PRIMER

ON

TARIFF SETTING

AND REGULATION

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Abbreviations and Acronyms

AWC	Annual Water Charge
CDA	Cooperative Development Authority
CPA	Certified Public Accountant
CPC	Certificate of Public Convenience
CPCN	Certificate of Public Convenience and Necessity
Cu.m., m3	Cubic Meter
Dep	Depreciation
DTI	Department of Trade and Industry
EV	Equivalent Volume
GPM	Gallons per Minute
KPI	Key Performance Indicator
LGU	Local Government Unit
MaxNI	Maximum Allowable Net Income
MWSS	Metropolitan Waterworks and Sewerage System
NRW	Non-Revenue Water
NSO	National Statistics Office
NWRB	National Water Resources Board
NWRC	National Water Resources Council
O & M	Operation and Maintenance
OPEX	Operating Expenses
OR	Official Receipt
PEER	Property and Equipment Entitled to Return
Psi	Pounds per square inch
PTR	Professional Tax Receipt
ROI	Return on Investments
RR	Revenue Requirements
RWSA	Rural Water and Sanitation Association
SEC	Securities and Exchange Commission
SRF	Supervision and Regulation Fee
YTD	Year to Date

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1 Introduction

This manual presents the guidelines and fundamentals of the rate making process and related practices and serves as a resource that NWRB or the private water utility may use as a guide in establishing the basis on which rates are founded, in calculating the rates and in the analysis of its validity. It is not intended, nor should it be considered, as a complete text for specific rate making. The complexities of tariff regulation require consideration of many factors not included in this simplified presentation.

The structure of the manual basically follows the tariff process. First the tariff goals and committed levels of service are set as discussed in Chapter 1-Introduction. Chapter 2 - tariff setting and the rate design process follows. Based on tariff goals and committed levels of service, revenue requirements are determined for the next five years. A section on water supply planning is included as a framework for the computation of revenue requirements. Annual base tariffs are determined based on an estimate of consumption levels. A section on rate design follows which sets about considerations in the design of a tariff structure. Chapter 3 deals with Tariff Regulation including documentary requirements and resulting adjustments to succeeding tariff proposals. The next chapters deal with water rate adjustments other than those related to tariff reviews (Chapter 4) and sanctions (Chapter 5). Chapter 6 discusses the tariff approval process including documentary requirements, timeframe and public hearing.

The last chapter pertains to the guidelines in preparing the Annual Report that will be used to regulate the water utilities.

1.1 Tariff Goals

The goals of the tariff must be identified in any tariff proposal. Tariff setting goals may consider the following:

Financial sustainability requires the utility to have funds to cover all financial obligations as they occur.

Good governance requires that tariff should at the very least be simple, transparent and predictable. Good governance relates more to the implementation of the tariffs. Transparency and predictability relate more to the process of setting a tariff, rather than to the tariff itself. Simplicity, on the other hand, affects the tariff structure.

Economic efficiency is achieved through demand management and water conservation considerations in the tariff structure.

Distributive justice requires the public service to be distributed to meet society's standards for the amount of the service that everyone including the poor, deserves or needs.

Fair pricing is achieved if users pay the net social cost associated with their use of the public service, unless society has decided to subsidize some users.

1.2 Levels of Service

Tariffs are based on levels of service established in consultation with customers and/or their representative bodies. The proposed tariff should be sufficient to provide the agreed levels of service, such as number of hours of service, water quality, non-revenue water percentage, service coverage and pressure at which the service is provided.

The first page of a tariff proposal will set these goals and demonstrate clearly compliance with NWRB's policy objectives and priorities. An example is shown in Box 1-1.

Box 1-1 Sample Statement of Goals and Priorities

The goals of the tariff proposal for Year _____ to Year _____ are as follows:

- To cover all revenue requirements for 12% Return on Asset, Operating and Maintenance Expenses (including depreciation), and Taxes[a]. The revenue requirements are based on the following levels of service:
  - Service coverage 90% (entire subdivision area except the X area)
  - Non-revenue water not higher than 25%
  - 12 hours service
  - Water pressure range of __ to __ psi within 80% of the service area
  - Water quality in compliance with Drinking Water Standards
- To ensure that water is provided to all residents of the area including low income customers and that water bills of low income customers do not exceed 5% of their household income
- To ensure that the tariff structure is simple[b] and understood by customers. Tariff increases are predictable within the next 5 years

[a] *financial sustainability goal*
[b] *good governance goal*

1.3 Other Parameters for Rate Setting

In addition to the explicit tariff goals and levels of service, the new tariff guidelines feature:

- Use of a **5-year tariff period** based on the utility's Business Plan. For this purpose a section on Water Supply Planning (Chapter 2.2) is included in the guidelines;
- Use of **key performance indicators as benchmarks**, where appropriate, to provide the basis for projections;
- Use of an Excel-based **tariff model**;
- Calculation of an **average ROI** to reduce price shocks within the five year period, and to minimize administrative workload; and
- At the end of the 5 year period, a mechanism for calculation of **disallowances** / **upward adjustment** which will permit adjustments for

excess/ deficiencies in meeting the 12% ROI, to be applied to succeeding tariff proposals.

1.4 Legal Requisites

There must be an application for CPC including a tariff proposal submitted under oath by the applicant utility before the water rates can be approved.

Water rates must be adequate to provide for:

1. Operating expenses[1], but excluding such items as the following that distort the result of normal operations:

    a. non-recurring expenses (like losses due to typhoon or fire); and
    b. expenses related to non-regulated activities (see Section 2.1)

2. Depreciation of property in service entitled to return; and

3. Reasonable surplus equivalent to 12% of net book value of property in service entitled to return[2] including working capital for two months;

The proposed water rates and the scheduled hearing date must be published in a newspaper of general circulation in the utility's province at least 15 days before the hearing date, to give a chance for the public or concerned parties to be heard.

Approved water rates must be posted within 7 days from approval in conspicuous places within the area serviced by the water supply utility[3].

2 Tariff Setting and the Rate Design Process

2.1 Revenue Requirements

In providing adequate water service to its customers, every water utility must receive sufficient revenue to ensure proper operation and maintenance of the system, its sustainability, and maintenance of the system's financial integrity. The first step in utility rate making is to determine the total annual operating revenue requirements for the period in which the rates are to be effective.

Revenue requirements (RR) are the costs of service to be derived from water rates. These are composed of operating expenses (OPEX), depreciation (Dep), and the maximum allowable net income which should result in an ROI that should not exceed the 12% ROI limitation (MaxNI),

RR = OPEX + Dep + MaxNI

The required tariff is arrived at by dividing the revenue requirements by volume sold. This is illustrated in Table 2-1 below.

[1] Per NWRB Board Resolution No. 265-4, 2. 1985
[2] Per NWRB Board Resolution No. 265-4, 2. 1985 and Board Resolution No. 05-196 dated January 25, 1996
[3] Per NWRB Board Resolution No. 08-1000

Revenue requirements (and consequently operating expenses) should include only those from regulated activities like provision of water supply. Examples of non regulated activities are sale of bottled water, purchases of lots for speculation, sale of water supply materials and equipment and services, retail business, janitorial services, etc.

Table 2-1 Composition of Revenue Requirements

	2005 Year 1	2006 Year 2	2007 Year 3	2008 Year 4	2009 Year 5
Maximum Allowable Net Income	147,592	182,482	261,561	235,922	209,414
Operating Expenses	1,086,054	1,171,808	1,218,458	1,305,817	1,349,790
Depreciation	144,041	155,066	329,005	329,005	329,005
Revenue Requirement	1,377,686	1,509,357	1,809,025	1,870,744	1,888,209
Volume Sold, m3	174,720	174,720	174,720	174,720	174,720
Required Average Tariff (Php/cum)	**7.89**	**8.64**	**10.35**	**10.71**	**10.81**

Operating expenses include expenditures on labor (salaries and wages), management fees, power, chemicals, materials, supplies, rent, advertising, insurance, contracted services, taxes and other fees, and routine maintenance expenses on assets (in contrast to expenditure for replacing and rehabilitating assets that is sourced from the capital expenditure budget). Expenses pertaining to revenues that are not regulated are excluded. These expenses must be spent efficiently in a proper and prudent manner. These are discussed in more detail in Section 2.2.3.

Depreciation pertains only to the property and equipment entitled to return (PEER).

Maximum allowable net income is calculated below and illustrated in Table 2-2.

PEER, at net book value
+ Working capital good for two months
= Total invested capital entitled to return
x 12% rate of return
= Maximum allowable net income

PEER at net book value is calculated as follows:
Cost of PEER at the beginning of the year
+ New investments entitled to return
= Total PEER, at cost
- Accumulated depreciation of the above assets
= Total PEER, net book value

Property and equipment entitled to return (PEER) are those assets in service that are directly used in the operations of the water system, and were funded by the owner's own funds, a loan, or internal cash generation. These assets are entitled to return to compensate the owner for the risk and cost of money on the investments. Assets funded by grants and donations or recovered in other ways aside from water tariffs are therefore not entitled to return. Assets funded by a loan are entitled to return, but interest thereon is not included in the revenue requirements. See Table 2-4 illustrating which assets are entitled to return or not.

Working capital good for two months, is calculated as follows:
Operating expenses excluding depreciation
/ 12 to get operating expenses for one month
x 2 months

= Working capital for two months

Operating expenses for purposes of calculating working capital has the same composition as operating expenses in calculating revenue requirements, except that depreciation, a non-cash expense account, is not included.

Table 2-2 Illustration of Maximum Allowable Net Income

	2005 Year 1	2006 Year 2	2007 Year 3	2008 Year 4	2009 Year 5	Total Years 1-5
Property & Equipment, beg	1,031,463	1,950,213	2,280,963	3,160,405	3,160,405	
New Investments	918,750	330,750	879,442	-	-	
Property and Equipment in Service Entitled to	1,950,213	2,280,963	3,160,405	3,160,405	3,160,405	
Less: Accumulated Depreciation	(901,292)	(955,578)	(1,183,803)	(1,412,028)	(1,640,253)	
Net Book Value	1,048,921	1,325,385	1,976,602	1,748,377	1,520,152	
Add: Working Capital						
Operating Expenses excluding depreciation	1,086,054	1,171,808	1,218,458	1,305,817	1,349,790	
2-Months Average Cash Operating Expenses	181,009	195,301	203,076	217,636	224,965	
Total Invested Capital Entitled to Return	1,229,930	1,520,687	2,179,679	1,966,013	1,745,117	1,728,285
Maximum Allowable Rate of Return	12.00%	12.00%	12.00%	12.00%	12.00%	
Maximum Allowable Net Income	147,592	182,482	261,561	235,922	209,414	
Maximum Allowable Net Income	147,592	182,482	261,561	235,922	209,414	
Operating Expenses	1,086,054	1,171,808	1,218,458	1,305,817	1,349,790	
Depreciation	144,041	155,066	329,005	329,005	329,005	
Revenue Requirement	1,377,686	1,509,357	1,809,025	1,870,744	1,888,209	8,455,021
Volume Sold, m3	174,720	174,720	174,720	174,720	174,720	873,600
Required Average Tariff (Php/cum)	**7.89**	**8.64**	**10.35**	**10.71**	**10.81**	**9.68**
Average Return on Investments						
Net Income (Loss) Before Tax, net	460,909	364,130	143,541	56,182	12,209	207,394
Average Water Revenues/m3 Sold	**9.68**	**9.68**	**9.68**	**9.68**	**9.68**	
Rate of Return	37.5%	23.9%	6.6%	2.9%	0.7%	12.0%

Implementing an Average Tariff

The resulting tariff may go up or down from year to year depending on the actual investments made and the number of customers contributing to the revenue requirements. A final step at setting the average tariff is how to avoid erratic price increases over the 5 year period. This calls for the use of the average ROI during this period. This is done as follows:

1. Compute the total revenue requirements for Years 1-5.
   From Table 2.2 above, this is 8,455,021.

2. Compute the total volume to be sold for Years 1-5.
   From Table 2.2 above, this is 873,600 cubic meters.

3. Compute the average tariff per cubic meter sold, as follows:

$$= \frac{\text{Total revenue requirements, Years 1-5}}{\text{Total volume to be sold, Years 1-5}}$$

   Substituting the values, the average tariff is:

$$= \frac{8,455,021}{873,600} = 9.68$$

This average tariff per cubic meter sold, P9.68 in the example, will now be the tariff to be applied for each of the five years. This is proven in the last section of Table 2-2, where the total net income for the period represents 12% of the net book value of assets entitled to return.

