP taking into account HCF and the adjustments;
 - ii. Apply and discuss the appropriateness of the agreed economic factors to determine the NPV of the HCF;
 - iii. Present the determination of the 2023 OCP for each Concessionaire; and
 - iv. Present an analysis of 2023 OCP against the projected OCP laid down in the previous Financial Model and identify major factors contributing to deviations from projections; also, identify all issues relative to OCP from the preceding Business Plan;

- f. Provide a review of the 12% nominal ADR, through Benchmarking analysis or other similar methods, to be used in the FCF, relative to the rates of return being allowed from time to time to comparable water utilities and/or other utility operators of long-term infrastructure concession agreements in other countries. The review may consider emerging and developed markets, and level of rates of return - low, median, high;
- g. Review Concessionaires' proposed Business Plans as approved by Corporate Office ("CO"), specifically, Service Obligations and CAPEX contained therein, in terms of their relevance to the water and wastewater master plan of the latter.
 - i. Evaluate the Concessionaires' proposed Service Obligations and programmed CAPEX in the new Business Plans as approved by the CO for purposes of determining whether these are substantially complying with the Concessionaires' commitments in the RCA, as amended and extended;
 - ii. Assess the efficiency and prudence of the proposed CAPEX as well as the timing of the same using the criteria set by the Consultants for this purpose; and
 - iii. Recommend the appropriate Concessionaires' Service Obligations and CAPEX for the period 2023 to 2027;
- h. Evaluate and determine FCF based on the proposed Concessionaires' Business Plans, which includes the following major tasks:
 - i. Verify the pre-rebased average tariff for residential, semi-business, commercial, and industrial used in the projection of revenues;
 - ii. Verify the reasonableness of assumptions, which includes financial and economic factors used, if any, on revenue projections and Receipts such as billed volumes and other revenues;
 - iii. Evaluate Expenditure streams for completeness and propriety of cost estimates;
 - iv. Establish the ConFees payments for the period 2023 to 2037;
 - v. Determine the NPV of FCF and the Rate Rebasing adjustment to make the NPV of FCF equal but opposite in sign with the OCP;
 - vi. Establish Concessionaires' FCF, classified under OPEX, CAPEX, and ConFees, based on the different segments of operation (i.e. water,

- wastewater or other operations) and further classification of OPEX into “controllable or uncontrollable”;
- vii. Analyze the relationships between financial and non-financial data and determine whether this is in accordance with historic or expected levels; and
 - viii. Perform Benchmarking Analysis on the FCF of the two Concessionaires;
 - i. Recommend the Concessionaires’ KPIs/BEMs and other targets for the period 2023 to 2027 and the corresponding penalties, if any, for not meeting these targets.
 - i. Assess effectiveness of current KPIs/BEMs targets and set improved and, if needed, additional KPIs/BEMs and other targets for the period 2023 to 2027 considering the provisions of the RCA, and
 - ii. Review and assess previous rewards and penalties for OPEX and NRW, and recommend, if needed, new penalties for new KPIs/BEMs and other targets;
 - j. Perform Sensitivity Analyses and provide expert advice on the following:
 - i. Estimate the effective change in tariff caused by cancellation/s or timing slide/s in identified key CAPEX project/s;
 - ii. Estimate the impact of differences in economic and financial assumptions, which includes the ADR, used in the OCP or FCF;
 - iii. Determine possible tariff impact/s on factors involving the Demand Projections, such as Billed Volume, number of customers and/or Customer Mix;
 - iv. Perform other sensitivity analyses that may be required by the RO, identified in the course of the Rate Rebasing;
 - k. Perform the Water Affordability Study on the rebased rates;
 - l. Determine whether adjustment in rates are compliant with Section 9.1 of the RCA, which states that adjustment in rates shall be subject to the limitation of ADR and Section 12 of the MWSS charter, viz., “rates and fees fixed by the Board of Trustees for the System ... shall be of such magnitude that the System's rate of net return shall not exceed twelve per centum (12%), on a rate base composed of the sum of its assets in operation as revalued from time to

time plus two months' operating capital." This shall involve the following major tasks:

