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**MAHARASHTRA STATE  
DRAFT CRITERIA FOR  
DETERMINATION OF  
BULK WATER TARIFF  
FOR CONTROL PERIOD JULY 2020 TO JUNE 2023.**



**MAHARASHTRA WATER RESOURCES  
REGULATORY AUTHORITY**

**JANUARY 2022**



# **DRAFT CRITERIA FOR BULK WATER TARIFF SYSTEM FOR THE CONTROL PERIOD (2020-23)**

## **1. BACKGROUND**

- 1.1. The Maharashtra Water Resources Regulatory Authority (MWRRA) Act, 2005, (hereinafter referred to as the Act) was enacted inter-alia for the purpose of regulating the water resources within the State of Maharashtra and for facilitating and ensuring judicious, equitable and sustainable management and allocation of water resources in the State. The Act was brought into force by the State government by Gazette notification no. Committee-2005/ (72/05)/1/WRI dated 08/06/2005. Subsequently, vide notification no. MWRRA. Selection 2005/78/05 dated 12/08/2005 the MWRRA (hereinafter referred to as the Authority) was established to carry out the tasks specified in the Act.
- 1.2. One of the powers, duties and functions of the Authority (under Section 11 (d) of the Act) is to fix the Criteria for water charges at sub-basin, river basin and State level and to establish a water tariff system after ascertaining the views of the beneficiary public based on the principle that water charges shall reflect the full recovery of the cost of irrigation management, administration, operation and maintenance of water resources project.
- 1.3. Vide Section 11 (u) of the Act, the Authority is required to review and revise the water charges after every three years.
- 1.4. In exercise of the powers conferred by Sub-Section 1 of Section 31 read with Sub-Sections (d) and (u) of Section 11 of the Act, the Authority had notified Maharashtra Water Resources Regulatory Authority (Fixing Criteria for and Issuance of Tariff Orders for Bulk Water) Regulations, 2013 dated 15/10/2013 after approval by the Water Resources Department (WRD).

- 1.5 Thereafter, after issuance of Second tariff order in January 2018, based on past experience the regulations of tariff fixation have been repealed by separate Notification published in the Gazette Part 4 (c) dtd. 24/05/2019 and notified MWRRA (Fees, Charges and Other receipts) Regulations, 2019 on 29/08/2019. The Authority, with an objective to set out a transparent and consistent procedure for fixing bulk water tariff system and also undertake its periodic review and revision, has notified “MWRRA (Fixing Criteria For and Issuance Of Tariff Orders For Bulk Water) Guidelines, 2019” on 14/11/2019.
- 1.6. The prevailing tariff is applicable upto June 2020. Therefore, the Authority has initiated the tariff review process. After receiving the draft tariff proposal with supporting data from service provider in October 2021, the Authority has prepared draft criteria for BWT and carried out first phase consultation process with Focus Group in December 2021. Taking into consideration comments/ suggestions received from various experts in the Focus Group, the draft CBWT has been revised for Public consultation in second phase.

**2. Legal & other support documents:**

This draft criteria is formulated following the provisions in:

- a) MWRRA Act, 2005 as amended from time to time.
- b) MWRRA (Fixing Criteria for and Issuance of Tariff Orders for Bulk Water) Guidelines, 2019 (“Guidelines” for short).
- c) Approach Paper on Determination of Bulk Water Tariff 2020-23 ( October 2019 )

The experience and difficulties faced so far is also duly considered.

**3. Applicability of the Tariff Order :**

The Tariff Orders issued by the Authority shall be applicable to all Bulk Water Supply Entities (BWSE) and Bulk Water User Entities (BWUE) of the State sector including individual farmer as bulk water user in the

respective jurisdiction or any Entity connected thereto in the State for the control period, including any extension/extensions given by the Authority, if any, with or without the annual increase in tariff.

