

WATER UTILITY REFERENCE MANUAL

Expenses

Definitions

There are several factors to consider in determining whether an expenditure is capitalized to the utility plant accounts or expensed in the current year. A determination has to be made as to when the item will be used or used up. If the item will be used within one year from the date of purchase, that item should be recorded as an expense. The Uniform System of Accounts (USOA) provides guidance as to the proper accounts to use in recording a utility's expenses.

Operation and Maintenance Expenses

For Classes AB and C utilities, Operation and Maintenance expenses should be allocated on a functional basis whenever possible. For instance, all costs associated with the pumping plant for a water utility are charged to pumping expenses. Another example would be a study that pertains only to the treatment process. This study would be charged to the treatment category, rather than general expenses.

Allocation of Joint Operating Costs – Between Departments

The need may arise to allocate joint operating costs, other than meter-related expenses as described in the meter expense allocation section of this manual. The allocation of joint expenses among departments of Class AB utilities is addressed in Wisconsin Administrative Code chapter PSC 103. Classes C and D utilities may also follow these guidelines.

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Allocation of Joint Operating Costs – Between Utility and Municipality

When allocations of costs between the municipality and utility departments must be made, the following general guidelines are suggested:

1. Worker's compensation and general liability insurance are allocated proportionate to payroll charges.
2. Property insurance is allocated according to policy specifications, or proportionate to plant investment if no breakdown is indicated in the policy.
3. Computer processing costs are allocated proportionate to services provided. Although this may be difficult to calculate, a joint computer processing facility is a service department, for which a chargeable basis must be determined. For allocating cost of printing customer bills, a ratio could be developed based on the number of line items printed on the customer bill for each billing department. For programming costs, it could be the number of lines of programming code written for each department.

Municipal Labor and Labor Allocation

The municipality should charge the utility for all services and expenses of municipal employees performing work for the utility. This will ensure that the utility's accounting records reflect the total cost of operating the utility. These charges are recorded in the appropriate expense accounts and the credit is to Account 233, Payables to the Municipality. If the municipality does not require reimbursement for these expenses, then the credit would be to Account 434, Miscellaneous Credits to Surplus.

The charge for work done should be based on the actual time engaged in work for the utility, or in case that is impractical, by a time study during a representative period. The time study may be conducted for specific periods of time that are representative of the year. The time is summarized and percentages developed to apply to the annual wages of each individual performing work for the utility in determining the labor costs allocated to the utility.

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The charges should include (but not be limited to) FICA taxes, federal and state unemployment taxes, pension costs, workers compensation, hospitalization, life and other insurance, sick leave, vacation, and holiday pay.

Deferral of Expenditures and Losses

Occasionally a utility experiences unusual losses or expenses. Premature retirement losses may occur due to storm damage or water mains may prematurely deteriorate due to corrosion. Large expenses may occur when a utility undertakes major maintenance or repair projects; e.g., well rehabilitation, pump repairs, and repainting and resurfacing of water storage reservoirs, tanks, and standpipes.

The cost of painting such storage facilities has increased rapidly with current painting costs in many instances exceeding the original cost of tank construction. This often can significantly affect the overall operating results if such expenditures are expensed in the year incurred.

Under these circumstances, it is recommended that the utility apply for Commission approval to amortize the costs over the period of time such expense is applicable and normalize the impact of such expenditures. The approval pertains to accounting procedures. Recovery of costs in rates is a separate decision which is not made until the utility's next rate case.

When authorized or directed by the Commission, nonrecurring or extraordinary major expenditures or extraordinary retirements or abandonment losses, are charged to a deferred debit account, and then amortized to operating expenses over a specified period of time. The PSC's decision whether to authorize a deferral is based upon the magnitude of the amount in relation to the utility's normal level of operation and maintenance expenses. The amount to be deferred as an extraordinary retirement or abandonment loss includes costs of removal for plant retirements, but salvage and insurance recoveries reduce the amount of loss.

When applying to the Commission to record a deferral, please provide a complete explanation of the circumstances, the desired amortization period, and the detail of the amount to be deferred.