If the applicant water utility proposes a water tariff that is higher than the tariff yielding a 12% ROI, NWRB will approve the tariff at the 12% ROI level. But if the applicant proposes a tariff with a lower yield than 12%, NWRB will approve the tariff proposed by the applicant. NWRB will take it that the applicant waives its entitlement to a 12% ROI as it submits its proposed tariff for approval. For this reason, the applicant must be careful in submitting its proposed tariff, to ensure that the utility will not financially suffer as a result.

The proposed water tariff increase should not exceed 80% of the existing tariff[4], otherwise a two-step increase may be necessary within the 5 year period.

2.2 Water Supply Planning

It is considered good practice for water utilities to have a business plan including an asset management plan to ensure improved operations and service and sustainability. The business plan should reflect levels of service intended to be implemented based on the proposed level of tariff. These become the bases for determining the propriety of required investments, demand and supply levels, and the corresponding operating expenses to be incurred.

2.2.1 Demand and Supply Analysis

Demand

The utility has to plan for the water demand from projected consumers during the next five years. This is done as follows:

1. Project the new connections that can be attained during the next five years.

   Break them down by category of consumers, if there are categories other than residential consumers.

2. Calculate the average consumption for each consumer category, using the following formula:

   Average consumption per month per connection, in cu. m.
   = Total billed volume for the year in cu. m.
   12 months X total number of connections

   The average monthly consumption for each consumer category will be needed later in calculating the water rates.

3. Project the demand or volume to be sold in cu. m., as follows:

   Projected volume sold per year, in m3
   = Projected total connections for the year
   X Average consumption per connection per month, in m3
   X 12 months

   This projected volume sold will be used to project water revenues and to evaluate the sufficiency of existing supply after taking non-revenue water (NRW) into consideration.

[4] Per NWRB Board Resolution No. 05-1000 dated October 23, 2000

4. Compute the percent of the population served in its service area, using the following formula.

   % Population served =

   $$\frac{\text{Total residential connections x average persons per household}}{\text{Total persons in the service area}}$$[5]

   This percentage gives management an idea of the saturation of its service area. It is a planning tool that shows the potential consumers that can still be served in the future and if there is still room for expansion.

Table 2-3 illustrates these calculations.

Table 2-3 Demand and Supply Projections

	2003 Actual	2004	2005	2006 Projected	2007	2008	2009
DEMAND							
New Connections	-	-	-	-	-	-	-
Total Connections	682	682	682	682	682	682	682
Average Persons per Household	6	6	6	6	6	6	6
Population Served	4,092	4,092	4,092	4,092	4,092	4,092	4,092
Ave. Consumption/Conn./Month (m3)	21.24	21.24	21.24	21.24	21.24	21.24	21.24
Volume Sold (m3/year)	200,679	173,847	173,847	173,847	173,847	173,847	173,847
SUPPLY							
Installed Production Capacity, lps	7.99	7.99	7.99	7.99	7.99	7.99	7.99
Production Capacity (m3/year)	251,973	251,973	251,973	251,973	251,973	251,973	251,973
Unaccounted-for Water (%)	22%	22%	22%	22%	22%	22%	22%
Production Requirement (m3/year)	257,405	222,989	222,989	222,989	222,989	222,989	222,989
Bulk Water Purchases (m3/year)	-	-	-	-	-	-	-
Total Own Production and Water Purchases (m3/yr)	251,973	251,973	251,973	251,973	251,973	251,973	251,973
Water Surplus / (Shortage) (m3/year)	(5,433)	28,983	28,983	28,983	28,983	28,983	28,983
Water Surplus / (Shortage) (lps)	(0.17)	0.92	0.92	0.92	0.92	0.92	0.92

Supply

Once the demand for water has been determined, the utility now has to check whether it has enough water to serve them. Again, the utility's business plan has to be considered in projecting the supply side. This is done as follows:

1. Determine the production capacity of the utility. This is the capacity of the utility's production wells, springs, or treatment plants, or their combination.

2. Determine the non-revenue water. This is water produced that are not billed and sold to consumers. This is calculated as follows:

   $$= \frac{\text{(Total Volume Produced + Treated Water Purchase) –Total Volume Sold}}{\text{Total Volume Produced + Treated Water Purchased}}$$

   An NRW higher than a given benchmark figure, i.e., 25%[6] , is an indication of inefficiency in the water supply system. Water utilities will be given a realistic period of time within which they will be able to bring down their NRW to the benchmark figure or lower if their current level is higher than this. After this agreed period, water utilities will be penalized for operating beyond a

[5] For subdivisions, "total persons in the service area" refers to total persons in the subdivision at full occupancy.
[6] Using LWUA's benchmark for water districts

benchmark figure for NRW. Any disallowance arising from this penalty is discussed in Section 3, Tariff Regulation.

3. Solve for the total required production, whether coming from the utility's own sources or from bulk purchases of treated water. This is done by this formula:

$$= \frac{\text{Volume Sold}}{\text{NRW\%}}$$

4. Add bulk water purchases (treated water) to the utility's own water production to get the total water available for sale.

5. The water surplus or shortage can then be determined as follows:

+ Total production capacity
+ Total bulk water purchases (treated water)
= Total volume available for sale
- Total volume to be sold
= Water surplus / (shortage)

In case of a substantial water surplus and the utility purchases bulk water to augment its production, either the bulk water purchases can be decreased, or the production from the utility's own sources can be reduced to bring down its non-revenue water.

If there is a water shortage, the utility can review its projections for making new connections and consider the following options:

- limit new connections
- ration water
- reduce its non-revenue water
- increase production if the well capacity is still able to provide more water
- consider having additional sources, like increasing its bulk water purchases or building a new well.

The last two options above will require additional funds, and the utility must be able to finance them, either through internal cash generation, existing reserves, a loan, grant, or additional equity investments.

2.2.2 Capital Expenditures

It is good practice for a utility to plan for maintenance/ rehabilitation/ replacement of assets to ensure the sustainability of the system. Preparing an asset management plan is encouraged and the required costs[7] are to be included in the utility's revenue requirements. If existing assets, with replacement/ rehabilitation, still cannot meet required demand, then new capital investments will have to be considered.

Depreciation Reserve Fund

All utilities are required under the Public Service Law[8] to set aside its depreciation expense into a depreciation reserve fund. This fund will be used only for

[7] Also referred to as economic depreciation
[8] Public Service Law, Section 16 (L)

improvements, new constructions, extensions or additions to the property of the water utility.

Assets Entitled to Return

Property and equipment have to be grouped whether they are entitled to return or not. A return on assets is provided to compensate the utility for the risk involved and the cost of money invested. As such, assets that have been donated or turned over to the utility or are recovered via other ways aside from water tariffs, are not entitled to return. For subdivision developers, assets forming part of land development are not subject to return because their costs are already included in the cost of the lots that are sold. Table 2-4 illustrates which assets are entitled to return or not.

2.2.3 Operating Expenses

Once the demand and supply have been established, operating expenses to support them will now have to be calculated. Projections of these expenses are based on previous years' actual data, or benchmark data on KPIs from the private utility benchmarking database to be developed by NWRB. These are the general classification of operating expenses and how they are projected.

1. Personnel. These are salaries, wages, honoraria, allowances and other personnel benefits given to management and staff. Personnel expenses are projected as follows:

   = [Total actual salaries and benefits for the year/ total employees]
   X projected number of employees

2. Management fees. Some utilities pay management fees for such services as metering, billing, collection, and accounting. These fees are supported by a contract between the utility and the management company. These fees may be used for projection purposes. The private utility benchmarking database for this expense may be used to check the reasonableness of the amount projected by the applicant.

3. Power. This expense represents the power bill of the utility. This is projected by computing the cost of power per volume produced and multiplying it by inflation. This unit cost of power is calculated as follows:

   $$= \frac{\text{Actual total power cost}}{\text{Actual volume produced in m3}}$$

4. Chemicals. This represents the cost of chlorine and/or other chemicals used in the treatment of water. This is projected by computing the cost of chemicals per volume produced, and multiplying it by inflation. The unit cost of chemicals is calculated as follows:

   $$= \frac{\text{Actual total chemicals cost}}{\text{Actual volume produced in m3}}$$

Table 2-4 Assets Entitled to Return

Type of Operator	How Assets Are Generally Acquired	Are Assets Then Entitled to Returns?
Subdivision Developers	Investments as part of land development	No, since the developer is expected, and it is business practice, to recover costs in full from sale of lots.
	Investments after land development	Yes
Locators Industrial Park Developers Economic Zone Developers Science Park Developers	Investments as part of land development	No
	Investments after land development	Yes
Homeowners Associations	Turned over by developer	Since homeowners are also the customers who will pay the tariffs, they may, if all homeowners/consumers agree, impose a rate of return upon their assets that in effect they paid for as part of the lot.
	Own investments after turn-over	Yes
Cooperatives RWSAs LGU-run Water Utilities	Grants from LGUs, bilateral / multilateral programs, etc.	No since assets are donated. But they should set aside the amount of the annual depreciation as cash reserves to maintain assets in good condition.
	Loan of LGU for the LGU-run water utility	Yes
	Own investments	Yes
Subdivision Operators Resettlement Area Operators	Assigned by subdivision developer or LGU to be managed by Operator, Management contract	No, but entitled to management fees
	Own investments after assignment of assets	Yes
Small scale service providers Point-of-Source Sellers Private Operators Ship chandlers who sell bulk water to ships	Put in by owner	Yes

5. Bulk water purchases. There are utilities that buy bulk water from other service providers like Maynilad or Manila Water to augment their own supply. This cost is projected as follows:

   = Bulk water price/m3 based on purchase agreement
   X volume to be purchased for the year

6. Repairs and maintenance. This expense represents expenditures to keep assets in good working condition without extending the useful life of the asset. The normal percentage used is 2% to 3% of the net book value of assets in service. But the utility's business plan may be considered in determining its projected level of maintenance.

7. Bad debts. This expense represents accounts that can no longer be collected. Normally, this is 2% of water revenues.

8. Annual water charge. This is NWRB's fee based on the deep well discharge granted on a water permit. The amount of the fee varies according to the volume of discharge allowed.