- i. Review the basis of calculating the Return on Rate Base ("RORB") based on Section 12 of the MWSS Charter and other issuances;
 - ii. Determine compliance to twelve percent (12%) cap on returns, as well as other requirement and limitations applicable to public utilities as provided under the constitution and other prevailing laws, rules and regulations, pursuant to Section 4.2.1 of the RCA;
 - iii. Establish the Asset Base for the following Rate Rebasing Period (i.e. Fixed Assets used and useful to operations plus two months working capital);
 - iv. Determine whether the Revenue from the rates derived from the Rate Rebasing exercise will exceed the required return on the Asset Base plus the Operating Expenses with Depreciation; and
 - v. Recommend the appropriate course/s of action for any excess rate of return, if any, to comply with Section 12 of the MWSS Charter;
- m. Recommend changes to the components of the customer bills to ensure clarity and reasonability of the charges being imposed, if any;
- n. Assess the socio-political impact of proposed rebased tariffs for the two Concessionaires including their acceptability/affordability;
- o. Organize, conduct, and document at least eight (8) Public Consultations with the customers of the Concessionaires, four (4) sessions to present the Concessionaires' proposed Business Plans and four (4) sessions to present the MWSS RO determined indicative tariff;
- p. Establish the appropriate Rebasing Adjustment for each Concessionaire in accordance with the foregoing parameters and the relevant RCA provisions and, correspondingly, the Rebased Average Tariff, in terms of the following:
- i. The Average Basic Charge;
 - ii. All-in average Tariff; and
 - iii. All-in impact to customer bills, per customer classification and identifying several key consumption levels (e.g., 10, 20, and 30 cubic meters);
- q. Determine whether the Standard Rates resulting from the proposed rebased rates is compliant to the provisions set in Section 9.2 of the RCA;

- r. Provide expert advice on reducing the tariff impact of the established Rebasing Adjustment for each Concessionaire through Expiration Payments under Section 9.5 of the RCA;
- s. Recommend enhancement/s to the RR Framework:
 - i. Recommend improvements to the existing TAGs and CAAGs based on the audit conducted to ensure that they remain relevant in a continuously evolving environment;
 - ii. Develop/enhance the financial model currently being used to:
 - a. A more user-friendly format, in terms of the completeness of the data links;
 - b. A common format that will facilitate the benchmarking of historical data and future assumptions of both Concessionaires;
 - c. A model that will allow for further Sensitivity Analysis on movement of various assumptions. For instance, the model will facilitate the tariff impact of possible non-implementation of key CAPEX projects;
 - d. A model that has different financial statements namely: Statement of Financial Position, Statement of Income and Statement of Cash Flows;
 - iii. Develop a comprehensive Penalties Framework to be used in future Rate Rebasing pursuant to Section 11.4 of the RCA;
 - iv. Revisit the provisions of the RCA and propose amendments and/or interpretations to address the current realities of the MWSS and Concessionaires considering the prevailing laws and jurisprudence;
- t. Conduct presentations and/or debriefing on the results of concluded Rate Rebasing exercise and the justifications for these, and the proposed improvements for future Rate Rebasing exercises;
- u. Provide a comparative review of the CA and the RCA in relation to Rate Rebasing, including an opinion on which is better and more advantageous to the consumers. Likewise, provide a legal opinion on the Executive Order and/or other issuances re-organizing the MWSS RO should these be passed during the Rate Rebasing period.
- v. Perform activities necessary in the conduct of the Rate Rebasing as may be assigned from time to time by the RO or the MWSS Board of Trustees (“BOT”), subject to prior agreement with the Consultant.

4. Deliverables

The following reports shall be submitted and/or presented to the RO and the MWSS BOT, if necessary.

Deliverables	Submission Timeline
1. Inception Report	30 days from commencement date
2. Monthly Accomplishment Reports – This will include discussions on the status of the following determinations: <ul style="list-style-type: none"> a. OCP- contains discussion on financial and economic factors used, if any, and the findings and recommendations on HCF audit and validation and OCP calculation; and b. FCF- contains discussion on financial and economic factors used, if any, and the findings and recommendations on FCF validation 	10 days following each preceding month to commence after submission of the Inception Report
3. Historical Cash Flows Report <ul style="list-style-type: none"> 3.1. Detailed Financial Audit of Historical Cash Flows (OPEX, CAPEX, Others) – contains discussion on findings and/or justifications on the recommended adjustments (2019-1H2022); 3.2. Detailed CAPEX Technical Audit – contains discussion on findings and/or justifications on the recommended adjustments (2018-2022); 3.3. OCP Calculation – contains findings and recommendations; and, 3.4. Service Obligation Compliance in the preceding Business Plan – contains findings and validations / verifications of the different service obligations 	180 days from commencement date
4. Public Consultations – to be conducted by the Consultants to discuss major projects and proposed tariff adjustments by the Concessionaires.	195 days from commencement date