Further, the Tariff Order so issued, on the basis of the methodology prescribed in the approach paper for the State sector, shall be applicable to all category of users to whom bulk water is supplied by water resources project owned and/or managed by any other BWSE or any other entity either in Public or Private Sector and the relevant BWSEs till such time that these BWSEs gets determined BWSEs specific tariff by approaching to the Authority as may be directed by the Authority or the Authority determines the separate BWSE specific Tariff Suo-moto, whichever is earlier.

**4. Validity of the Criteria :**

This Criteria is valid for three years from 01/07/2020 to 30/06/2023 for the control period under consideration of 2020-23 and for such period thereafter, as may be extended by the Authority. For any review and revision of the Criteria, the Authority shall follow the procedure stipulated in the Guidelines.

**5. Bulk Water Tariff Proposal from Service Provider :**

As per the Clause 3 (2) of the Guidelines, BWSE has submitted the Bulk Water Tariff proposal with supporting data. The Authority has finalised the Approach Paper & hosted on the website in October 2019.

**6. Admitted Operation & Maintenance cost :**

Admitted Operation and Maintenance (O & M) Cost shall include cost of irrigation management, administration, operation and maintenance of water resources projects in the State as per Section 11(d) of the Act. These terms defined in the Guidelines are as under;

*2(15) "Cost of Administration" means the expenses of offices at division level and above on items such as, but not limited to, salaries and allowances of staff*

*actually engaged in administration of irrigation management and other expenses as admissible under the head of Administrative Charges as per the accounting standards adopted by the respective agencies or entities.*

**2(16)** *“Cost of Irrigation Management” means the expenses of the irrigation management sections and irrigation sub-divisions such as, but not limited to, salaries and allowances of staff, expenses on contingent field staff appointed during rotation period, office expenses, stationary, advertisements, vehicles, purchase of miscellaneous material, formation of Water User Associations, their training and capacity building activities, crop measurement, assessment and recovery of water charges etc. including such other expenses as may be necessary in the opinion of the Authority.*

**2(17)** *“Cost of Maintenance” means expenses on both Preventive Maintenance and Operative Maintenance.*

**2(18)** *“Cost of Operations” means expenses on items such as, but not limited to, energy charges of lift irrigation schemes, spares, consumables, etc., including such other expenses as may be necessary in the opinion of the Authority.*

**2(19)** *“Cost of Operative Maintenance” means expenses on items such as, but not limited to, pumping out of water from the drainage galleries, restoring discharge carrying capacity of canals by removing silt, weeds, shrubs, restoring breeched sections of canals, repairs to canal structures to prevent water losses, replacing damaged rubber seals/stem rods, repairs of residential and non-residential buildings for operating staff etc., including such other expenses as may be necessary in the opinion of the Authority.*

**2(20)** *“Cost of Preventive Maintenance” means expenses on painting, lubrication of moving parts in electro-mechanical equipment’s in head works, lift irrigation schemes and canal control structures, treating the leakage paths and arresting the leakages through bank-work to avoid piping failures, remedial measures to prevent progress of retrogression in spillway channels, restoring damaged pointing in stone masonry etc., including such other expenses as may be necessary in the opinion of the Authority.*

## **7. Review of User Categories :**

In the earlier tariff order, only three user categories were considered i.e. Domestic, Industrial and Agricultural. Under domestic - ULBs ( Municipal Corporations , Nagarpalikas/Nagarparishads) in control period 2020-23 , “Commercial Subcategory “ is introduced only for Municipal corporations.

After observing impact for Municipal Corporations, for next control period commercial sub category will be introduced Nagarpalikas & Nagarparishads.

The commercial use as defined in the Guidelines, 2019 is as under-

*“Commercial use” means water used by any entity to which water is made available for commercial use such as, but not limited to restaurants, lodges & hotels, water sports/resorts, swimming pools, clubs, malls, hospitals, stadiums, construction activities etc. and any other activity as may be identified by the Authority as commercial activity from time to time.*

The Authority also recognises new sub-category under Industry, as the

*“Domestic use in industrial units” means water used by industrial worker staying in Industrial Residential colony for all usual domestic purposes.*

BWSE shall sanction such use & make such provision in the Agreement on compliance of relevant infrastructure and installation of separate water meters etc. as applicable.

