Guidebook for Managing a PCE-eligible Utility

Part 4: Guide to Submitting the

*Annual Power Cost Equalization Report for Nonregulated Utilities*

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# Reporting processes

The Regulatory Commission of Alaska requires that utilities submit a PCE Annual Report by a date issued to the utility in an order, the required filing date is not the same for all utilities. Regulated utilities are required to submit an annual report within 90 days of the end of the calendar year—this report is not used for any PCE reporting purposes. Included within the report is a certification from the utility that all of the information included in the report is true and correct. If it is determined that the utility knowingly submitted an incomplete or inaccurate report, the utility can be held accountable by fines and suspension from the PCE program.

If a utility does not submit all the information required to determine the PCE level, including annual filings and fuel price changes, or if the RCA believes there are reasons to question some of the financial information provided, the RCA will disallow the expenses and potentially recommend suspension from the program until the information has been received and processed by RCA.

RCA evaluates ~3 years.

# Page 1: Residential

# Page 2: Community Facility

# Page 3: Balance Sheet

The Balance Sheet complements the Income Statement. Whereas the Income Statement provides information about the revenue and expenses within a particular period, the Balance Sheet is a broader picture of the utility’s financial position at a particular point in time.

Balance sheets should be prepared along with the Income Statement at the end of the month and the end of the year to report to the RCA.

The Balance Sheet really does help us answer a number of very important questions, such as:

* How much does the utility own?
* How much does the utility owe to others?
* How much do others owe the utility?

The Balance Sheetshows the balance in all the asset, liabilities, and fund equity accounts. [[1]](#footnote-1)It is developed on the “fundamental accounting equation”

$$Assets = Equity/Fund Balance + Liability$$

*(Value of things the utility has = Amount of assets the utility owns + What the utility owes)*

It is possible to scan the summary information presented on assets, liabilities and equity/fund balance and determine fairly quickly whether the utility is financially healthy.

An **asset** is something of value, particularly something that will create future revenue for the utility. Assets can be the power house, cash, supplies, inventory, fuel, generators, receivables, etc.

**Owner’s equity/fund balance** is the part of your assets that the utility owns. Equity can be in the form of stocks (if it is an investor-owned utility), paid in capital, or retained earnings. It is referred to as owner’s equity, if it is a business, or fund balance if it is a government or non-profit.

A **liability** is something that you owe someone else. Liabilities can be loans, accounts payable, taxes payable, etc.

For many, the balance sheet is not intuitive to understand or interpret. A simple example should help to make it clear. Suppose a utility purchased a new engine and generator for $100,000. The utility had $20,000 cash on hand that it was able to pay for part of the generator, so it also had to take out a loan for $80,000. The asset is the engine ($100,000), the invested cash is the equity ($20,000), and the loan is the liability ($80,000). To put these values into the Balance Sheet:

**Assets = Equity/Fund Balance + Liabilities**

$100,000 = $20,000 + $80,000

$100,000 = $100,000

In all cases the balance sheet should balance. If it does not balance, then the assets, equity, and/or liabilities are not being accounted for correctly. This is not just math equation, but is important because the assets, equity, and liabilities are financial basis of the utility and are indicators of the utility’s financial strength or weakness. The balance sheet should be seen as a diagnostic tool for understanding how the utility is doing financially. Especially by tracking the balance sheet over time, the manager will be able to see if the utility is taking on too much debt, is collecting from customers adequately, or has sufficient liquid assets to pay the bills. By splitting things into their appropriate accounts, the manager will be able to see specifically what is helping and hurting the utility’s finances.

#### **Compiling and interpreting the Balance Sheet**

The Balance Sheet is included in the *Annual Power Cost Equalization Report for Nonregulated Utilities* on Page 3. The form that the RCA provides in the annual report includes a selection of the accounts developed by *Uniform System of Accounts Prescribed for Public Utilities and Licensees Subject to the Provisions of the Federal Power Act.* The left side of the form has included the account number. What follows are non-technical definitions of the accounts based on the language in the aforementioned system. If a more in-depth description is needed, a number of resources are available that would be appropriate for accountants and other financial professionals.[[2]](#footnote-2) Utilities are not required to use the Balance Sheet provided by the RCA, other formats are allowed if they fit the needs of the utility better than the supplied form. Especially as the Balance Sheet template provided by the RCA may not include all relevant accounts for the utility, the utility may choose to use an accounting program to create its own balance sheet.



Figure 8: Balance Sheet from Annual Power Cost Equalization Report for Nonregulated Utilities

#### **Assets**

If the utility has not already done it, an inventory of assets should be performed. Assets that should be inventoried include the fuel necessary for generating power, storage tanks, generators and the supplies needed to operate the utility both in the field and in the office, including items such as spill response supplies, engine oil, gauges, paper and pencils, computers and printers and much more. Aside from merely knowing what the utility has and does not have, it is important for determining the amount of insurance needed to cover a potential loss.