Deliverables	Submission Timeline
<p>5. Future Cash Flows Report</p> <p>5.1. Establishment of KPIs+BEMs and other targets for 2023-2027 – contains the established Indicators and Measures including targets and the corresponding Penalties, if any;</p> <p>5.2. New Business Plan – contains discussion relative to Concessionaires’ approach/strategy in delivering the services to meet their targets. Should also contain the recommended Service Obligations and clearly indicating the required CAPEX for 2023-2027 in the attainment of the Service Obligations;</p> <p>5.3. Established FCF – contains details on macro-economic and other assumptions used and changes made to projections of Concessionaires;</p> <p>5.4. Sensitivity Analysis and Impact of Tariff to both customers and concessionaires;</p> <p>5.5. Water Affordability on the rebased rates;</p> <p>5.6. Review of the 12% nominal ADR through Benchmarking analysis or other similar methods;</p> <p>5.7. Initial assessment concerning compliance with RORB requirement</p>	<p>210 days from commencement date</p>
<p>6. Preliminary Rate Rebasing Report – This shall contain the indicative tariff adjustments for the Concessionaires that will be discussed during the RO public consultations</p>	<p>240days from commencement date</p>
<p>7. Presentation / Debriefing on findings and recommendations for the Rate Rebasing exercise. The Consultants shall provide copies of the materials to be used in the presentation / debriefing.</p>	<p>Not later than the end of the contract</p>
<p>8. Final Rate Rebasing Report – This shall contain the detailed discussion on the Rate Rebasing exercise undertaken, ideally, covering the scope of work for the contract.</p>	<p>Not later than the end of the contract</p>

All formal reports shall be submitted in 7 hard copies and e-copies,

5. Contract Duration

The contract duration shall be for a period of nine (9) months to be reckoned from the receipt of the NTP or the date specified therein, whichever comes later.

6. Team Composition

The key staff are identified, with their main duties and responsibilities and qualifications, as follows:

a. Project Manager:

- i. The Project Manager shall act as team leader. He/she shall be responsible for the development of a detailed framework/masterplan on the methodology/conduct of the Rate Rebasing exercise. He/she shall likewise ensure presentation of all key findings to the RO and the MWSS BOT, as well as the timely submission of all deliverables under this engagement, shall coordinate and integrate all inputs and submit all reports, and shall facilitate all meetings among Consultants, RO, CO, MWSS BOT, Concessionaires, and other stakeholders.
- ii. He/she must have a Bachelor's degree in Economics, Finance, or Engineering, preferably with a Master's degree and must have at least ten years of solid work experience in financial, economic and technical analysis of large infrastructure projects, preferably in the water/sewerage or power sector, five years of which should be as a team leader/project manager of a multi-disciplined team with a mix of technical, financial, legal, and economic expertise.

b. Financial Expert:

- i. The Financial Expert shall be responsible for the validation of all actual and forecasted expenditures/costs including all relevant assumptions used in their determination. He/she shall also be responsible for the application of the financial principles involved in the Rate Rebasing exercise including, but not limited to, computations of the indicative RORB, approaches to capital expenditure recovery, all analyses and assessment of HCF (including the OCP) and FCF, and provide financial information for the Sensitivity Analyses required. He/she shall be responsible for summarizing and presenting, together with the Project Manager, all key financial issues for the RO and MWSS BOT.
- ii. He/she must have a Bachelor's Degree in Finance, Accountancy, Economics or Business administration, preferably a Certified Public Accountant and/or a Master's degree in Finance, Economics, or Business

Administration or related courses, with at least five years of extensive work experience and exposure in financial analysis, financial valuation and/or financial planning, with special focus on, project costing and revenue forecast for large infrastructure projects, preferably of the water, sewerage, and power sectors.

c. Financial Audit Manager:

- i. The Financial Audit Manager shall be responsible for application of the financial and accounting principles and parameters involved in the regulatory financial audit including interpretation and all analyses and assessment of HCF. He/she shall assist the Financial Expert in the validation of HCF by managing the financial audit process in an organized and timely manner, and shall be initially responsible for summarizing and presenting financial audit issues and findings.
- ii. He/she must be a Certified Public Accountant and preferably with a Master's degree in Finance, Economics, or Business Administration or related courses, preferably with at least ten years of extensive work experience and exposure in financial audit, financial analysis, financial valuation, and/or financial planning, for rate setting and/or due diligence audit required for valuation such as merger and acquisition of companies with large infrastructure projects preferably in the water, sewerage and power sectors.

d. Economist:

- i. The Economist shall be responsible for the review of the 12% nominal ADR through Benchmarking analysis or other similar methods, formulation of all economic projections and assumptions including, but not limited to, elasticities of billed volume, the use of CPI and Forex rates, and their effect on tariff, all Sensitivity Analyses in relation to the foregoing, and Water Affordability Study on the rebased rates.
- ii. He/she must have a Bachelor's degree in Economics, preferably with a Master's degree, with five years of extensive relevant professional experience in economic analysis within the context of economic regulation, preferably in the water, sewerage, and power sectors. Preferably with international experience.

e. Financial Modeler:

- i. The Financial Modeler shall be responsible for programming the actual model scenarios or sensitivity runs and tests required by MWSS BOT and RO.
- ii. He/she must have a Bachelor's degree in Economics, Accountancy or Finance with at least five years of extensive work experience and exposure in financial modeling, financial analysis, financial valuation, and/or financial planning for companies with large infrastructure/CAPEX projects, preferably in the water, sewerage, and power sectors.

f. Technical Head - Water Supply System Operations Expert:

- i. The Technical Head shall be responsible for assessing reasonableness of all costs and capacities assumed, CAPEX, technical designs and standards that drive major CAPEX or cost items relating to water supply. He/she must provide, where necessary, benchmarks to costs and assumptions that drive costs and CAPEX.
- ii. He/she must have a Bachelor's degree in Engineering, preferably with a Master's degree, with at least ten (10) years of relevant professional experience, three (3) years of which must be international and/or worked on at least three (3) international projects, as an Engineer in water supply and sewerage system design, implementation and management of water supply and sewerage projects as well as operation and management of water supply and sewerage systems. He/She must also have five years experience as project manager/team leader.

g. NRW Specialist:

- i. The NRW Specialist shall be responsible for recommending the appropriate manner or approach to measuring NRW in a way that will help track real efficiencies and enable the Concessionaires to measure their effectiveness in this area. He/she shall also handle the determination of the efficiency and prudence of completed and proposed CAPEX projects including determination of accuracy of cost estimates relating to NRW. He/she shall likewise be responsible for determining rewards and penalties to be given to the Concessionaires, if applicable.
- ii. He/she must have a Bachelor's degree in Engineering with at least ten years of professional experience as an Engineer in the water and sewerage sector, five years of which as a NRW Expert. He/she must have experience in the reduction of physical losses and the rehabilitation of

distribution networks for NRW reduction, preferably with exposure in performance-based contracts for NRW reduction.

h. Water Supply Specialist:

- i. The Water Supply Specialist shall be responsible for evaluating and validating the Concessionaires compliance with their service obligations, specifically on water supply service area coverage and population, 24-hour water availability and pressure, water quality standards, and customer service standards. He/she shall also handle the determination of the prudence and efficiency of completed and proposed CAPEX projects including determination of accuracy of cost estimates.
- ii. He/she must have a Bachelor's degree in Engineering with at least ten years of experience in the water and sewerage sector, five years of which should be in water supply systems design and operation.

i. Sewerage and Sanitation Expert:

- i. The Sewerage and Sanitation Expert shall be responsible for assessing reasonableness of all capacities assumed as well as the technical designs and standards that drive major CAPEX or cost items relating to sewerage and sanitation. He/she must benchmark CAPEX proposals with international best practices. He/she will also be responsible for evaluating and validating the Concessionaires compliance with their Service Obligations in the light of wastewater quality standards and customer service standards.
- ii. He/she must have a Bachelor's degree in Engineering, but preferably with Master's degree with at least ten (10) years of professional experience, three (3) years of which must be international and/or worked on at least three (3) international projects, as an Engineer in the analysis, planning, design and management of sewerage and sanitation facilities.

j. Sewerage and Sanitation Specialist:

- i. The Sewerage and Sanitation Specialist shall be responsible for evaluating cost estimates of CAPEX or cost items relating to sewerage and sanitation. He/she shall also handle the determination of the prudence and efficiency of completed and proposed CAPEX projects including determination of accuracy of cost estimates. He/she shall likewise determine compliance of Concessionaires with their Service Obligations, specifically on sewerage and sanitation coverage and population.