## **8. Government Subsidy :**

The State government shall make the required budget provision for meeting the estimated O & M cost. Revenue gap, if any, between the estimated O & M cost and estimated tariff realization from tariff levied as per the tariff order, will be treated as State Government subsidy.

## 9. Apportionment of O & M Cost :

Rationalized tariff order based on criteria that involved parameter based apportionment of O & M cost within three user categories was issued by the Authority after carrying out Stakeholder Consultation process on CBWT as well as Tariff Proposal for Control Period of 2017 - 20. The O & M cost was apportioned among each of the three category of users' viz. agriculture, domestic and industry based on four fundamental parameters viz. (a) Affordability, (b) Quantity & Accessibility (c) Timeliness of Supply and (d) Impact on Water Quality. Following percentage weightages were assigned to these parameters;

<u>Parameter</u>	<u>Weightage assigned</u>
(i) Affordability	- 60%
(ii) Quantity & Accessibility	- 10%
(iii) Timeliness	- 10%
(iv) Impact on water quality	- 20%

The above percentage weightages of parameters were assigned to each category of use and has resulted into the allocation of O&M cost to the three categories. It is now proposed to keep the cost apportionment same as per the Tariff Order for control period 2017-20 i.e. 19% for Agriculture, 22% for Domestic and 59% for Industry.

The O & M cost for the control period of 2020-23, will be based on 2020-21. An increase is proposed every year on the basis of cost projections (Cost Inflation Index, Wholesale Price Index etc.) for the control period available at the time of preparation of the Tariff Proposal. The O & M Cost as per this will be apportioned accordingly to the three categories of users to fix the basic rate and also source-wise applicable rates. Concessions / penalties will not be accounted for in fixation of basic rate.



## 10. Principles and Methodology for fixing Tariff :

### 10.1 Agriculture

- (1) The Basic Rate (BR) for flow irrigation will be based upon 19% of the O & M cost excluding expenditure (electricity charges, M&R cost and operation cost of the head works of Lift Irrigation Schemes) for Government Operated Lift Irrigation Schemes (LIS) & will be applicable to Registered Water User Associations (WUAs) registered under Maharashtra Co-operative Societies Act, 1960 and Maharashtra Management of Irrigation Systems by Farmers Act, 2005.
- (2) The BR for flow irrigation volumetric tariff will be fixed for Rabi season , 50% of it in Kharif season and 150% of it in Hot-weather season shall be applicable.
- (3) Period of Kharif, Rabi and Hot Weather seasons for Konkan & Vidarbha regions, and rest of the Maharashtra for purpose of levying water charges, shall be as under:

Season	Period (excluding Konkan & Vidarbha regions)	Period (for Konkan and Vidarbha regions)
Kharif	1 July to 14 October	1 July to 14 November
Rabi	15 October to 28 February	15 November to 31 March
Hot Weather	1 March to 30 June	1 April to 30 June

- (4) Tariff for area under Government LIS in the State will be the Basic Rate for flow irrigation plus 19% of expenditure towards electricity charges, M&R cost and operation cost of the head works of LIS.( Balance 81% of such expenditure shall be added to other category of users as per apportionment in para 9 above). The scheme-wise tariff for Government Operated LIS shall be fixed by the respective RBA as per practice according to past Tariff Order.
- (5) Water charges for irrigation of cash crops (e.g. Sugarcane, Cotton, Banana & Horticulture etc.) on the wells within influence zone as stated in

Section 26 of Maharashtra Ground Water (Development & Management ) Act , 2009 from the boundary of the canals or Full Reservoir Level (FRL) of the storage tank, will be levied at the rate of 50% basic rate.