9. Supervision and regulation fee. This is a fee to NWRB calculated as 0.5% of total paid-up capital or cost of property and equipment, whichever is higher.

10. General and administrative expenses. These expenses represent all other expenses of the utility not identified above, which are incurred for the operation of the utility. For projection purposes, this is computed as a percentage of total personnel cost.

    The water utility must prepare a breakdown of these expenses to enable NWRB to determine the propriety of these expenses. They may be compared against benchmarks of NWRB based on a database of private utilities under its jurisdiction.

11. Depreciation. This is the depreciation of all assets in service, whether entitled or not to return. For projection purposes, the composite depreciation of existing assets is used.

12. Taxes. This account includes franchise taxes, value-added tax, and any other tax, except income tax which is not an operating expense and is computed separately. Franchise tax is computed by multiplying operating revenues net of bad debts by the rate of the franchise tax. The value-added tax is computed by multiplying water revenues by the VAT rate.

Table 2-5 illustrates how the projections of these operating expenses are presented.

Table 2-5 Illustration of Operating Expenses

	2003 Actual	2004	2005	2006 Projected	2007	2008	2009
PERSONNEL							
Number of Employees	10	6	6	6	6	6	6
Employees / 1000 Connections	14.7	8.8	8.8	8.8	8.8	8.8	8.8
Connections/employee	68	114	114	114	114	114	114
Escalation Factor for Personnel	12%	0%	5%	5%	4%	4%	4%
Cost / Employee / Year	42,143	42,143	44,250	46,462	48,321	50,254	52,264
Personnel Cost	421,428	252,857	265,500	278,775	289,926	301,523	313,584
MANAGEMENT FEES							
Annual Rate Increase	0%	0%	0%	0%	0%	0%	0%
Management Fees	180,000	180,000	180,000	180,000	180,000	180,000	180,000
POWER							
Escalation Factor for Power	7%	10%	5%	5%	4%	4%	4%
Power Cost (Peso / m3 produced)	1.71	1.88	1.97	2.07	2.16	2.24	2.33
Power Cost, Total (Pesos)	440,142	490,497	507,448	525,098	538,301	551,948	566,053
CHEMICALS							
Escalation Factor for Chemicals	0%	0%	5%	5%	4%	4%	4%
Chemical Cost (Peso / m3 produced)	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Chemical Cost, Total (Pesos)	-	2,008	1,978	1,950	1,922	1,895	1,869
BULK WATER PURCHASES							
Escalation Factor for Bulk Water Purchases	0%	0%	5%	5%	4%	4%	4%
Cost/m3 purchased	-	-	-	-	-	-	-
Bulk Water Purchases	-	-	-	-	-	-	-
REPAIRS AND MAINTENANCE							
Maintenance of Net Assets (%)	8%	5%	5%	5%	5%	5%	5%
Net Assets Allocated	687,015	493,019	398,159	1,078,649	1,113,229	1,631,861	1,271,051
Maintenance Expenses (Pesos)	54,572	24,651	19,908	53,932	55,661	81,593	63,553
BAD DEBTS							
% of Water Revenues	0%	2%	2%	2%	2%	2%	2%
Bad debts/volume sold	-	0.13	0.13	0.13	0.13	0.13	0.13
Bad Debts (Pesos)	-	22,783	22,783	22,783	22,783	22,783	22,783
ANNUAL WATER CHARGE							
Number of Deepwells	1	1	1	1	1	1	1
Water Charge per Well	506	506	506	506	506	506	506
Annual Water Charge (Pesos)	-	506	506	506	506	506	506
SUPERVISION AND REGULATION FEE							
Property and Equipment in Service		2,639,345	2,746,345	3,698,695	4,029,445	4,908,887	4,908,887
Paid-Up Capital		187,500	187,500	187,500	187,500	187,500	187,500
Basis of Fee		2,639,345	2,746,345	3,698,695	4,029,445	4,908,887	4,908,887
Rate		0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Supervision and Regulation Fee (Pesos)	-	13,197	13,732	18,493	20,147	24,544	24,544
FRANCHISE TAX							
Operating Revenues		1,139,174	1,541,030	1,541,030	1,541,030	1,541,030	1,541,030
% Net of Bad Debts		98%	98%	98%	98%	98%	98%
Net Operating Revenues		1,116,391	1,510,210	1,510,210	1,510,210	1,510,210	1,510,210
Franchise Tax for the Year		-	-	-	-	-	-
GENERAL & ADMINISTRATIVE EXPENSES							
% of Personnel Cost	11%	15%	15%	15%	15%	15%	15%
General and Administrative Expenses (Pesos	66,398	66,398	69,718	76,864	88,132	105,095	130,334
DEPRECIATION							
Average Depreciation Rate	7%	7%	7%	7%	7%	7%	7%
Depreciation (Pesos)	281,875	193,996	201,860	271,859	296,170	360,810	360,810

2.2.4 Financing

If the utility secured a loan to fund its capital investments, the related accounts have also to be included in the projections. If the utility is still disbursing from the loan, these disbursements have to be projected per year. Then based on the loan agreement, the principal amortization, as well as the corresponding interest expense, should be included in the projections.

The following data are required for projection purposes:

1. Terms of loan, interest rate, principal amount, start and ending date of loan repayment
2. Principal repayment for the next five years
3. Interest every year

2.3 Rate Design

2.3.1 Rate Structure

In general, all consumers are considered residential, although NWRB allows water utilities to have other categories of consumers like public taps and commercial and industrial.

There may be only one category of consumers if consumption of other customer categories is not substantial. In this light, consumers with business permit, but whose consumption is close to those of residential consumers, may be classified as residential and not commercial. But commercial consumers may be classified together with industrial consumers if their consumption is significantly higher than residential consumers.

Commercial and industrial consumers are those that can pass on the cost of water to their customers.

The rate structure for public taps, residential and institutional consumers is as follows:

0 – 10 m3 (Minimum Charge)
11 – 20
20 – 30
31 – 40
41 – 50
over 50 m3

The rate structure for commercial and industrial consumers[9] is as follows:

0-25 m3 (Minimum Charge)
26-1000 m3
over 1000 m3

For a peddler/shipchandler[10] , the rate may be per drum, per gallon, per pick-up delivery or by bulk.

[9] NWRB Board Resolution No. 06-0700 dated July 24, 2000 refers to industrial consumers only. Under these guidelines, commercial consumers are classified together with industrial consumers.

[10] NWRB Board Resolution No. 06-0700 dated July 24, 2000 also prescribes the unit of measure for water sales of peddlers/ship chandlers.

2.3.2 Computing the Proposed Water Rates

The water rate structure comprises two parts: the minimum charge and the commodity charge.

The minimum charge is also known as service charge or demand charge. It should be able to cover all the fixed costs required to carry on the vital water supply functions not directly related with production and distribution. It ensures that there will be enough revenues to meet the utility's basic costs during periods of low water sales, such as when there is a drought or for other reasons.

The minimum charge should be within the ability of the low income users to pay for ten cubic meters of water[11]. This volume is assumed to be enough for the basic needs of a low income user. The minimum charge should not exceed 5% of the family income of the low income group in the municipality where the water utility operates.

Every five years, the National Statistics Office publishes the results of the Family Income and Expenditures Survey. This contains the family income of the low income group for the year of the survey. To get the income for any given year after the survey, multiply the income by general inflation of the years from the year of the survey to the given year being computed.

The commodity charge is the amount to be charged for consumption beyond the minimum charge. This amount varies according to volume produced and consumer category.

The quantity block method is being adapted as the method to be used to convert the determined revenue requirements into the tariff structure to be implemented. This supports NWRB's policy to promote conservation of water by providing for a higher tariff for higher consumption.

The following data are needed to be able to determine the water rates to be applied to consumers:

- Average revenue requirements for one year. (The total revenue requirements computation is illustrated in Table 2-1.)
- Number of connections and respective average monthly consumption, classified by consumer category and meter size (see Table 2-6 below).

Table 2-6 Customers' Blocking

Meter Size	Public Taps		Residential / Institutional		Commercial / Industrial	
	# Connections	Ave. Cons./Mo.m3	# Connections	Ave. Cons./Mo.m3	# Connections	Ave. Cons./Mo.m3
1/2"						
3/4"						
1"						
1 1/2"						
2"						
3"						
4"						
TOTAL	-		-		-	

[11] Based on lifeline consumption of 10 m3. Other utilities (Kauswagan) have established a lower level of 7 m3 for the minimum block.

These are the procedures in setting the water rates.

A. Compute the Equivalent Volume

1. Compute the Equivalent Volume (EV) for each consumer category and quantity block, as follows:
   = Consumption in the quantity block
   X connections for the meter size
   X meter size factor

   The meter size factor is a multiplier applied to the consumption of a quantity block to determine its equivalent volume. This factor assumes that with a higher meter size come higher maintenance cost and more convenience appropriate to the needs of the consumer, so that consumers pay higher water rates commensurate to their meter size. The standard meter size factors are shown in Table 2-7 below. The factor for the commercial/industrial consumers are twice that of the public tap, residential or institutional consumers.

Table 2-7 Meter Size Factor

	Public Tap / Residential / Institutional	Commercial / Industrial
Meter Size	Meter Size Factor	
1/2"	1.00	2.00
3/4"	1.60	3.20
1"	3.20	6.40
1 1/2"	8.00	16.00
2"	20.00	40.00
3"	36.00	72.00
4"	72.00	144.00

   By substituting the figures from Table 2-8 to the formula,

   Total EV for the 0-10 m3 of the 2 " residential customers
   = 10 m3 x 10 connections x 20.0 meter size factor = 2000

   Total EV for the 31-40 m3 quantity block
   = 5 m3 x 10 connections x 20.0 meter size factor = 1000

2. Compute the monthly total EV by getting the sum of all the EVs in the quantity block.

   For the 0-10 m3 quantity block (column h in Table 2-8), the total monthly EV is 5,600.

3. Compute the annual total EV by multiplying the monthly EV for each quantity block by 12 months.

   For the 0-10 m3 quantity block (column h in Table 2-8), the total annual EV is 5,600 x 12 or 67,200.

4. Compute the Equivalent Volume (EV) by quantity block as follows:

= Annual EV
X Incremental Factor

For the 31-40 m3 quantity block (column k in Table 2-8), the total EV is 12,000 x the incremental factor 2, that gives 24,000.

The incremental factor may be determined by the water utility, depending on the interval it wants between quantity blocks. In Table 2-8, the incremental factors are 1.00, 1.50, 1.75, 2.00 and so on. A sharper increase in a block may be used as a mechanism to discourage more consumption (and encourage water conservation) beyond that block.

The set of incremental factors for the commercial/industrial consumers is fixed at twice that of the residential consumers. But since there are fewer quantity blocks for the commercial/industrial consumers, the first block is the same as the residential consumers' first block. The last block of the commercial/industrial is the same as the residential consumers' highest block. The commercial/industrial's middle block is the same as the residential consumers' third block (31-40 cu.m.) where their average consumption usually falls.

Should the minimum charge be beyond the affordability of the low income group, these incremental factors can be adjusted until an affordable minimum charge is reached.

5. Compute the total EV by adding all the EVs from all the quantity blocks.

   In the illustration above, the total EV of all the quantity blocks is 214,800.