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The staff of the Division of Water, Compliance and Consumer Affairs will review the request, and if approved, will provide authorization by letter specifying the actual or estimated amount and account to be charged for the deferral. The staff will also specify the annual amount, period of time, and account to be charged with the amortization.

Examples of items that have been deferred in the past are: premature retirement losses due to storm damage, painting a water tower, and major repairs to equipment.

Depreciation Expense

Depreciation expense is an allocation of the original cost of utility plant in service, less applicable net salvage, over service lives of the related plant assets. Depreciation expense is not computed for intangible plant and land rights. A depreciation rate expressed as a percentage usually carried to one decimal place is applied to the average of beginning of year and end of year plant balances. Utilities are required to use individual rates for each primary plant account. The utility may change the rate as long as it stays within the range of rates listed in the following table (Page 6).

Accounting Treatment

The amount computed as depreciation expense is recorded in the general journal as a debit to Account 403, Depreciation Expense, and a credit to Accumulated Depreciation Account 111.1 Accumulated Provision for depreciation of Utility Plant, Financed by Utility Operations or by the Municipality.

- For utilities that charge depreciation expense on vehicles or other assets to a clearing account, the debit is to the clearing account rather than to Account 403.

- Retirements of plant assets no longer in service are recorded at original cost, by debiting accumulated depreciation and crediting the plant account.

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- Cost of removal is debited to accumulated depreciation and any salvage realized is credited to accumulated depreciation.
- Group depreciation is used for each plant account; therefore, gains and losses are not computed on retirements, because the group is considered to be depreciated as a whole, rather than on an individual unit basis.
- The only exceptions to group depreciation are unit depreciation of vehicles and power-operated equipment.

The Utility is required to depreciate contributed plant in the annual report submitted to the Public Service Commission. The depreciation on contributed plant is not allowed to be recovered by the utility in a rate case so this expense is not included in the revenue requirement and for that reason is referred to as a “below the line” expenditure. The reserve for contributed plant is Account 111.2, Accumulated Provision for Depreciation of Utility Plant, Contributed Plant.

Benchmarks

During 1996, the Commission adopted benchmark depreciation ranges for municipal water utilities, which eliminated the need for costly and time-consuming periodic depreciation studies for Class AB utilities. A review was made of the composite depreciation rates for all municipal water utilities in Wisconsin for the year 1995, to determine if this amount was at least 2.00 percent. The benchmark depreciation ranges were updated in 2000 based on a composite depreciation rate range of 2.00 to 2.50 percent. A composite rate of at least 2.00 percent may not always be achieved, such as when the balance in Account 343, Transmission and Distribution Mains, constitutes an unusually large portion of the total plant investment.

Besides simplifying the depreciation process, the purpose of benchmark ranges is to use individual account depreciation rates which achieve an overall composite rate in the range of 2.00 to 2.50 percent. This helps to maintain the financial viability of water utilities because accelerating capital recovery of plant investment increases the cash flow of utilities to provide funds for debt service

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payments and replacement of plant assets. For each plant account, there is a range of values for service life, net salvage, and the resultant depreciation rate. The midpoints of the ranges for depreciation rates are used in most instances, unless there is evidence to support using another rate; or a different rate within the benchmark needs to be used to achieve a 2.50 percent composite rate.

Contact Commission staff of the Division of Water, Compliance and Consumer Affairs if you believe your utility's depreciation rates should be revised or if you need a copy of your utility's depreciation rates.