(6) In order to promote WUA formation, the BR of flow irrigation for individuals will be 125% of the BR.

(7) The Applicable Rate (AR) for Private LIS will be 65% of BR as follows;

**Source wise Applicable Rates for Private LIS (Individual user)**

Sr. No.	Classification	Source of Water Supply	Rate ( 65 % of BR)
(1)	(2)	(3)	(4)
1	Assured Water Supply	Reservoirs of major projects	125% of AR
2		Reservoirs of medium & minor projects, canals of major and medium projects, storage tanks	AR
3	Regulated Water Supply including transmission losses	Regulated river reach downstream of dam / K.T. weirs with back up reservoirs on upstream /tail race water of hydropower stations	AR
4	Partly assured water supply	Canals of minor projects, K.T. weirs without back up of reservoirs & arrangement without any regulation in absence of bandhara	50% of AR
5	Infrastructure constructed & maintained by water user entity	Reservoir constructed at own cost by water user entity & also maintained at its own cost	16% of AR

- (8) The registered WUAs formed under Private LIS will be given 25% concession in the above rate.
- (9) The beneficiaries of Private LIS should install the water meter at the source on delivery pipeline at its own cost. During transition period before installation of water meter, the water charges shall be levied on the basis of discharge of the pump or standard duty. This concession will be applicable for a period of 1 year from the date of this Order. After this, water charges shall be levied at **2** times applicable rate for flow irrigation.
- (10) If Private LIS, fails to install water meter / water meter is not working / water meter is tampered, the assessment will be done at the rate, 2 times applicable water rate for flow irrigation with quantity calculated as per actual irrigated area and standard duty.
- (11) If the water is supplied by BWSE up to the decentralized storages as provided in Government Resolution dated 02/05/2017 then the water rates as prescribed in Sub-Paras (1), (4) & (6) of Para 10.1 above corresponding to the conveyance system viz. flow or lift will be applicable. If water is taken to decentralized storage by means of canals then conveyance losses shall not be levied. However, if the beneficiary takes the water to its decentralized storages through regulated source of natural stream, then these conveyance losses @ 10 % shall be applicable.
- (12) Water rates for fishery shall be the same as volumetric rates applicable to Agriculture.
- (13) Project affected farmers, having been allotted compensatory land in the command area, shall be entitled to get water at 75% of the applicable water rates. Further, if project affected farmer has resorted to Lift Irrigation at his/her own cost 50% of the applicable rates shall be charged.
- (14) If the water is taken for an extended Kharif crop in Rabi season or for an extended Rabi crop in Hot Weather, relevant Kharif / Rabi rates will be charged for such water taken in the extended irrigation rotation.

- (15) Water charges should not be levied for the irrigation in the first year of irrigation (trial irrigation) of the project.
- (16) If the individual farmer takes metered water supply for modern irrigation system (micro-irrigation) then the rates applicable shall be 75% of the rates prescribed for individual farmer practicing flow irrigation. (If registered WUA takes the metered water supply for micro irrigation then the rates applicable shall be 75% of the rates prescribed for registered WUA practicing flow irrigation).
- (17) If water charges for a season is paid in advance i.e. before commencement of that season then rebate @ 10% shall be given in applicable water charges for that season.
- (18) Water rates in case of ex-malgujari tanks shall be governed by the decision already given by the Supreme Court in case No. CIVIL Appeal No 2475 of 1968 dated 16/08/1978.
- (19) Penal interest at the rate of 10% per year will be charged for delayed payment/ part thereof, beyond permissible time limit.
- (20) If water supplied for irrigation use is found to be used for industrial purpose without prior permission of BWSE, then assessment will be done at 2 times the rate applicable for industrial use.