B. Compute the Cost per EV

$$= \frac{\text{Annualized Revenue Requirement}}{\text{Total Equivalent Values}}$$

Assuming the annualized revenue requirements is 1,691,004, cost per EV

$$= \frac{1{,}691{,}004}{214{,}800} = 7.87$$

Table 2-8 Computation of Equivalent Volume

COMPUTATION OF EQUIVALENT VOLUME													
						Equivalent Volume or EV							
	Size	Meter Size Factor	Number of Connections	Average Monthly Consumption	Total Consumption	TOTAL EV	0-10 cu.m.	11-20 cu.m.	21-30 cu.m.	31-40 cu.m.	41-50 cu.m.	Over 50 cu.m.
a	*b*	*c*	*d*	*e*	*f = d X e*	*g = h .. M*	*h*	*i*	*j*	*k*	*l*	*m*
Residential/	1/2"	1.00	200	10	2,000	2,000	2,000	-	-	-	-	-
Institutional	3/4"	1.60			-	-	-	-	-	-	-	-
	1"	3.20	50	25	1,250	4,000	1,600	1,600	800	-	-	-
	1 1/2"	8.00			-	-	-	-	-	-	-	-
	2"	20.00	10	35	350	7,000	2,000	2,000	2,000	1,000	-	-
	3"	36.00			-	-	-	-	-	-	-	-
	4"	72.00			-	-	-	-	-	-	-	-
Sub-Total, Connections			250									
Sub-Total, Equivalent Consumption, monthly, m3					3,600	13,000	5,600	3,600	2,800	1,000	-	-
Sub-Total, Equivalent Consumption, annual, m3					43,200	156,000	67,200	43,200	33,600	12,000	-	-
Increment Factor							*1.00*	*1.50*	*1.75*	*2.00*	*2.50*	*3.00*
Equivalent Volume						**214,800**	**67,200**	**64,800**	**58,800**	**24,000**	**-**	**-**

Table 2-9 Computation of Water Rate

COMPUTATION OF COST PER EQUIVALENT VALUES														
				0 - 10 cu.m.			11-20 cu.m.			21-30 cu.m.			31-40 cu.m.	
	Size	Cost/EV	Total Revenues	Qty Block Factor	Tariff Rate	Revenues	Qty Block Factor	Tariff Rate	Revenues	Qty Block Factor	Tariff Rate	Revenues	Qty Block Factor	Tariff Rate
Residential/	1/2"	7.87	188,939	1.00	7.87	188,939	1.50	11.81	-	1.75	13.78	-	2.00	15.74
Institutional	3/4"	7.87	-	1.00	7.87	-	1.50	11.81	-	1.75	13.78	-	2.00	15.74
	1"	7.87	510,135	1.00	7.87	151,151	1.50	11.81	226,727	1.75	13.78	132,257	2.00	15.74
	1 1/2"	7.87	-	1.00	7.87	-	1.50	11.81	-	1.75	13.78	-	2.00	15.74
	2"	7.87	991,930	1.00	7.87	188,939	1.50	11.81	283,409	1.75	13.78	330,643	2.00	15.74
	3"	7.87	-	1.00	7.87	-	1.50	11.81	-	1.75	13.78	-	2.00	15.74
	4"	7.87	-	1.00	7.87	-	1.50	11.81	-	1.75	13.78	-	2.00	15.74
Total Revenues, Residential/Institu			1,691,004			*529,029*			*510,135*			*462,901*		

C. Compute the tariff rate for the quantity block of each consumer category

= Cost per EV X Incremental Factor

This is illustrated in Table 2-9. For the 0-10 block of residential/ institutional consumers, the rate would be:

= 7.87 X 1.00 or 7.87

For the 11-20 cu m consumption block, this would be 7.87 X 1.50 or 11.81.

The rate structure for the water utility would then be as illustrated in Table 2-10.

The water rate of commercial/industrial consumers is twice the rate of residential consumers.

To simplify billing computations, the proposed water rates may be rounded to the nearest peso.

Table 2-10 Proposed Water Rates

Quantity Block (m3)	Public Tap	Residential/ Institutional	Commercial/ Industrial
First 10 m3	78.72	78.72	
11-20	11.81	11.81	
21-30	13.78	13.78	
31-40	15.74	15.74	
41-50	19.68	19.68	
Over 50	23.62	23.62	
First 25 m3			393.62
26-1000			31.49
Over 1000			47.23

3 Tariff Regulation

At the end of year 5, the actual average ROI attained over the 5-year period will be compared against the approved ROI. The excess/deficiency will be the basis for a disallowance or upward adjustment for the succeeding tariff review/adjustment. This is done as follows.

A. Compute the revised Net Assets Entitled to Return:

1. Review the propriety of investments entitled to return that were made in the last five years. Only the allowed investments entitled to return that were actually implemented will be considered.

2. Review the operating expenses that were actually incurred, and disallowing those that are considered excessive or not spent efficiently and with prudence. The allowed OPEX will be used in calculating the allowed two

months working capital. Allowances/disallowances for power and chemicals, including the effects of not meeting the target NRW are discussed separately at the end of this Section 3.

3. Add the results of (1) and (2) above to get the revised Net Assets Entitled to Return.

B. Recompute the revenue requirements during the past 5 years.

1. Maximum allowable net income
   = Approved ROI applicable during the past five years
   X Revised Net Assets Entitled to Return

2. Add adjusted OPEX, as computed in A-2 above.

3. Add depreciation of all assets in service.

4. The recomputed revenue requirements
   = Recomputed Maximum Allowable Net Income (B-1)
   + Adjusted OPEX (A-2)
   + Adjusted Depreciation (B-3)

C. Recompute the resulting tariff based on the above recalculations

$$\frac{\text{Recomputed Revenue Requirements (B-4)}}{\text{Actual Volume Sold}}$$

D. Compute the tariff adjustment.

1. Get the difference between the recomputed average tariff and the actual tariff implemented.
   = Should-have-been average tariff (C)
   - Actual average tariff implemented

2. Compute the tariff adjustment
   = Tariff difference (D-1)
   X Actual Volume Sold

E. Add or deduct the tariff adjustment (from D-2) from the Revenue Requirements for Years 1-5. The allowances/disallowances will then be reflected in the tariff for the projected Years 1-5.

Adjustments Related to NRW

A water utility whose existing NRW is higher than 25% (or any benchmark figure given by NWRB) will be given a reasonable period to reduce its NRW until it reaches 25%. If the target NRW is not met, the water utility produces more volume to be able to meet the demand for water. Higher power and chemical costs are incurred. These should therefore be disallowed in the next request for tariff approval, thereby reducing the OPEX as part of the revenue requirements.

The water utility will be given a flexibility of a variance of 10% of the target. Within this allowed variance, the water utility will not be penalized.

Illustration (figures in percentages):

	Year 1	Year 2	Year 3	Year 4	Year 5
Target NRW%	40	35	30	27	25
Attained NRW%	42	39	35	25	20
Variance	2	4	5	-2	-5
10% of target	4	3.5	3	2.7	2.5
Penalty	0	0.5	2	0	0

The following are the steps in computing the power and chemical costs to be allowed/disallowed from the OPEX of the past five years.

A. Compute the allowance / disallowance on power and chemical costs arising from the excess volume produced for attaining a higher NRW.

    1. Compute the agreed NRW level with a 10% flexibility, as follows:
        = Target NRW%
        X 1.10

    2. Compute the should-be volume produced at the agreed NRW level with 10% flexbility, based on the actual volume sold.
        = Actual volume sold for the year
        (100% – agreed NRW with flexibility) (A-1)

    3. Compute excess volume produced
        = Should-be volume produced (A-2)
        - Actual volume produced

    4. Compute power and chemical cost disallowance due to the over-production.
        = Excess volume produced (A-3)
        X Power cost/volume produced approved for the past five years
        + Excess volume produced (A-3)
        X Chemical cost/volume produced approved for the past five years

B. Compute the allowance / disallowance on power and chemical costs resulting from implementing different unit costs per volume produced.

    1. Compute difference in unit cost per volume produced
        = Cost per volume produced for power and chemicals, approved for the past five years
        - Actual cost per volume produced for power and chemicals

    2. Compute the amount disallowed for power and chemicals resulting from implementing different unit costs per volume produced
        = Difference in unit cost per volume produced for either power or chemicals (B1)
        X Should-be volume produced at the agreed NRW level (A-2)

C. Deduct (for disallowance) or add (for allowance) the results of (A) and (B) from/to the OPEX for the coming Years 1-5. Take note that the maximum ROI is not exceeded.

4 Water Rate Adjustments

Water tariff may also be reviewed before the end of the five-year validity of the current tariff if there were extraordinary events that affected the operations of the utility.

These adjustments are done by recomputing the proper tariff for the remaining validity period of the tariff.

4.1 Appraisal

Appraisal of assets is allowed if it is undertaken by a reputable independent appraiser. The results of the appraisal will need to be submitted when requesting for water rates approval since it affects the value of the asset rate base.

4.2 Extraordinary Price Adjustments

A water utility may request for a tariff adjustment even before the end of the five-year validity period should there be extraordinary events beyond the control of the operator that affected its operations. This may include an extraordinary increase or decrease in power cost for a given year, legislated wage increases, service area extension or force majeur.

5 Sanctions

If a water utility willfully violates NWRB regulations on tariff setting, any or all of the following sanctions will be imposed:

1. Effects of non-conformance to agreed targets in the determination of the approved tariff will be deducted from the revenue requirements for the next five-year period.

2. The CPC of the utility shall not be extended.

3. An administrator shall be assigned to manage the utility until compliance is attained. Expenses related to the assignment shall be borne by the utility.

4. A performance bond will be required from the utility operator, which will be forfeited in case of breach of contract.

6 Application for CPC and Tariff Approval

6.1 Application for Initial CPC and Tariff Approval

6.1.1 Documentary Requirements

The following documents are required to be submitted for an initial application for a CPC and approval of tariff:

1. For corporations and partnerships:
    a. SEC registration;
    b. Articles of incorporation or partnership;
    c. By-laws; and

   d. Board resolution authorizing the signatory to sign and file the application
2. For single proprietorships:
   a. Registration with the Department of Trade and Industry or Mayor's Permit and
   b. Special power of attorney authorizing the signatory to sign and file the application
3. Approved water permit(s)
4. Official receipt of Annual Water Charge(s)
5. Clearance that applicant has no unpaid fees and charges from NWRB
6. Plan of water distribution system
7. Plan, elevation and cross-sectional views of tank/reservoir
8. Plan, elevation and cross-sectional views of pump house, machinery and equipment
9. Certificate of potability
10. Latest audited financial statements for the last two years
11. Actual Balance Sheet showing balance sheet items for water operations for the last two years[12] . If a complete Balance Sheet cannot be prepared, the following accounts pertaining to the water operations for the last two years must be provided. The net effect of these accounts will be assumed to be the capital for the water operations.
    a. Accounts Receivable – Water Supply
    b. Materials Inventory
    c. Property and Equipment In Service, at cost
    d. Accumulated Depreciation
    e. Customers' Deposits
12. Itemized list of assets entitled to return as of the end of the last historical year. This should support the Property and Equipment in Service referred to in Item 11 (c) above.
13. Actual Income Statement showing income statement items for water operations for the last two years[13]
14. Business Plan for the next five years
15. Projected financial statements for water operations for five years, with the following:
    a. Income Statement
    b. Balance Sheet
    c. Assumptions
16. Itemized list of new investments for the next five years
17. Proposed schedule of water rates
18. Levels of Service agreed with consumers commensurate with proposed rates

6.1.2 Application Process and Period

Utilities are encouraged to conduct prior consultation with customers/customer representatives to agree on levels of service commensurate with the proposed tariff, and to undertake the optional preliminary review with NWRB's deputized economic agents before filing the tariff proposal with NWRB. The major steps in the process for the application for a CPC and corresponding approval of water rates are shown in Table 6-1 below.