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Depreciation Rates

Wisconsin Municipal Water Utilities
Benchmark Ranges of Depreciation Rates
Effective Date is January 1, 2008

Account Number	Account Title	Service Life		Net Salvage		Recommended Range of Deprec. Rates - Percents		Recommended Depreciation Rate
		Min	Max	Min	Max	Min	Max	
<u>Source of Supply Plant</u>								
311	Structures and Improvements	30	40	-15%	0%	2.5%	3.8%	3.2%
312	Collecting and Impounding Reservoirs	50	70	0%	0%	1.4%	2.0%	1.7%
313	Lake, River and Other Intakes	50	70	-5%	0%	1.4%	2.0%	1.7%
314	Wells and Springs	30	45	-10%	0%	2.2%	3.7%	2.9%
316	Supply Mains	50	75	-10%	0%	1.3%	2.2%	1.8%
317	Other Water Source Plant	20	25	0%	0%	4.0%	5.0%	4.5%
<u>Pumping Plant</u>								
321	Structures and Improvements	30	40	-15%	0%	2.5%	3.8%	3.2%
323	Other Power Production Equipment	20	30	-10%	0%	3.3%	5.5%	4.4%
325	Electric Pumping Equipment	20	30	-10%	0%	3.3%	5.5%	4.4%
326	Diesel Pumping Equipment	20	30	-10%	0%	3.3%	5.5%	4.4%
328	Other Pumping Equipment	20	30	-10%	0%	3.3%	5.5%	4.4%
<u>Water Treatment Plant</u>								
331	Structures and Improvements	30	40	-15%	0%	2.5%	3.8%	3.2%
332	Sand and Other Media Filtration Equipment	30	40	-20%	0%	2.5%	4.0%	3.3%
333	Membrane Filtration Equipment	10	25	-5%	0%	4.0%	10.5%	6.0%
334	Other Water Treatment Equipment	15	20	-5%	0%	5.0%	7.0%	6.0%
<u>Transmission and Distribution Plant</u>								
341	Structures and Improvements	30	40	-15%	0%	2.5%	3.8%	3.2%
342	Distribution Reservoirs and Standpipes	50	65	-10%	0%	1.5%	2.2%	1.9%
343	Transmission and Distribution Mains	85	100	-10%	0%	1.0%	1.3%	1.3%
345	Services	45	60	-30%	0%	1.7%	2.9%	2.9%
346	Meters	16	25	0%	0%	4.0%	6.3%	5.5%
348	Hydrants	55	75	-20%	0%	1.3%	2.2%	2.2%
349	Other Transm. and Distribution Plant	15	30	0%	0%	3.3%	6.7%	5.0%
<u>General Plant</u>								
390	Structures and Improvements	30	40	0%	0%	2.5%	3.3%	2.9%
391	Office Furniture and Equipment	15	20	0%	0%	5.0%	6.7%	5.8%
391.1	Computer Equipment	3	5	0%	0%	20.0%	33.3%	26.7%
392	Transportation Equipment	5	15	10%	25%	6.7%	20.0%	13.3%
393	Stores Equipment	15	20	0%	0%	5.0%	6.7%	5.8%
394	Tools, Shop and Garage Equipment	15	20	0%	0%	5.0%	6.7%	5.8%
395	Laboratory Equipment	15	20	0%	0%	5.0%	6.7%	5.8%
396	Power Operated Equipment	10	20	10%	25%	5.0%	10.0%	7.5%
397	Communication Equipment	5	10	0%	0%	10.0%	20.0%	15.0%
397.1	Communication Equipment - SCADA	10	12	0%	0%	8.3%	10.0%	9.2%
398	Miscellaneous Equipment	15	20	0%	0%	5.0%	6.7%	5.8%

NOTE 1: In the event any class of plant shall become fully depreciated by the use of these rates with due consideration for net salvage, if any, then no further accrual for such class of plant shall be made.

NOTE 2: The net salvage percentages listed with a negative sign indicate a negative net salvage.

NOTE 3: The recommended **Total Utility Composite** depreciation rate range is **2.0% to 2.5%**.

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Property Tax Equivalent

Wisconsin Statutes section 66.0811(2) authorizes a municipality to levy a tax equivalent on a utility and gives the municipality the discretion to impose a lower payment. The statute requires that the payment be the higher of the current year's calculation or the amount computed in 1994, unless the municipality authorizes a lower payment.