## **10.2 Domestic :**

- (1) The Basic Rate (BR) will be based upon 22% of the O & M cost.
- (2) The BR for volumetric tariff will be same for all seasons and will be linked to source of supply.
- (3) The Applicable Rate (AR) will be 125% of BR for Municipal Corporations, 90% of BR for other Urban Local Bodies and 75% of BR for Grampanchayats.

(4) The source of supply wise AR will be as follows;

**Source wise Applicable Rates for Domestic Supply**

	<b>Category</b>	<b>Source of supply</b>	<b>Rate</b>
a)	Assured water supply	Reservoir/storage tank without canal	AR
b)	Regulated water supply with transmission loss	Regulated river portion below dam/KT weir with back up reservoir/tail race from hydro plant	Two times of AR
c)	Partly assured water supply	KT weir without back up reservoir/unregulated river without any KT weir or bandhara	50% of AR
d)	Water user entity has shared proportionate cost of infrastructure	Water user entity (Gram Panchayat/ Nagar Palika/ Municipal Corporation and such other utilities/ has shared proportionate cost of dam/bandhara/KT weir	* See note below.
e)	Infrastructure constructed & maintained by water user entity	Water user entity (Gram Panchayat/ Nagar Palika/ Municipal Corporation and such other utilities) has constructed dam/ bandhara/KT weir at own cost	16% of AR

\*Note: 1) Transmission losses to be borne by water users. Evaporation losses at storage to be borne by BWSE.

2) For past agreements on sharing in total / proportionate cost of infrastructure or where shared cost of infrastructure is agreed to at planning stage in new projects or where weir / bandhara for the capacity equal to annual water demand is constructed by entity below a dam to use its share, the water rate will be 16% of applicable rate in proportion to the cost shared. However, in case of

new agreements for water allocation to an entity from a completed dam, any payment in share cost will be treated only as advance water tariff to be adjusted against concessional water tariff of 16% applicable rate, the number of years the concessional tariff will be operative will be calculated by NPV method with 10% rate of interest. On full adjustment of the advance tariff, the appropriate basic rate will become applicable.

- (5) While deciding annual demand in continuation with existing agreement with Municipal Corporation, Commercial use, will be separately quantified and charged appropriate Commercial rate i.e. five times the AR of Municipal Corporations.
- (6) The Private Townships, developed by private and other entities in accordance with the prevailing State Government policy to which water is supplied by BWSE, will be charged five times the AR of concerned ULB or Gram Panchayat in which the township is located.
- (7) During the construction phase of commercial entity, private colonies, townships; the water use will be charged at commercial rate and after completion of the construction (i.e. after receipt of Occupation Certificate), water use will be charged five times the AR of concerned ULB or Gram Panchayat. If both uses are concurrent, different meters are to be installed and assessments be done accordingly.
- (8) Water charges for BWUE, dependent on the wells within influence zone as stated in Section 26 of Maharashtra Ground Water ( Development & Management ) Act , 2009 from the boundary of the canals or Full Reservoir Level (FRL) of the storage tank, will be levied at the rate of 50% of AR.
- (9) Water charges for Annual Quantities drawn upto 100% of sanctioned quota will be at AR, for more than 100% & less than 125% of sanctioned quota, water charges will be 1.50 times AR and beyond 125% of sanctioned quantity, water charges will be 3.0 times AR.