[12] These reports are required for water utilities that have business ventures other than its water operations.
[13] Ibid.

Table 6-1 CPC and Tariff Approval Process

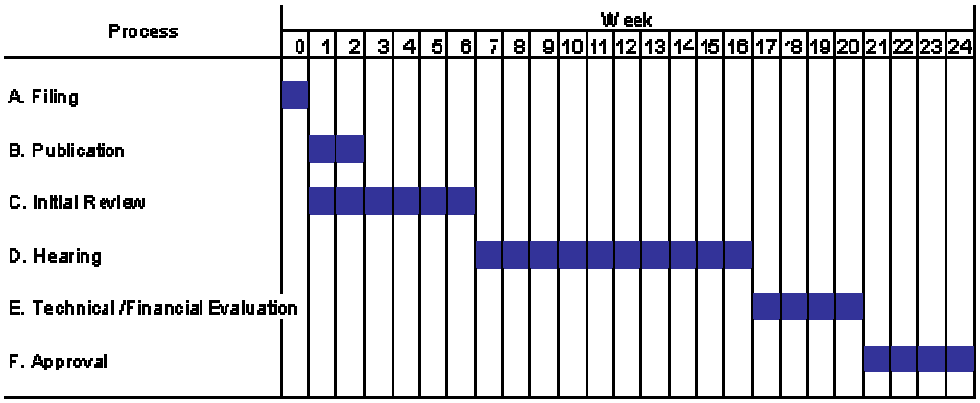
Responsible Unit	Activity
A. Filing	
Applicant	1. Fills up application form in 6 copies. 2. Submits application form and documentary requirements to NWRB.
Registration and Licensing Section	3. Examines completeness of documentary requirements. 4. If complete, assesses filing fee due. 5. Prepares the Confirmation of Payment containing the assessment and gives this to the Applicant.
Applicant	6. Applicant pays the filing fee to the Cashier.
Registration and Licensing Section	7. Records OR number on all copies of Application Form. 8. Files Application Form (original) with supporting documents in Case Folder. 9. Assigns case number to application and records this in the Docket. 10. Sends copies 2-6 to applicant for further distribution. 11. Forwards Case Folder to Director's office for disposition of the case.
Office of the Executive Director	12. Orders disposition of the case for preliminary review.
Registration and Licensing Section	13. Calendars hearing date. 14. Prepares Notice of Hearing in 2 copies. 15. Obtains signature of Notice of Hearing by Executive Director. 16. Sends a certified copy of Notice of Hearing to applicant. 17. Files Notice of Hearing in the Case Folder.
B. Publication	
Applicant	18. Receives the certified copy of the Notice of Hearing. 19. Based on this, publishes Notice of Hearing and proposed water rates at least 15 days prior to the scheduled Hearing date, in a daily newspaper of general circulation in the province or Metro Manila, whichever is applicable, where the service area of the utility is located. 20. Makes additional copies of the Notice of Hearing and all attachments to the Application and distributes these together with the Application Form, to affected parties: Copy 2 – Applicant's file Copy 3 – Homeowners' Association Copy 4 – Baranggay Chairman Copy 5 – Sangguniang Bayan Copy 6 – MWSS or Water District, or existing CPC grantee, if applicable

Responsible Unit	Activity
C. Initial Review	
Water Utilities Division	21. While waiting for the Hearing date, assigns the case for technical and financial review.
Registration and Licensing Section	22. Reviews the Case. This may be done simultaneously with the financial review. 23. Prepares a Technical Evaluation Report 24. Files report in the Case Folder.
Water Rates Evaluation Section	25. Reviews the Case. This may be done simultaneously with the technical review. 26. Prepares a Financial Evaluation Report. 27. Files report in the Case Folder.
D. Hearing	
Hearing Officer, Litigation and Adjudication Section	28. Hears presentation of the documentary requirements and other evidence of the applicant. 29. Based on the technical and financial evaluation reports, orders applicant to implement recommended actions. 30. Hears presentation of the documentary requirements and other evidence of the oppositor, if he intends to. 31. If there is no opposition, submits case for resolution.
Applicant	32. Submits Formal Offer of Evidence within 15 days after the Hearing.
E. Financial and Technical Evaluation	
Registration and Licensing Section	33. Based on proceedings of the Hearing, checks compliance with additional requirements. 34. Completes technical evaluation of the case with field visit if necessary. 35. Updates technical evaluation report. 36. Files report in Case Folder.
Water Rates Evaluation Section	37. Based on proceedings of the Hearing, checks compliance with additional requirements. 38. Completes financial evaluation of the case, with field visit if necessary. 39. Updates financial evaluation report. 40. Files report in Case Folder.
Hearing Officer, Litigation and Adjudication Section	41. Consolidates the Technical and Evaluation Reports and prepares the Memo for Board Action and Draft Decision.
F. Approval	
Deputy Executive Director	42. Reviews the case and endorses approval to the Executive Director
Executive Director	43. Recommends approval of the case to the Board Vice Chairman and Board
Board Vice Chairman	44. Validates recommendation of the Executive Director
NWRB Board of Directors	45. Deliberates on the case. 46. If there are questions, returns the case folder to the Water Utilities Division to resolve the issues. 47. If there are no questions, issues Board Resolution approving the CPC and tariff rates.

Responsible Unit	Activity
G. Issuance of CPC	
Registration and Licensing Section	48. Logs resolution of the case in the Docket. 49. Prepares CPC in two copies (for the applicant and for NWRB files) and submits this for signature by the Executive Director 50. Informs Applicant about the approval of the application for a CPC and tariff for implementation. 51. Prepares Confirmation of Payment for the payment of the fee for the CPC Certificate/Diploma and other unpaid fees and corresponding penalties, if any.
Applicant	52. Pays the fees and penalties, if applicable.
Registration and Licensing Section	53. Upon payment, issues the CPC to the applicant together with a copy of the Board Resolution containing the approved water rates for implementation.

All the above steps towards approval of the CPC and rates for implementation will take approximately 24 weeks or 6 months, as can be seen from Table 6-2 below.

Table 6-2 Application Processing Period



6.2 CPC Validity Extensions and Subsequent Tariff Adjustments

6.2.1 Documentary Requirements

The CPC has to be renewed every five years, at the same time that subsequent tariffs have to be reviewed. At this time, the following requirements need to be submitted:

1. Board resolution (for corporations and partnerships) or special power of attorney (for single proprietorships) authorizing the signatory to sign and file the application
2. Approved water permit(s)
3. Official receipts of Annual Water Charges
4. Official receipt of Supervision and Regulation Fee
5. Clearance that applicant has no unpaid fees and charges from NWRB
6. Plan of water distribution system

7. Plan, elevation and cross-sectional views of tank/reservoir
8. Plan, elevation and cross-sectional views of pump house, machinery and equipment
9. Certificate of Potability
10. Annual Reports for the last five years
11. Latest audited financial statements for the last five years
12. Actual Balance Sheet showing balance sheet items for water operations for the last five years[14]. If a complete Balance Sheet cannot be prepared, the following accounts pertaining to the water operations for the last five years must be provided. The net effect of these accounts will be assumed to be the capital for the water operations.
    a. Accounts Receivable – Water Supply
    b. Materials Inventory
    c. Property and Equipment In Service, at cost
    d. Accumulated Depreciation
    e. Customers' Deposits
13. Itemized list of assets entitled to return as of the end of the last historical year. This should support the Property and Equipment in Service referred to in Item 9 (c) above.
14. Actual Income Statement showing income statement items for water operations for the last five years[15]
15. Business Plan for the next five years
16. Projected financial statements for water operations for five years, with the following:
    a. Income Statement
    b. Balance Sheet
    c. Assumptions
17. Itemized list of new investments for the next five years
18. Proposed schedule of water rates
19. Levels of Service agreed with consumers commensurate with proposed rates

6.2.2 Application Process and Period

The procedures involved for CPC validity extension and subsequent tariff adjustments are basically the same as those for the review of the initial water rates.

The difference is in the financial and technical review. At this stage, there is now a review of the performance of the utility during the last five years to check that the approved water rates and the promised levels of service and investments were attained as projected. If the levels of service and investments were not attained, there will be a commensurate downward adjustment to the proposed tariff of the next CPC period.

Because of the additional review procedures, the total time for approval of subsequent tariff adjustments may take about seven months.

[14] These reports are required for water utilities that have business ventures other than water operations
[15] Ibid.

7 Preparation and Filing of the Annual Report

7.1 General Rules

The Annual Report is a compilation of data pertaining to a water utility operator who has been issued a Certificate of Public Convenience/ Certificate of Public Convenience and Necessity (CPC/CPCN)[16]. It depicts the financial condition and other essential data relative to the operation of the water utility. It contains vital information that will be used in the regular performance monitoring of the water utility and also in the formulation of water tariff. As such, the Annual Report must be audited by an external auditor and its truthfulness, accuracy and completeness sworn to by the Operator of the water utility or his authorized representative, before a notary public.

The Annual Report must be filed annually before the NWRB on or before May 31 of every year. The report must be prepared in at least two copies, with the original to be submitted to NWRB, and the duplicate retained by the CPC/CPCN grantee for its files. Failure to submit on time will result to the imposition of corresponding penalty charges on the CPC/CPCN grantee.

The Annual Report may be prepared using the MS Excel template that is available from NWRB. This template already includes the formulas that may be needed in filling in some data. The contents of the Annual Report may not be altered, especially the format for the Auditor's Certificate and the Affidavit. But the CPC/CPCN Grantee may add information that it deems important to be known by NWRB for regulation and monitoring purposes.

It is advised that Section 18 - Financial and Technical Data Sheet be prepared monthly to facilitate the collection of the year-to-date data, although it is not required to be submitted to NWRB. Only the end of the year sheet is required to be attached to the Annual Report.

The Annual Report format is shown in Annex A.

7.2 Detailed Implementing Guidelines

7.2.1 Information Sheet

1. **Business Name or Name of the Authorized Water Operator**

   State the exact name of the registered business name of the water utility or the name of the authorized water operator.

2. **Office Address**

   State the complete office address of the water utility where all communications relative to operation shall be forwarded.
3. **Telephone, Fax Numbers and Email Addresses**

[16] This is in accordance with Section 17 of the Public Service Law and as specified under NWRB's Board Resolution No. 04-0588 dated May 13, 1988.

List all telephone and fax numbers, including email address, if any, on the space provided. The contact numbers that will be placed here shall be for water utility business operations only.

4. Service Area

Identify and indicate the location of the service area/s (name of barangays) currently served by the water utility.

5. CPC/CPCN Case Number

Indicate the original case number of the CPC granted by NWRB and write down the date of validity.

Indicate also the existing CPC case number and the date of validity. This applies to water utilities which have renewed their license to operate.

6. Form of Business Organization

In Item 6a, place a check on the box provided for the appropriate form of business organization of the water utility. Water utilities are classified either as a single proprietorship, partnership, corporation, LGU managed, association, or cooperative.