Wisconsin Administrative Code Chapter PSC 109 provides for the following: definitions, computation of the tax equivalent for municipal utilities, exclusions (property outside the corporate limits), and exemptions from the tax equivalent (sewer utilities and town sanitary districts). The tax equivalent for municipal utilities is computed as follows:

1. Total property is utility plant in service, plant held for future use, and construction work in progress; plus materials and supplies at January 1; less plant outside corporate limits.
2. Total taxable property is total property (step 1) multiplied by the assessment ratio (provided to the local municipal treasurer by the Department of Revenue each year).
3. Net local and school tax rate is the sum of local, school, and vocational tax rates, after adjustment for the state tax credit.
4. Tax equivalent is total taxable property (step 2) multiplied by the net local and school tax rate (step 3).
5. The tax equivalent must be at least equal to payments made on the property for taxes levied in 1994 and payable in 1995, unless the governing body of the municipality authorizes a lower payment. In other words, it is the higher of the amount calculated in Step 4 or the amount levied in 1994, unless the governing body of the municipality authorizes a lower payment amount.

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The tax equivalent is recorded by debiting Taxes (Account 408) and crediting Accrued Taxes (Account 236). If the municipality waives payment, the amount included in Account 236 should be credited to Account 434, Miscellaneous Credits to Surplus.

- Account 236, Accrued Taxes, should be reviewed at year-end to determine if the items in this account, including the tax equivalents, should be transferred to Payable to Municipality (Account 233) or Advances from Municipality (Account 223).
- Account 236 is used to track credits and debits during the current year. If the utility will not be making payments to the municipality for the tax equivalent or other types of taxes until the following year, it is more appropriate to transfer the amounts to Account 233.
- Amounts which will not be fully repaid for several years should be transferred to Account 223.

Meter Expense Allocation

If the sewer department bases its charge for utility service upon a volume charge, which is determined from the reading of the water meter, the water utility must charge the sewer department for its share of all meter-related expenses. In this situation, both the water utility and the sewer department derive equal benefit from the reading of the water meters. This applies even if the sewer department is not regulated by the Commission.

Meter-related expenses include meter maintenance, expenses incurred in the daily operation of meters, meter reading expenses, local and school tax on meters, and return on net investment in meters. Payroll overheads, such as social security taxes and pension and benefits expenses applicable to the labor charged to the meter-related expenses, are also included.

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When calculating the rate of return on net investment in meters, the authorized rate of return on rate base from the most recent rate order is used. To calculate depreciation expense, the certified or authorized depreciation rate is multiplied by the average plant investment in Account 346, Meters.

Reimbursements of costs received from the sewer department are credited to the appropriate expense accounts, and the return on net investment in meters is credited to Account 474, Other Water Revenues as listed below. In the first four categories, Account 408, Taxes, is included for social security taxes.

Accounts for Allocating Meter Expenses				
<u>Description</u>	<u>Water – Credits</u>			<u>Sewer - Debits</u>
	<u>Class AB</u>	<u>Class C</u>	<u>Class D</u>	
Removing, resetting, testing & inspecting meters	408, 663, 926	408, 640, 926	408, 600, 686	834, 854
Maintenance of meters & meter testing equipment	408, 676, 926	408, 653, 926	650, 686	834, 854
Labor & materials used in reading meters	408, 902, 926	408, 901, 903, 926	408, 680, 681, 686	842, 854
Labor & materials used in customer billing, accounting, & collecting	408, 901, 903, 926	408, 902, 903, 926	408, 680, 681, 686	840, 854
Depreciation expense for Account 346, Meters	403	403	403	403
Local & school tax equivalent on meters	408	408	408	408
Return on net investment in meters	474	474	474	856

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Frequently Asked Questions

Q1: How is the cost of removing and resetting meters recorded?

A: The cost of removing and resetting meters is charged to operating expenses as follows:

- a. Class AB utilities: Account 663, Meter Expenses.
- b. Class C utilities: Account 640, Operation Labor.
- c. Class D utilities: Account 600, Salaries and Wages.

Q2: Is it permissible to charge to the various operating accounts that portion of social security and unemployment benefit taxes which relates to the labor charged to various operating accounts?