- (10) "Polluter pays" principle - ULBs are expected to treat sewage to the standard specified by Maharashtra Pollution Control Board (MPCB) before its release into a natural water course or an irrigation canal. ULBs, who have not installed Sewage Treatment Plant (STPs) based upon their water allocation & STPs not working to its full capacity, will be charged 2 times applicable rate for the sanctioned quota or actual water use whichever is higher.
- (11) ULBs are entitled to use treated sewage provided such use is by way of conveyance through closed pipe from treatment plant (without discharging it into river /nalla). If such water is supplied for irrigation, its rates shall not be more than 60% of rates specified for irrigation by fresh water. Similarly, they shall submit details of such water use to BWSE. Treated sewage water if discharged into natural stream will be regulated by BWSE.
- (12) Water used without signing the agreement, will be charged at 2 times AR.
- (13) If ULBs are found to be supplying water from its drinking water entitlement to industrial users without prior approval of BWSE, such water use will be charged at 3 times the applicable industrial water rates retrospectively.
- (14) Where meter is installed but is found not functioning / removed / tampered / faulty , one months notice shall be given for repairing & commissioning of the meter .Water charges for this period will be 1.5 times of the AR on the sanctioned quantity of water or recent water use whichever is higher. Extension of one month can be given for repairing the water meter depending on specific local situation. If this defect is not rectified within 90 days, water charges will be 2 times AR.
- (15) Penal interest @ 10% per annum shall be levied on arrears of water charges.

### 10.3 Industrial :

- (1) The Basic Rate (BR) will be based upon 59% of the O & M cost.
- (2) The BR for volumetric tariff will be same for all seasons & will be linked to source of supply.
- (3) Basic Rate (BR) will be linked to source of supply as categorized below and subject to the condition that the effluent will be treated to the required MPCB standards before its release into a natural water course or an irrigation canal.
- (4) The BR will be applicable for process industries, industries using water for cooling (like thermal power plants) & in manufacturing. The industries using water as raw material viz. mineral water, beverages and for ethanol or alcohol production, cogeneration in the sugarcane process industries and other similar industries will be charged 25 times BR.

#### Source wise Applicable Rates for Industrial Supply

	Category	Source of supply	Applicable Rate (AR)
a)	Assured water supply	Reservoir/ storage tank without canal	BR
b)	Regulated water supply with transmission loss	Regulated river portion below dam/KT weir with back up reservoir/tail race from hydro <b>power</b> plant	Two times BR
c)	Partly assured water supply	reservoir with canal/KT weir without back up reservoir / unregulated river without any KT weir	50% of BR



d)	Water user entity has shared proportionate cost of infrastructure	Water user entity (process industry or industry using water as raw material) / has shared proportionate cost of dam/ bandhara/ KT weir	* See note below.
<p>Note : 1) Transmission losses to be borne by water users. Evaporation losses at storage to be borne by BWSE.</p> <p>2) For past agreements on sharing in total / proportionate cost of infrastructure or where shared cost of infrastructure is agreed to at planning stage in new projects or where weir / bandhara for the capacity equal to annual water demand is constructed by entity below a dam to use its share, the water rate will be 16% of applicable rate in proportion to the cost shared. However, in case of new agreements for water allocation to an entity from a completed dam, any payment in share cost will be treated only as advance water tariff to be adjusted against concessional water tariff of 16% on applicable rate, the number of years the concessional tariff will be operative will be calculated by NPV method with 10% rate of interest. On full adjustment of the advance tariff, the appropriate basic rate will become applicable.</p>			

- (5) While entering into agreement with Industries , “Domestic use in industrial units” will be separately quantified and charged as per AR of concerned ULB or Gram Panchayat in which the industrial colony is located. BWSE shall sanction such use & make such provision in the agreement on compliance of relevant infrastructure & installation of separate water meters etc. as applicable.
- (6) Water charges for BWUE, dependent on the wells within influence zone as stated in Section 26 of Maharashtra Ground Water ( Development &

Management ) Act , 2009 from the boundary of the canals or Full Reservoir Level (FRL) of the storage tank, will be levied at the rate of 50% of BR.