- ii. He/she must have a Bachelor's degree in Engineering with at least ten years of experience in the water and sewerage sector, five years of which should be in the analysis, planning, design and management of sewerage and sanitation facilities.
- k. Demographic/Survey Specialist:
- i. The Demographic/Survey Specialist shall be responsible for evaluating and validating compliance on water supply, sewerage and sanitation services population coverage and the reasonableness of population projections used in establishing water demands and future coverage targets. He/she may also provide inputs to the acceptability / affordability analysis of the rebased tariff.
 - ii. He/she must have a Bachelor's degree in Statistics with at least five years of extensive experience in population/projection survey and demographic studies.
- l. Cost Engineers:
- i. The Cost Engineers shall be responsible for establishing the reasonableness of standard unit prices applied for all CAPEX and OPEX requirements for the new Business Plan relating to water supply, sewerage and sanitation. He/she must provide, benchmarks for standard costing applied in determining the CAPEX and OPEX requirements of the Concessionaires.
 - ii. He/she must have a Bachelor's degree in Engineering with at least five (5) years of experience in unit cost development/price analysis and estimates of water supply and sewerage facilities.
- m. Lawyer:
- i. The Lawyer shall be responsible for reviewing all current and long-standing issues relating to past interpretations of CA, as amended, and all accompanying historical MWSS BOT Resolutions for or against such interpretations or to current plans and financials submitted by the Concessionaires that give rise to new issues. He/she shall, thereafter, recommend a position, along with the rationale, for any interpretation, whether these constitute a change in the RCA.
 - ii. He/she must be a member of the Philippine Bar with at least five years of extensive experience in corporate law practice in a regulated environment. He/she must be proficient in contract review and resolving

legal and regulatory issues, with exposure to large infrastructure projects, preferably in the water and sewerage sector.

The key and support staff needed for the project and the total estimated man-months are as follows:

Key Staff	No. of Person/s	No. of Man-Months
Project Manager	1	9
Financial Expert	1	9
Financial Audit Manager	2	7
Financial Modeler	1	4
Economist	1	1
Technical Head who is also a Water Supply System Operations Expert	1	4
NRW Reduction Specialist	2	12
Water Supply Specialist	2	18
Sewerage/Sanitation Expert	1	3
Sewerage/Sanitation Specialist	2	12
Cost Engineer	8	32
Demographic/Survey Specialist	1	2
Legal Adviser	1	3
SUB-TOTAL	24	117

Administrative/Technical Support Staff	No. of Person/s	No. of Man-Months
Project Coordinator	2	18
Administrative Officer	1	9
Junior Engineer/Senior Researcher*	10	70
Financial Auditor*	12	36
Secretary/Encoder	4	36
Stenographer	2	15
Enumerators*	20	60
Utility/Messenger	1	9
SUB-TOTAL*	52	253

TOTAL MAN-MONTHS*	76	369
-------------------	----	-----

Note: * Values indicated are maximum amounts

7. Constraints

To ensure fairness and objectivity, the following constraints shall apply:

- a. The Consultant firm and any member of the proposed team of Consultants had no previous professional relationship or engagement, directly or indirectly with the Concessionaires, their parent companies and subsidiaries in the past one year immediately preceding the day of submission of bids;
- b. Any key member of the proposed team of Consultants has not been a partner, director, officer, or employee of the East and West Zone Concessionaires of the MWSS within the prohibitive period immediately preceding the day submission of bids, prescribed as follows:
 - i. Five (5) years for a partner, director or officer; and
 - ii. Three (3) years for an employee;
- c. Any key member of the proposed team of Consultants has no familial relationship within the 3rd civil degree of consanguinity or affinity with any of the employees or officers of the CO, the RO or any of the Concessionaires, or current members of the Bids and Awards Committee of the CO or the RO; and
- d. The provision of Section 47 (Disclosure of Relations) of the Implementing Rules and Regulations (IRRs) of Republic Act No. 9184 ("RA 9184") shall apply to all personnel of the Consultant

For purposes of the Constraints above, affiliate shall mean an inter-company relationship in which one of the companies directly owns fifty percent (50%) or less or the other companies' outstanding capital stock. Companies controlled by a common entity, are not considered affiliates under this project. Companies owning capital stock of another company through mutual funds being managed by another entity is not considered as an affiliate under this project.