The inventory should be updated yearly, although some consumable items should be updated more frequently.

The Assets section is usually divided into two parts: Current Assets and Long-term Assets. Unfortunately, the RCA form does not have such a clear distinction in its structure.

***Note on grant-funded assets***: Many rural Alaska utilities have had much of the utility infrastructure paid for by state and/or federal grants. Since grants do not count as either a liability (the utility does not owe anyone for the grant) or as equity (since the utility did not invest in the grant), a grant-funded asset will not show up on the balance sheet like other assets. While it is important that the utility track the asset, such as a power house or wind turbine, over time like any other asset (including tracking depreciation), it will need to be tracked differently than if the utility had paid for or taken out a loan for the asset. The preferred method for dealing with a grant-funded asset is to include both an account and a *contra-account* to track the asset. A contra-account will mirror the asset account but cancel it out on the balance sheet. For example, if the wind turbine initial cost was $2 million there would be an asset account of $2 million for the wind turbine, and a contra-account that would negate that $2 million asset. This allows the utility to track the asset, but not cause the confusion of not having the balance sheet balance.

***Long-term assets*** include assets that won’t easily convert to cash within a year, and generally include tangible properties or equipment, such as equipment used by a utility to generate and distribute power. Periodically, the utility should inventory all plant, property and materials to assess the long-term assets of the utility, and also determine if/when they need to be replaced. Long-term assets include:

* securities - overall one year
* accounts and notes receivable - over one year
* plant and equipment
* land and buildings
* accumulated depreciation [included as a contra, or negative, asset]

**101 Electric Plant in Service** includes the original cost of electric plant, owned and used by the utility for electric utility operations, and having an expected life of more than one year from date of installation. The cost of plant should include everything used to get the plant into service, including land rights, permits, training, principal and interest payments paid prior to installation, etc.Improvements in excess of $5,000 to the electric plant, including things such as engine overhauls and distribution upgrades that extend the life, meet regulations, or otherwise improve the infrastructure, should also be included in this account. For reporting purposes, the utility will need to track the grant-funded assets separately from those purchased through equity or debt.

**110 Accumulated Provision for Depreciation and Amortization of Electric Utility Plant** is the sum of all the yearly depreciation expensed for the plant. This should agree with the accumulated depreciation reported on the Schedule of Depreciation and Amortization. As noted before, the utility can expense the depreciation of any portion of the asset paid for by the utility. For reporting purposes, the utility will need to track the depreciation of grant-funded assets separately from those purchased through equity or debt.

**Net Plant in Service** is a calculation that subtracts the Accumulated Provision for Depreciation and Amortization of Electric Utility Plan from the Electric Plant in Service. Net Plant in Service should agree with the book value on the Schedule of Depreciation and Amortization.

**107 Construction Work in Progress** includes plant that has not been put into service. This includes the design, installation, and construction of engines and generators, wind turbines, and distribution systems. The assets will be transferred to Electric Plant in Service when they are put into service. The Construction Work in Progress account is a good reminder for the utility to get the system in service as soon as is practical, as the utility cannot depreciate Construction Work in Progress until the asset is put in service. If the asset is never put into service the utility will have to petition the RCA to be able to amortize the asset.

**121 Nonutility property** includes other long-term assets with a value over $5,000 that are not used directly to generate or distribute power. Common nonutility property includes welders, cranes, trucks and all-terrain vehicles.

**122 Accumulated depreciation and amortization of nonutility property** includes the depreciation and amortization of the nonutility property in account 121. This follows the same rules as in Account 110 (Accumulated Provision for Depreciation and Amortization of Electric Utility Plant.)

***Current assets*** create cash or turn into cash within the next year. Knowing how much current assets you have is important - it will help you determine if there are sufficient funds available to cover bills. It is also important to know the total of cash in the various bank accounts. Management needs to be alert to any negative numbers in the bank accounts. A negative number indicates an overdrawn account. Current assets include:

* cash
* securities
* accounts receivable
* inventories
* prepaid expenses

**130 Cash and Working Funds** include all cash and cash-like accounts. This account will include physical cash that the utility may hold, any bank accounts, and other funds that could be convertible to cash within a business day. The utility should balance how much cash it holds at any time. The utility needs to have sufficient cash on hand to cover the current liabilities and other expected or unexpected costs, but not too much cash. Cash in excess of what is needed for current liabilities or as a “rainy day fund” should either be reinvested into the utility to improve service or reduce costs to consumers.