- (7) Water charges for Annual Quantities drawn upto 100% of sanctioned quota will be Applicable Rate (AR), for water use more than 100% & less than 125% of sanctioned quota, water charges will be 1.50 times of AR and beyond 125% of sanctioned quota, water charges will be 3.0 times of AR.
- (8) Water rates applicable for Agro-Industries like poultry, Rice Mill, Dairy, corn processing, Vegetable Ghee etc., 75% of the AR. However, this concession will not be applicable for industries manufacturing alcohol / ethanol from sugarcane or corn as well as for winery, breweries.
- (9) "Polluter pays" principle - Every industry is expected to treat effluent to the standard specified by Maharashtra Pollution Control Board (MPCB) before its release into a natural water course or an irrigation canal. Industries, who have not installed Effluent Treatment Plant (ETPs) based upon their water allocation & ETPs not working to its full capacity, will be charged 2 times of Applicable Rate for the sanctioned quota or actual water use whichever is higher.
- (10) If any industry reduces its requirement by recycling (reducing its net demand of water up to minimum 75% or less than that), it shall be charged at 75% of applicable rate, provided, officers of BWSE not below the rank of Executive Engineer have confirmed the reduction made in water use by recycling.
- (11) Industries are entitled to use treated effluent provided such use is by way of conveyance through closed pipe from treatment plant (without discharging it into river /nalla). If such water is supplied for irrigation, its rates shall not be more than 60% of rates specified for irrigation by fresh water. Similarly, they shall submit details of such water use to BWSE.

- (12) Water used without signing the agreement, will be charged at 2 times AR.
- (13) If an industry adopts zero liquid discharge technology and draws only upto 25% of its allocation to cover line loss, evaporation and process consumption, it will be charged only @ 25% of the AR for the water drawn.
- (14) Where meter is installed but is found not functioning / removed / tampered, one months' notice shall be given for repairing & commissioning of the meter .Water charges for this period will be 1.5 times of the AR on the sanctioned quantity of water or recent water use whichever is higher. Extension of one month can be given for repairing the water meter depending on specific local situation. If this defect is not rectified within 90 days, water charges will be 2 times AR.
- (15) Penal interest @ 10% per annum shall be levied on arrears of water charges.

#### **11. Commitment and Penal Charges:**

##### **Commitment Charges:**

In order to ensure that water reserved for non-irrigation purpose shall not remain unutilized and available water shall be utilized optimally, non-irrigation water utilities are permitted to give phase-wise plan of utilization. In case, non-irrigation utility wants to use allocated water in phased manner, it has to plan so, prior to execution of agreement. Such phase-wise planned water use shall be incorporated in the agreement. The levy of water charges shall be based on such phase-wise planning. But, balance water quantity (total allocated quantity - phase-wise planned water use) should be charged at the rate of 5% towards commitment charges. Similarly, if variation in actual water use and phase-wise planned water use is more than 10%, the assessment shall be done as follows:

In case, actual water use happens to be less than 90% of the phase-wise planned quantity of water, the billing shall be done on the 90% of the quantity of water specified in the agreement. If the actual water use is between 90% to 100% of

the corresponding phase-wise water use, billing shall be made as per the standard rate. However, if the actual water use is more than 100% of the planned quantity of water corresponding to that particular phase, the billing of such excess quantity shall be made at 1.5 times of the standard rate. Following is an illustration for more clarification;

Suppose a water user has signed an agreement with the BWSE for 100 Mm<sup>3</sup> of non-irrigation use of water for 5 years. The user will need 100 Mm<sup>3</sup> water from the 4th year and its need in first 3 years it is 50, 60 and 80 Mm<sup>3</sup> respectively. This stage-wise water supply requirement will be mentioned in the agreement.

The water tariff for this use will be as follows:

1.	Year One	50 X Applicable Rate+ 5% of Applicable Tariff on remaining 50, as Commitment Charges
2.	Year Two	60 X Applicable Rate+ 5% of Applicable Tariff on remaining 40, as Commitment Charges
3.	Year Three	80 X Applicable Rate+ 5% of Applicable Tariff on remaining 20, as Commitment Charges
4.	Year Four	100 X Applicable Rate

**Penal Charges:-** If actual water use is not as per the above stages and, if the difference is more than 10%, then the penal rates as provided in domestic & industrial category will be levied.