All other provisions of RA 9184 and its IRRs shall also apply to the Consultant firm and any key member of the proposed team of Consultants.

8. Terms of Payment

a. Remuneration Payments

Deliverables/Milestones	Percent of Contract Value
1. Advance Payment	15% of total remuneration
2. Inception Report	15% of total remuneration less recovery of advance payment
3. Monthly Progress Reports	10% of total remuneration less recovery of advance payment
1 st Monthly Report – conducted/evaluated at least 20% of the CAPEX and Financial audits and SO compliance (2.5%)	
2 nd Monthly Report – conducted/evaluated at least 40% of the CAPEX and Financial audits and SO compliance (2.5%)	
3 rd Monthly Report – conducted/evaluated at least 20% of the CAPEX and Financial audits and SO compliance (2.5%)	
4 th Monthly Report – conducted/evaluated at least 20% of the CAPEX and Financial audits and SO compliance (2.5%)	
4. Historical Cash Flow Report <ul style="list-style-type: none"> i. Financial Audit; ii. CAPEX Technical Audit; iii. OCP Calculation; and iv. Validation/Findings of Service Obligation Compliance 	20% of total remuneration less recovery of advance payment
5. Public Consultations – upon submission of Report on Public Consultations, including the attendance sheets for the consultations conducted	10% of total remuneration less recovery of advance payment
6. Future Cash Flow Report <ul style="list-style-type: none"> i. Established KPIs+BEMs and other targets for 2023-2027; ii. New Business Plan including Service Obligations and CAPEX; 	20% of total remuneration less recovery of advance payment

Deliverables/Milestones	Percent of Contract Value
iii. Established FCF with details on macro-economic other assumptions used and changes made to projections of Concessionaires; iv. Sensitivity Analysis and Impact of Tariff to both customers and concessionaires; v. Water Affordability Study on the rebased rates; vi. Review of the 12% nominal ADR through Benchmarking Analysis or other similar methods; vii. Assessment in compliance with the RORB requirements	
7. Preliminary Rate Rebasing Report – upon submission of the indicative tariff adjustments acceptable to the RO	10% of total remuneration less recovery of advance payment
8. Conduct of presentation / debriefing on findings and recommendations for the Rate Rebasing exercise – upon submission of attendance sheet and copies of presented materials	5% of total remuneration less recovery of advance payment
9. Final Rate Rebasing Report – upon the recommendation for the Final Payment	10% of total remuneration less recovery of advance payment

b. Reimbursable Expenses

The Consultant may include certain Reimbursable expenses, as part of the project cost. The Reimbursable for the project shall be limited to the following:

- i. Acquisition of two (2) sedan/AUV/CUV/MPV vehicles for mobility of the Consultants during the project;
- ii. Equipment / material testing;
- iii. Consumable office supplies;
- iv. Printing and report reproduction;
- v. Communication expenses;
- vi. Public consultations' expenses;

- vii. Pantry supplies;
- viii. Meeting expenses, including rental of venues for large group meetings;
- ix. Storage devices, such as USB or portable hard drives;
- x. Laptop computer with operating systems to be used exclusively for the project;
- xi. Heavy duty colored printer to be used exclusively for the project;
- xii. Computer software to be used exclusively for the project; and
- xiii. Digital Camera

Reimbursable expenses shall be claimed within a two-month period after the end of each calendar month, otherwise they are deemed waived. These must be supported by proof of payments, e.g. Official Receipt. The two (2) vehicles, laptop computer with operating systems, printers and computer software, subject to reimbursement, shall be turned over to the RO upon the conclusion of the engagement.

9. Assistance to be Provided by the MWSS RO

The MWSS RO shall provide the following assistance to the Consultants:

- a. Fully furnished office space with telephones/internet access;
- b. Make its personnel available to support this undertaking;
- c. Additional logistics required; and
- d. Assist the Consultants in securing data needed from the Concessionaires and the MWSS.

10. The Contract Award

Using the Quality Based Evaluation (QBE) procedure, the contract shall be awarded to prospective bidder with the Highest Rated Bid (HRB), considering its Technical Bid component, with the contract price agreed as a result of the negotiation and post-qualification.