**142 Customer Accounts Receivable—Electric** includes the amounts due from customers for utility service, which is bills that are yet to be paid. If the Customer Accounts Receivable account increases over time, this is likely a sign that the utility is having difficulty collecting from customers.

**144 Accumulated provision for uncollectible accounts—credit** includes an annual estimate of the amount of accounts receivable which may be uncollectible. It is labeled as a credit in this account as it will reduce the utility’s total assets. This account should be consistent with the Bad Debt expense on the Income Sheet.

**151 Fuel Stock** includes the book cost of fuel on hand. The method for calculating the book cost should be consistent with the Non-Regulated PCE Fuel and Purchased Power Cost Report Form, adjusted for the actual number of gallons of stock on hand. The fuel stock should be included in this account regardless if the fuel was purchased with cash or a loan. If the utility was gifted the fuel the utility should follow the same guidance for recording other grant-funded assets.

**154 Plant Materials and Operating Supplies** includes the cost of materials purchased primarily for use in the utility business for construction, operation and maintenance purposes. It also includes the book cost of materials that were recovered from the electric plant during improvement activities and can be reused or sold as scrap. Plant Materials and Operating Supplies should not include those materials that are used within the year, such as filters and oil, instead these should be expensed on the Income Sheet and not included as an asset.

**174 Miscellaneous current and accrued assets** include other short-term assets that are not reported elsewhere.

**186 Miscellaneous deferred debits** include prepaid expenses, such as prepaid insurance.

**190 Accumulated deferred debits**

**Total Assets** is the sum of all utility assets. Accounts with credits (such as depreciation accounts and the accumulated provision for uncollectible accounts) will reduce the value of the total assets.

#### **Equity**

**Owner’s equity/fund balance** is the part of your assets that the utility owns. Equity can be in the form of stocks (if it is an investor-owned utility), paid in capital, or retained earnings. It is referred to as owner’s equity, if it is a business, or fund balance if it is a government or non-profit.

**201 Common stock issued, 204 Preferred stock issued, and 211 Miscellaneous paid-in capital** are for investor owned utilities. The accounts include the value of the stocks issued by the utility. Some cooperatives may have stock as well.

**215 Appropriated retained earnings** include retained earnings that have been put into a restricted account. Retained earnings are created when the utility has positive net revenue; that is, it makes a profit. The funds in the restricted account could be because of internal or external reasons. For instance, a lender may require a certain amount to be included in a reserve account or the utility’s governing board may require a specified amount for a rainy day fund. The funds in this account are not able to be used for purposes besides what the appropriation indicates.

**216 Unappropriated retained earnings** are similar to appropriated retained earnings, except that they are not earmarked for any particular purpose. Unappropriated retained earnings can be used for any purpose that the utility chooses.

**218 Noncorporate proprietorship** includes investor-owned utilities that are not corporations and do not sell stocks.

Cooperatives may have member’s equity, which is left off of the RCA form.

Municipal- and tribal-owned utilities may have other forms of equity not included on the RCA form.

**Total Equity** is the sum of all forms of utility equity. A utility’s equity should stay steady or increase over time. If equity drops, it is a sign that the utility is having financial problems.

### Liabilities

Liabilities are what the utility owes others—creditors, customers, and vendors. While many utilities are reluctant to carry debt, if the debt is being used for productive purposes, such as improvements to the power system that increase reliability or efficiency, the investment will be useful for customers and the utility and can actually reduce costs to customers. Utility’s need to be careful in incurring debt for non-fuel operational expenses, as this is a sign that insufficient revenue is being generated and/or collected: Operational expenses should be covered by operational income, not by incurring debt.

Like Assets, the Liabilities section is also usually divided into two parts: Current Liabilities and Long-term Liabilities.

***Long-Term liabilities*** are liabilities that are due after one year or more. Long-term liabilities include:

* notes and loans over one year
* bonds

**224 Other long-term debt** includes all long-term, greater than one year, debt. Since the RCA has not included the potential long-term debt accounts, this account would cover all long-term notes and bonds. Common sources of long-term debt include AEA’s Power Project Loan Fund, the USDA Rural Utility Service, banks, and credit unions.

Long-term debts should be split into the current amount of the debt, that is the amount to be paid in the year, and the long-term debt that will not be paid off within the year. The current portion of long-term debt is not included on the RCA form.

***Current liabilities*** are short-term obligations, usually payable within the next year. Current liabilities should be less than current assets - otherwise the utility will not have enough money to pay the bills that are coming due. Current liabilities include:

* accounts payable
* notes payable - the portion due within the year
* taxes owed
* prepayments by customers
* lines of credit

**232 Accounts payable** includes all amounts payable by the utility within one year, which are not provided for in other accounts. Common accounts payable item includes services, bulk fuel loans, and other short-term liabilities. If accounts payable continues to rise month-to-month or year-to-year, this is a sign that the utility is likely not paying its bills or that expenses are raising quicker than revenue can be collected.