If your water utility is not classified in the foregoing, place a check on the box provided for "Others" and specify the nature of your business operation.

In Item 6b, write the exact date of registration or incorporation of the water utility with the Security and Exchange Commission (SEC), Department of Trade and Industry (DTI) or with the Cooperative Development Authority (CDA) for water cooperatives.

7. Custodian of Books of Accounts

Indicate the name and position of the person who is responsible in keeping and maintaining the books of accounts of the water utility. The person appointed as custodian shall be responsible for all the financial transactions related to the water utility. He/she shall also be responsible in addressing all the queries/comments from NWRB with regards to the data inputted in this Annual Report. This does not, however, absolve the executive officers or the members of the board of directors of the grantee from any liability as approving officers of the utility's transactions.

8. Last Annual Report

State the year of the last Annual Report filed and submitted to NWRB and the date it was sent to NWRB office.

9. Latest Payment of Supervision and Regulation Fee (SRF) and Annual Water Charge (AWC)

In Item 9a, indicate the applicable year of payment, amount paid, official receipt number and date of payment of the latest payment made for the water utility's supervision and regulation fee (SRF).

The SRF is billed annually between June 1 to September 30 of every year to all CPC grantees based on the actual amount of property and equipment or cost of capital stock whichever is higher. The SRF is due and payable on or before September 30 of every year. A corresponding penalty is imposed on the operator for failure to pay on time.

In Item 9b, indicate the water permit number, year of applicability of the annual water charge payment, amount paid, official receipt number, and date of payment of the latest payment made for the Annual Water Charge/s (AWC).

The AWC is billed annually based on the water permit granted and the pressure/volume of water extracted from the deepwell (in terms pounds per square inch, PSI). If the water utility has more than one water permit, all the pertinent data for all the water permits must be indicated in the Annual Report. Likewise, for failure to pay the AWC on time a corresponding penalty is imposed on the operator.

10. Board of Directors

For a water utility corporation, list down the names and corresponding position (i.e. Chairman, Vice-Chairman, Treasurer, Member, etc.) of the present members of the board of directors of the water utility only.

Specify the term of office of each director (number of years stay in the board) and the inclusive date of appointment.

For single proprietorship or partnership, list down the names and positions of the owner and/or partners who is/are responsible in the policy making of the utility and the inclusive dates of appointment, if applicable.

For the other forms of business organization, list down the names, corresponding position, term and inclusive dates of appointment, if applicable, of persons who are members of the governing or policy making body of the utility.

Note: If the space provided in the report is insufficient, use a separate sheet and attach them to the Annual Report.

11. Executive Officers

List the complete names of all executive officers who are responsible in running the day-to-day operations of the water operations only. Executive officers include the top management officials such as the President (or General Manager), Vice-President or equivalent position, Treasurer and other officers included in the top management.

Indicate the corresponding position, date of appointment and status of appointment (permanent, contractual, etc) of each officer of the water utility.

Note: If the space provided in the report is insufficient, use a separate sheet and attach them to the Annual Report.

12. Water Rate Structure

The water rates that will be placed here must be the rates recently approved by NWRB and is presently implemented by the water utility.

Write down the date (month and year) of effectivity and the period of validity of the existing water rates.

For piped water consumers, write down in the appropriate column the water rates in pesos per cubic meter billed for the applicable consumption block.

For bulk water sales (water peddlers or shipchandlers), indicate the price per liter, per gallon, etc. on the column provided. If you are using other unit of measurement (other than liter or gallon) state the price under the "Other Measurement" column and specify the unit of measurement currently used by the water operator.

13. Customers' Blocking

For each customer's classification, indicate the number of active connections and the monthly average consumption (in cubic meters) of all these connections for every water meter size. The sum of all the connections should tally with the total connections declared in Item 18.1 on Service Connection Data. Ensure that these data are accurately stated since these will be used for any water rate adjustments.

7.2.2 Income Statement

Figures to be used in this section shall come from the audited financial statements of the water utility for the end of the current year (year of the Annual Report) with comparative figures for the previous year. Operating revenues and expenses pertaining to non-regulated operations of the water utility should be excluded.

The "This Year" column pertains to figures for the current year. The "Last Year" column pertains to figures for the previous year. If an account title is not used, or there is no expense for the year, write zero (0).

The "% Increase / Decrease" column pertains to the variance in percent between the two years. It is calculated as follows:

$$\% \text{ Increase (Decrease)} = \frac{\text{This year} - \text{Last year}}{\text{Last year}} \times 100\%$$

The Income Statement accounts are grouped into Operating Revenues, Operating Expenses, and Net Non-Operating Revenues/(Expenses). Their details are itemized below.

1. Operating Revenues

The operating revenues are composed of the following accounts:

a. Water Sales
b. Penalty Charges
c. New Connection Fees
d. Other Water Revenues

All other revenue accounts used by the water utility but not mentioned above (such as reconnection fees, service connection materials, water meters, etc.) shall be classified and lumped into the "Other Water Revenues" account.

Sum-up all the revenue accounts and placed the total under "Total Operating Revenues".

2. Operating Expenses

Operating expenses are composed of the following accounts:

a. Personnel Costs
b. Management Fees
c. Power
d. Chemicals
e. Repairs and Maintenance
f. Bulk Water Purchase
g. Bad Debts
h. Annual Water Charge
i. Supervision and Regulation Fee (SRF)
j. Franchise Tax
k. Depreciation
l. Interest Expense
m. Other O & M Costs

In filling up this portion, classification of expenses of the water utility is limited to the above accounts. All other expenses not mentioned above but part of the regular expenses of the water utility shall be totaled and placed under "Other O & M Costs". Note that the foregoing are also the account titles used in tariff model formulation.

All expenses related to salaries such as overtime pay, SSS/GSIS contributions, pag-ibig contribution, 13th month pay, bonuses, Phil-health, etc, shall be lumped together or summarized into "personnel costs".

Sum-up all expense accounts and placed the total under "Total Operating Expenses".

3. Net Non-Operating Revenues / (Expenses)

These refer to non-operating revenues, net of non-operating expenses related to the water operations.

7.2.3 Balance Sheet

Figures to be used in this section shall come from the audited financial statements of the water utility for the end of the current year (year of the Annual Report) with comparative figures for the previous year.

The "This Year" column pertains to figures for the current year. The "Last Year" column pertains to figures for the previous year. If an account title is not used, or there is no expense for the year, write zero (0).

The "% Increase / Decrease" column pertains to the variance in percent between the two years. It is calculated as follows:

$$\% \text{ Increase (Decrease)} = \frac{\text{This year} - \text{Last year}}{\text{Last year}} \times 100\%$$

The classification of Balance Sheet accounts in the Annual Report has been simplified to reflect only those accounts that are considered significant for monitoring purposes. The water utility operator must reclassify its accounts to fit into these classifications. Other accounts may be lumped in the appropriate accounts, such as "Other Current Assets", "Other Assets", "Other Long-term Liabilities", "Other Current Liabilities", and "Other Liabilities and Deferred Credits".

The amount declared in the property and equipment in service must reconcile with the total amount stated in Item 16 "Breakdown of Property and Equipment in Service".

The net book value of equipment in service and/or the cost of capital stock that will be declared shall be the basis of computing the Supervision and Regulation Fee (SRF). Improper statement or mis-declaration of actual amounts will cause erroneous billing of the SRF.

For water utility operators who have other lines of business that are not regulated by NWRB (like sale of bottled water or sale of plumbing materials), the Balance Sheet accounts for the water utility operations must be declared. If this is not feasible, the following accounts must be declared:

a. Accounts Receivable – Water Supply
b. Materials Inventory
c. Property and Equipment In Service, at cost
d. Accumulated Depreciation
e. Customers' Deposits

The difference between the assets and liabilities will be assumed as the capital for the water supply operations.

7.2.4 Breakdown of Property and Equipment in Service

This section pertains to property and equipment of the water utility that are used in service, regardless of their funding source (donated or received as grant, loan, internal cash generation or other source), and whether they are entitled to return or not.

For uniformity of charging depreciation, assets of the water utility operator should be classified according to the recommended accounts in Section 16 of the Annual Report, and to use the NWRB-recommended useful life in determining depreciation.

Columns that are required to be filled up in Section 16 are enumerated below. The other columns are automatically calculated under Excel, should the Excel version of the Annual Report be used.

a. Year of the annual report at the heading
b. Year the asset was acquired (column c)
c. Cost of the asset (column d)
d. Classification of the asset by funding source, into:
    - Donations or grant (column e)
    - Loan (column f)

The Excel version of this Annual Report contains formulas in Section 16 that would automatically compute the amount of assets funded by other sources (column g), classify assets whether entitled to return (column i) or not (column h). It also calculates depreciation expense (column i) based on the useful life of the asset (column b), accumulated depreciation (column k) and net book value (column l). This is why the year of the annual report is important to be filled up, especially the Excel version, since this year is compared with the acquisition year of the asset to calculate the accumulated depreciation.

Useful life

The useful life (column b) stated in the report is the estimated life of each asset as approved by NWRB. Verify/check each item and compare with the useful life being used by your water utility in computing the annual depreciation. In case of discrepancy, (and for uniformity of all CPC grantees), follow the useful life indicated in the Annual Report and adjust your accounting records accordingly.

Year Acquired

Indicate only the year when the asset was acquired or purchased. If under each classification, there are multiple years of acquisitions (such as in service connections, office equipment, vehicles etc.) insert additional rows for each acquisition year. If using the Excel version of the Annual Report, insert an entire row including the formulas, then copying the corresponding useful life for the asset. This is illustrated below.

Description	Useful Life	Year Acquired
Service Connection	5	1991
Service Connection	5	1994
Service Connection	5	1998

Amount per Balance Sheet

Indicate the exact amount of each property and equipment account per balance sheet (audited). The total of this column should tally with the amount declared in the Balance Sheet section of the Annual Report, Item 15.

Funding Source

Determine the source of funding used in the purchase of the property whether it was a grant (donated properties fall under this category), loan or procured from the internal funds or other sources of the water utility.

For each line of asset, indicate how much were acquired by grant, loan or from internal funds/other sources.

Classification if Entitled to Return

From the total amount of each asset category indicate how much are entitled to return or not. Assets acquired through donations or grants are automatically not entitled to return. All other assets funded otherwise are entitled to return.

Annual Depreciation

Under each asset category, compute the annual depreciation using the estimated useful life (column b) and straight line depreciation method or the existing method used by your water utility.

The water utility must be consistent in adopting the same depreciation method for all assets.

Accumulated Depreciation

Indicate the accumulated depreciation of each property. This is computed by multiplying the annual depreciation of the property by its age. The accumulated depreciation should not exceed the cost of the property. The sum of this column may be different from the operator's accounting records because of the rounding of the acquisition date and the useful life used. In case of differences, the calculations under this Section shall prevail.

Net Book Value

Calculate the "Net Book Value" of each line of asset by using this formula:

= Cost per Balance Sheet – Accumulated Depreciation

7.2.5 List of Capital Investments

This portion pertains to new capital investments put in by the water utility operator during the current year. These investments should be classified according to the asset classification in Section 17 of the Annual Report based on their useful lives.

7.2.6 Financial and Technical Data Sheet

The financial and technical data sheet contains vital information with regards to the operation of a water utility. It will be used in formulating the water industry averages and benchmarking for CPC grantees and likewise the basis of calculating Key Performance Indicators (KPIs).