A: Social security, unemployment benefit and other forms of payroll taxes, to the extent applicable to operating payrolls, are included in Account 408, Taxes, and are not distributed over the various accounts to which the payroll was charged.

Portions of taxes applicable to construction work in progress are distributed directly or through clearing accounts to the appropriate utility plant accounts. Likewise, any such taxes applicable to non-utility operations are charged to the appropriate non-utility account.

Q3: Where is the PSC remainder assessment charged?

A: The PSC remainder assessment is considered a tax and charged to Account 408, Taxes.

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Q4: Where are water monitoring and testing expenses recorded?

- A:**
- a. Class AB utilities: Account 642, Operation Labor and Expenses.
 - b. Class C utilities: Account 632, Operation Supplies and Expenses.
 - c. Class D utilities: Account 640, Supplies and Expenses.

Q5: Where do you record expenses related to the Diggers Hotline?

- A:** Expenses related to the Diggers Hotline usually consist of labor and material costs. The labor cost of personnel going out to mark locations is the highest cost item. These labor and material costs are accounted for as follows:
- a. Labor:
 - 1. Class AB Utilities: Account 665, Miscellaneous Expenses.
 - 2. Class C Utilities: Account 640, Operation Labor.
 - 3. Class D Utilities: Account 600, Salaries and Wages.
 - b. Materials:
 - 1. Class AB Utilities: Account 665, Miscellaneous Expenses.
 - 2. Class C Utilities: Account 641, Operation Supplies and Expenses.
 - 3. Class D Utilities: Account 640, Supplies and Expenses.

Q6: Where do you record training expenses?

- A:** General training, conference, and seminar expenses get charged to Account 926, Employee Pensions and Benefits. Training costs related to a specific function such as for pumping station employees, whether in-house or in attendance at seminars are charged to the following accounts:
- a. Class AB utilities: Account 626, Miscellaneous Expenses.
 - b. Class C utilities: Account 623, Operation Supplies and Expenses.
 - c. Class D utilities: Account 640, Supplies and Expenses.

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Q7: Where do general labor costs get charged?

- A. Labor costs for general administrative purposes and for time not chargeable directly to a particular operating function are classified as administrative and general salaries. The costs are charged to the following accounts:
1. Classes AB and C utilities: Account 920.
 2. Class D utilities: Account 680.

Q8: Where do amounts paid to regulatory agencies get charged?

A: Fees, expenses, and other assessments paid to government regulatory agencies are accounted for as follows.

1. The PSC remainder assessment, which is billed to each utility annually to cover costs of utility regulation not identified with specific services or formal cases, is charged to Account 408, Taxes.
2. Costs directly related to formal cases before the PSC, Department of Natural Resources (DNR), or other regulatory commissions are charged to Regulatory Commission Expenses as listed below.
 - a. Classes AB and C utilities: Account 928.
 - b. Class D utilities: Account 688.

Q9: Where do fees for professional services get charged?

A: Fees and expenses of professional consultants, including payments to accountants, attorneys, engineers, management consultants, and negotiators, are accounted for as listed below.

1. Professional services related to formal cases; i.e., rate increases, depreciation studies, construction authorizations before the PSC, DNR, or other regulatory commissions, are charged to Regulatory Commission Expenses as listed below.
 - a. Classes AB and C utilities: Account 928.
 - b. Class D utilities: Account 688.

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2. Costs not related to actual and proposed construction or formal cases before regulatory bodies are charged to Outside Services Employed as listed below.
 - a. Classes AB and C utilities: Account 923.
 - b. Class D utilities: Account 682.

3. Costs related to preliminary surveys, plans, and investigations made for a specific project are accounted for as listed below. (For more information, please see Section 2; Utility Plant and Accumulated Depreciation, Preliminary Survey and Investigation Charges.)
 - a. Class AB, C and D utilities: Account 183, Preliminary Survey and Investigation Charges.

4. When construction begins, the cost is an overhead cost, and is reclassified to Construction Work in Progress, as listed below.
 - a. Classes AB, C and D utilities: Account 107, Construction Work in Progress.