This data sheet should be prepared monthly or quarterly by the water utility operator for regular monitoring of its financial performance. But for the purpose of preparing

the annual report as required by NWRB, only the "December" figures shall be written in the "This Month" column and the accumulated figures to be stated in the "Year to Date" column. If the data sheet is for a given quarter, change the "This Month" column into "This Quarter" and indicate what quarter figures are used.

The Accounting and Administrative Units of the water utility shall be responsible in preparing/supplying the necessary data for items I to 4, while Engineering /Maintenance Unit shall be responsible for filling up the Water Production Data, Item 5.

1. Service Connection Data

Active Service Connection

Active service connections pertain to the actual number of connections that are presently or regularly billed, whether they are metered or flat rate customers.

Classify the customers according to residential, commercial/industrial and public taps.

Sum-up the figures and indicate the monthly and the year-to-date (YTD) totals in their corresponding columns.

The sum of all the active service connections in this section should be the same as the sum of the number of connections reported in Section 13, Customers' Blocking.

Changes

Calculate the monthly and annual changes with regards to new service connections, reconnected connections and disconnected services and place them properly under their respective lines in the report.

Customer in Arrears

Determine the total number of customers in arrears or who are not paying their bills on time.

Calculate the percentage (%) of connections in arrears in relation to the total number of service connections and indicate the result under the "% to total" section. The formula is:

$$\% \text{ to Total} = \frac{\text{Number of Customers in Arrears}}{\text{Total Number of Customers}}$$

Population

Determine the present population in the franchised service area/s and input them in the "Year-to-Date" column. (Monthly data with regards to population need not be stated).

Population data periodically issued by the National Statistics Office (NSO) or the latest survey conducted by the barangay council, if any, may be used to indicate the service area population. For subdivisions, the service area population is the total number of persons in the subdivision at full occupancy.

Also, determine the total number of served population and input them in the "Year-to-Date" column (Monthly data with regards to population need not be stated). Served population is the actual number of persons presently benefiting from the services of the water utility, computed by multiplying the number of residential connections by the average persons per household.

Compute the "% served" to find out how much of the service area population is being served at present by the water utility. The resulting figure must be expressed in percentage. The formula to calculate % Served is:

$$\% \text{ Served} = \frac{\text{Served Population}}{\text{Service Area Population}} \times 100$$

2. Personnel Data

Indicate the total number of employees (include part-time employees) as of the year-end in the column provided. If the CPC grantee has business operations other than the regulated water utility operations, only the employees for the water utility operations shall be stated. For part-time employees, indicate only the time spent with the water utility, such that if 2 employees render 50% each of their time with the water utility, the 2 employees will be counted only as 1. Monthly data on number of employees need not be stated in this section.

Calculate the number of connections per employee and state the figure under the year-to-date column. The active number of service connections that will be used here shall be the same as the figure stated in 1.1 of the Financial and Technical Data Sheet. The formula is as follows:

$$\text{No. of Connections/Employee} = \frac{\text{Total Active Service Connections}}{\text{Total Employees}}$$

Also, calculate the average monthly salary per employee and indicate under the year-to-date column. The formula is:

$$\text{Average Monthly Salary} = \frac{\text{Total Personnel Costs}}{\text{Total Employees}}$$

Ensure that the amount of personnel costs used in the formula tally with the amount stated in the Income Statement.

3. Billing and Collection Data

As mentioned in the first paragraph of item 16, the December figures shall be placed under the "This Month" column while the accumulated water sales (total from January to December) shall be stated on the "Year-to-Date" column.

<u>Billing (Water Sales)</u>

Determine the total water sales for the month and the accumulated water sales for the year and place them on their respective columns. Only the billings with regards to water sales and penalty charges shall be stated in this section, other sources of revenues of the water utility need not be indicated here. A summary of monthly billings should be prepared regularly to facilitate filling up of this section.

Sum-up the revenues and put the total under the "Total" section.

Collection (Water Sales)

Classify the total collections for the month into current, arrears (current year) and arrears (previous years).

For the monthly data:

Current accounts refer to collection of bills issued during the month.

Arrears (current year) refer to collections during the month out of bills issued during the year.

Arrears (previous years) refer to collections during the month out of bills issued during the past years.

For the Year-to-Date data, accumulate the figures reported in the previous months for Current Accounts, Arrears (Current Year) and Arrears (Previous Years).

Collection Efficiency

Calculate the on-time payment and overall collection efficiency and express these in percentage. Below are the formulae:

On-Time Payment

$$\% \text{ of On Time Payment} = \frac{\text{Current Collections}}{\text{Water Sales}} \times 100$$

Overall

$$\text{Overall Collection} = \frac{\text{Total Collections}}{\text{Water Sales}} \times 100$$

4. Financial Data

Water Revenues

From the audited income statement, calculate the total operating revenues per month and year-to-date and indicate the total amount on their respective columns. Operating revenues refer to all regular income related to the water operation such as water sales, penalty charges, new connection fees, other water revenues.

Indicate also the total non-operating revenues per month and year-end figures. Non-operating revenues cover unusual income generated from the water utility operation (such as gain on sale of asset, dividend/interest arising from the investment funds of the water utility, etc).

Expenses

Also, based from the monthly/quarterly/annual income statement, indicate the individual cost of the expense accounts. Other expense items not specified in item 4.2 of the Financial Data (Expenses) but contains material amount, shall be added to the list of expenses (material amount is 5% of the total operation and maintenance

costs). However, if the amount is in-material, classify/include under "Other O & M Costs".

The formulae to compute the sum of water revenues and operating expenses and to arrive at "net income (loss) before income tax" are already included in the program. Countercheck the formula for the accuracy of the results.

5. Water Production Data

The Engineering and/or Maintenance Unit of the water utility shall be responsible in providing the data in this portion.

The data required are for both the "This Month" and "YTD" columns.

Volume Produced and Purchased

Determine the volume of water produced and purchased (in cubic meters). Classify them into:

a. pumped water,
b. gravity-fed, or
c. bulk water purchases

Volume of Billed Water

Determine the volume of water billed (in cubic meters) from the following classes of customers from the water bills issued:

a. Metered customers
b. Un-metered or flat rate customers

Sum-up the metered and flat rate billed water to arrive at volume of water billed.

Metered billed volume is the sum of the billed consumption (in cubic meters) from metered connections.

Unmetered billed volume is the estimated volume of water billed (in cubic meters) from flat rate customers who have no water meters installed. The average monthly consumption of the metered customers is generally used in the absence of a more accurate method. This average volume is multiplied by the number of un-metered connections to get their estimated billed volume.

Water Use Assessment

This section collects the following data:

a. Average consumption per connection per month (in cubic meters), by consumer category
b. Average consumption per capita per day (in liters)
c. % of non-revenue water

Calculate the average monthly consumption per connection in terms of cubic meters of residential, commercial/industrial and public tap customers, as shown below. These averages must tally with the figures written in Section 13, Customers' Blocking.

$$= \frac{\text{Total volume billed or sold per category (for the month or for the year)}}{\text{Number of customers per category (for the month or for the year)}}$$

Place the average monthly consumption of each category (residential, commercial/industrial, public tap) under the "This Month" column. Ensure that the resulting figure for YTD shall not accumulate the monthly figure of average consumption.

Determine the average consumption per capita per day of residential customers only and express this in liters. Commercial/industrial and public tap consumers is not required. Per capita per day is the average water consumed by every member of the household within a day. Below is the formula:

Average consumption per capita/day (liters)

$$= \frac{\text{Ave. monthly consumption (in cu. m) x 1000}}{\text{Ave. person per household x 30 days}}$$

Note: *Use the average monthly consumption as computed in 5.3.a.1 (residential) of the Financial and Technical Data Sheet. For the average person per household, use the available data within the service area or the NSO data of your municipality/city where the water utility operates.*

Non-revenue water in percentage is computed as follows:

$$= \frac{\text{Total Volume Produced and Treated Water Purchased – Total Volume Billed}}{\text{Total Volume Produced and Treated Water Purchased}}$$

Other Water Production Data

Determine and indicate the actual data under each of the following:

a. Capacity of reservoir/s (in cubic meters)
b. Number of operating pumps

For each of the pumps, indicate the following:

a. Average number of operating hours per pump
b. Average production per pump (in GPM)
c. Average number of kilowatt hours consumed per pump
d. Total kilowatt hours consumed by all pumps

If there are more pumps that the number provided in the form, use a separate sheet and attach this to the Annual Report.

6. Water Production Data

Determine and indicate the actual data under each of the following:

a. Range of water pressure, in psi
b. Water pressure for 80% of the service area, in psi

7.3 Audit Certificate

The financial statements that should be presented in this annual report must be audited by an External Auditor. The External Auditor may be an auditing firm or an individual Certified Public Accountant (CPA).

The same auditor who signed the audited financial statements shall issue an audit certificate with regards to this annual report. He/she must also indicate his/her Professional Tax Receipt (PTR) number, and its date and place of issuance below his signature.

The absence of the audit certificate in the Annual Report shall invalidate its contents.

7.4 Affidavit

The affidavit shall be executed by the Operator of the water utility or any other authorized representative who can attest to the accuracy, validity, truthfulness, and completeness of all the information written in the Annual Report.

The affidavit shall be sworn to before a Notary Public. The absence of this notarized affidavit in the Annual Report shall likewise invalidate its contents.

Annex 1. Annual Report Format

_____

Name of Water Utility Operator

NWRB Code No._____

Year: _____

ANNUAL REPORT
OF AUTHORIZED
WATER UTILITY OPERATORS

Republic of the Philippines
NATIONAL WATER RESOURCES BOARD
8th Floor NIA Building, EDSA, Quezon City

ANNUAL REPORT
FOR WATER UTILITY OPERATIONS

1. Business Name of Water System or Name of Authorized Water Operator

2. Office Address

3a. Telephone Numbers	**3b. Fax Numbers**	**3c. E-mail Address**

4. Location of Service Area of Water Utility

5. CPC/CPCN

	Case No.	**Validity Date**
Original		
Existing		

6.a Form of Business Organization of the Water Utility

- ☐ Single Proprietorship
- ☐ Partnership
- ☐ Corporation
- ☐ LGU Managed
- ☐ Association
- ☐ Cooperative
- ☐ Others (please specify) _____

6.b Date of Incorporation/Registration of Water Utility

7. Custodian of Books of Accounts

Name	Position

8. Last Annual Report Submitted to NWRB

Report Year	Date Submitted

9. Latest Payment of NWRB Fees

Kind of Fee	Water Permit No.	Year	Amount Paid	OR No.	Date Paid
a. Supervision and Regulation Fee					
b. Annual Water Charge					

10. Board of Directors

Name	Position	Term	Inclusive Dates of Appointment

11. Executive Officers

Name	Position	Date of Appointment	Status

12. Water Rate Structure

Effectivity	From	To

Residential / Institutional / Public Taps		**Commercial / Industrial**	
Consumption, cu. m.	Peso / cu.m.	Consumption, cu. m.	Peso / cu.m.
0 - 10		0 - 25	
11 - 20			
21 - 30		26 - 1000	
31 - 40			
41 - 50		Over 1000	
Over 50			
BULK SALES	Peso / Liter	Peso / Gallon	Peso / *
Selling Price per Unit			

** Specify unit*

13. Customers' Blocking

Meter Size	Public Taps		Residential / Institutional		Commercial / Industrial	
	# Connections	Ave. Cons./Mo.m3	# Connections	Ave. Cons./Mo.m3	# Connections	Ave. Cons./Mo.m3
1/2"						
3/4"						
1"						
1 1/2"						
2"						
3"						
4"						
TOTAL	-		-		-	

14. Income Statement

For the Years Ended _____ and _____

Account Title	This Year	Last Year	% Increase/ (Decrease)
OPERATING REVENUES			
Water Sales			-
Penalty Charges			-
New Connection Fees			-
Other Water Revenues			-
Total Operating Revenues	-	-	-
OPERATING EXPENSES			
Personnel Costs			-
Management Fees			-
Power			-
Chemicals			-
Repairs and Maintenance			-
Bulk Water Purchase			-
Bad Debts			-
Annual Water Charge			-
Supervision and Regulation Fee			-
Franchise Tax			-
Depreciation			-
Interest Expense			-
Other O & M Costs			-
Total Operating Expenses	-	-	-
NET INCOME	-		-
Add: Net Non-Operating Revenues / (Expenses)			-
NET INCOME (LOSS) BEFORE INCOME TAX	-	-	-

15. Balance Sheet
As of December 31, 20_____ and 20_____

ASSETS and OTHER DEBITS	This Year	Last Year	% Increase (Decrease)
Properties and Equipment In Service (PPIS)			
Property and Equipment in Service			-
Accumulated Depreciation			-
Total PPIS, Net Book Value	-	-	-
Properties and Equipment Not In Service , Net Book Value			-
Construction Work in Progress			-
Investments			-
Depreciation Reserve Fund			-
Current Assets			
Cash on Hand and in Bank			-
Special Time Deposits			-
Accounts Receivables - Water			-
Other Accounts Receivable			-
Material and Supply Inventories			-
Accruals and Prepayments			-
Other Current Assets			-
Total Current Assets	-	-	-
Other Assets			-
TOTAL ASSETS AND OTHER DEBITS	-	-	-

LIABILITIES AND STOCKHOLDER'S EQUITY	This Year	Last Year	% Increase (Decrease)
STOCKHOLDER'S EQUITY			
Capital			
Capital Stock (Paid Up)			-
Donated Capital			-
Proprietor's Account (for partnership and single proprietorship)			-
Total Capital	-	-	-
Retained Earnings			
Appropriated			-
Un-appropriated			-
Total Retained Earnings	-	-	-
TOTAL STOCKHOLDER'S EQUITY	-	-	-
LIABILITIES			
Long-Term Liabilities			
Loans Payable			-
Advances from Affiliated Companies			-
Other Long-term Liabilities			-
Total Long-Term Liabilities	-	-	-
Current Liabilities			
Loans Payable, Current Portion			-
Notes Payable			-
Payable to Affiliated Companies			-
Interest Payable			-
Taxes Payable			-
Other Current Liabilities			-
Total Current Liabilities	-	-	-
Other Liabilities			
Customer's Deposits			-
Other Liabilities and Deferred Credits			-
Total Other Liabilities	-	-	-
TOTAL LIABILITIES	-	-	-
TOTAL LIABILITIES AND STOCKHOLDER'S EQUITY	-	-	-

	A	B	C	D	E	F	G	H	I	J
1	**16. Breakdown of Property and Equipment in Service**									
2	**As of December 31,** 0 *(Year of Annual Report)*									
3										
4					**Funding Source**			**Classification if Entitled to Return**		
5	**Description**	**Useful**	**Year**	**0**	**Donations /**		**Other**	**Not**		**Depreciation**
6		**Life**	**Acquired**	**Balance Sheet**	**Grant**	**Loan**	**Sources**	**Entitled**	**Entitled**	**Expense**
7	*a*	*b*	*c*	*d*	*e*	*f*	*g = d - e - f*	*h = e*	*I = d - h*	*j = d / b*
8	Land						-	-	-	-
9	Deepwells and Pumphouses									
10	Deepwell casing	15					-	-	-	-
11	Pump assembly	10					-	-	-	-
12	Motor for submersible pump	5					-	-		-
13	Motor control for deepwell pump	7					-	-	-	-
14	Pump house-mixed materials	10					-	-	-	-
15	Pump house-reinforced concrete	40					-	-	-	-
16	Booster Station									
17	Pump house-mixed materials	10					-	-	-	-
18	Pump house-reinforced concrete	40					-	-	-	-
19	Pump assembly	20					-	-	-	-
20	Motor for booster and line turbine	5					-	-	-	-
21	Motor control for booster station	20					-	-	-	-
22	Reservoir									
23	Concrete reservoir	40					-	-	-	-
24	Steel overhead tank	25					-	-	-	-
25	Steel tank on ground concrete	30					-	-	-	-
26	Chlorinating Equipment	10					-	-	-	-
27	Pipelines									
28	Cast/ductile iron pipes	60					-	-	-	-
29	Steel pipes with cement lining	40					-	-	-	-
30	Steel pipes cylinder type	20					-	-	-	-
31	Asbestos and plastic pipes	30					-	-	-	-
32	Flow Meters	7								-
33	Water Meters	7								-
34	Service Connections	5					-	-	-	-
35	Valves and Chambers	30					-	-	-	-
36	Fire Hydrants	20					-	-	-	-
37	Building	40					-	-	-	-
38	Building Improvements	10					-	-	-	-
39	Office Furniture and Fixtures	10					-	-	-	-
40	Office Equipment	5					-	-	-	-
41	Vehicles	5					-	-	-	-
42	Tools and Equipment	5					-	-	-	-
43	**Total Property and Equipment in Service**			-	-	-	-	-	-	-

17. LIST OF CAPITAL INVESTMENTS
During the Year

Description	Useful Life (Years)	Amount
Land		
Deepwells and Pumphouses		
Deepwell casing	15	
Pump assembly	10	
Motor for submersible pump	5	
Motor control for deepwell pump	7	
Pump house-mixed materials	10	
Pump house-reinforced concrete	40	
Booster Station		
Pump house-mixed materials	10	
Pump house-reinforced concrete	40	
Pump assembly	20	
Motor for booste and line turbine	5	
Motor control for booster station	20	
Reservoir		
Concrete reservoir	40	
Steel overhead tank	25	
Steel tank on ground concrete	30	
Chlorinating Equipment	10	
Pipelines		
Cast/ductile iron pipes	60	
Steel pipes with cement lining	40	
Steel pipes cylinder type	20	
Asbestos and plastic pipes	30	
Flow Meters	7	
Water Meters	7	
Service Connections	5	
Valves and Chambers	30	
Fire Hydrants	20	
Building	40	
Building Improvements	10	
Office Furniture and Fixtures	10	
Office Equipment	5	
Vehicles	5	
Tools and Equipment	5	
Total Investments During the Year		-

18. Financial and Technical Data Sheet

1 SERVICE CONNECTION DATA	**Month of December**	**Year-to-Date (YTD)**
1.1 Active Service Connections		
a. Residential		
b. Commercial/Industrial		
c. Public Taps		
Total	-	-
1.2 Changes		
a. New Connections		
b. Reconnected		
c. Disconnected		
1.3 Customer in Arrears		
a. Number		
b. % to total		
1.4 Population		
a. Service Area Population		
b. Served Population		
c. % Served		
2 PERSONNEL DATA		**Year-to-Date (YTD)**
a. Total Employees		
b. No. of Connections / Employee		
c. Average Monthly Salary/Employee		
3 BILLING AND COLLECTION DATA	**Month of December**	**Year-to-Date (YTD)**
3.1 Billing		
a. Water Sales		
b. Penalty Charges		
Total	-	-
3.2 Collection		
a. Current Accounts		
b. Arrears (Current year)		
c. Arrears (Previous years)		
Total	-	-
3.3 Collection Efficiency		
a. On- Time Payment		
b. Overall		

4. FINANCIAL DATA	Month of December	Year-to-Date (YTD)
4.1 Revenues		
a. Water Sales and Other Operating Revenues		
b. Non-operating Revenues (i.e., Interest income)		
Total Revenues		
4.2 Expenses		
a. Personnel Costs		
b. Power		
c. Chemicals		
d. Management Fees		
d. Repairs and Maintenance		
e. Bulk Water Purchase		
f. Bad Debts		
g. Annual Water Charge		
h. Supervision and Regulation Fee		
i. Franchise Tax		
j. Other O & M Costs		
k. Depreciation		
l. Interest Expense		
Total Expenses		
4.3 Net Income (Loss) Before Income Tax		
5. WATER PRODUCTION DATA		
5.1 Volume Produced and Purchased (in cubic meters)		
a. Pumped Water		
b. Gravity Fed		
c. Bulk Water Purchased		
Total		
5.2 Volume of Billed Water (in cu. meter)		
a. Metered		
b. Un-metered		
Total Volume Billed		
5.3 Water Use Assessment		
a. Average Monthly Consumption /Connection (in cu. m.)		
1. Residential		
2. Commercial/Industrial		
3. Public Tap		
b. Average Consumption per Capita/day (in liters) (residential customers only)		
c. % of Non-revenue water (%NRW)		
5.4 Other Water Production Data		
a. Capacity of reservoirs (cu. m.)		
b. Number of operating pumps		

Pump Details - YTD	TOTAL	Pump 1	Pump 2	Pump 3	Pump 4
Ave. operating hours					
Ave. production (in GPM)					
Ave. kilowatt hours consumed					
Total kilowatt hours consumed					

6. WATER PRESSURE	Month of December	Year-to-Date (YTD)
6.1 Range of Water Pressure, in psi		
6.2 Water Pressure for 80% of Service Area, in psi		

AUDIT CERTIFICATE

I/We have audited the accompanying balance sheets of _____ _____ and the related statement of income and supporting schedules, as set forth in this Annual Report to be filed with the National Water Resources Board pursuant to Section 17 (h) of Commonwealth Act No. 146, as amended.

I/We conducted my/our audits in accordance with auditing standards generally accepted in the Philippines. Those standards require that we plan and perform the audit to obtain reasonable assurance whether the financial statements are free of material misstatement. I/We believe that my/our audits provide a reasonable basis for my/our opinion.

In my/our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of _____ _____ as of December 31, 20___, and the results of its operations for the year then ended in conformity with accounting principles generally accepted in the Philippines.

_____
Certified Public Accountant

PTR Number: _____
Date Issued: _____
Place Issued: _____

Date: _____

AFFIDAVIT

I, _____
(Name of Affiant)

of _____
(Residence Address)
after having been duly sworn to in accordance with law, hereby depose and state;

1. That I am the _____
(Position)
of _____;
(Name of Water Utility)
2. That I have personally and carefully examined the foregoing annual report of _____;
(Name of Water Utility)
3. That I attest the truthfulness and accuracy of all statement of facts contained in the said report;

4. That this report is a complete and faithful statement of the business affairs of the above-named water utility during the period from _____ to _____, 20____.

IN WITNESS WHEREOF, I have hereto affixed my signature this _____day of _____, 20 _____ at _____

_____
(Signature of Affiant)

Subscribed and sworn to before me this____ day of _____, 20__, Affiant exhibited to me his Community Tax Certificate No. _____issued at _____ on _____, 20 ___.

_____
(Notary Public)
Doc. No: _____
Page No: _____
Book No: _____
Series of: _____