**235 Customer Deposits** are included if the utility takes a security deposit from customers. Since the utility will have to repay the security deposit to the customer in the future (generally 12-24 months), the utility has a liability it must cover. Payments on prepaid meters would also be included in this account.

**236 Taxes Accrued** include the amount of taxes that the utility owes and has not yet paid at the end of the period.

**237 Interest Accrued** includes the amount of interest that the utility owes and has not yet paid at the end of the period. Interest which is added to the principal of the debt on which incurred should not be included here, but included in the appropriate debt account.

**242 Miscellaneous Current and Accrued Liabilities** includes the amount of all other current and accrued liabilities not provided for elsewhere. The most common types of Miscellaneous Liabilities are rentals, payroll, employees’ vacations and holidays, insurance, and other.

*Accrued Rentals* include unpaid joint use pole rentals, if the utility rents the pole from another entity, and other rentals that the utility has not paid for at the end of the reporting period.

*Accrued Payroll* includes the salaries and wages at the end of an accounting period that the utility has not yet paid.

*Accrued Employees' Vacations and Holidays* includes the liability for accrued wages for employees' vacation, holidays, and sick leave. If an employee receives paid vacations, holidays, and/or sick leave, the utility must be able to cover the employees’ non-productive time. If employees do not take their vacations and holidays or more employees are added to staff, it is expected that this liability will increase.

*Accrued Insurance* is most commonly used in case of workmen's compensation and public liability insurance. A liability exists when the insurance payment that had been estimated is less than what is actually needed to cover the needs of the insurance.

*Other Current and Accrued Liabilities* includes current and accrued liabilities not provided for elsewhere.

**252 Customer Advances for Construction** includes customer prepayments for things such as line extensions and connection fees.

**253 Other Deferred Credits** This account shall include advance billings and receipts and other deferred credit items.

**Total Liabilities** is the sum of all forms of utility liability. Unless the utility has made a capital purchase financed by debt, if liability increases, it is a sign that the utility is potentially having financial problems.

**Total Liabilities and Equity** should equal the value found under the line item Total Assets. If the two values do not equal each other, do not balance, then the manager should determine which part(s) of the balance sheet are incorrect.

# Page 4 and 4A: Income Sheet

## Revenue

Type of Accounting—cost basis or accrual basis

How is this done with prepaid?

### Identifying and Reporting Revenue

Before diving into how to set rates, this chapter will also use the Income Sheet (Page 4) of the Annual Power Cost Equalization Report for Nonregulated Utilities to begin reporting income. Utilities are not required to use this form, but it is commonly used by most non-regulated PCE-eligible communities.

Revenue is income from goods or services that have been billed to customers. Posting something as revenue does not mean that it has been or will be collected by the utility. A part of any successful utility will be a good collections policy to ensure that all revenues are collected. If the utility needs assistance with developing a collections policy and procedure, please see the DCRA’s guide.[[3]](#footnote-3) Revenues that are not collected by the utility should be expensed as “Bad Debt”, as seen in Chapter 3.

In addition to the requirements of reporting revenue to be eligible for PCE reimbursement, utilities should carefully track revenues. The first reason is that utilities need to ensure that there are sufficient funds available to cover the utility’s operating expenses. If expenses are greater than revenue and there are not sufficient reserves to cover the difference, the utility will have significant difficulties and may even lead to bankruptcy.

Utility managers also need to be able to have internal controls on utility funds to avoid risks such as, fraud and embezzlement. If internal controls are not in place and/or the manager does not have a clear understanding of the expected revenue and expenses, there can be unnecessary financial issues for the utility.



Figure 5: Utility Operating Income from PCE Income statement form

#### Sales Revenues

The sales revenue reported on the Income Statement are revenues that primarily come from electricity sales to customers. All utilities must have rates for each class of customer (residential, commercial, community facilities, federal/state facilities) and each block of sales. Some utilities have a single rate for all kilowatt-hours sold in the community, whereas others may have numerous rate classes and rates by block. No matter how a utility chooses to structure the rates, it is important that the utility ensure that customers are being charged properly. Customers need to be classified on the correct schedule, and if there are multiple blocks, each block of kWhs needs to be charged appropriately. If the customer and billing system is not set up properly, the utility will not be charging customers properly and the revenue collected by the utility will be incorrect.

The utility manager should periodically check to make sure that customers are being charged the correct rates. In small utilities, it should be possible to check the rates charged to every customer. In large utilities, it may not be practical to check all customers, and spot checks could be done randomly.

Managers should also check to make sure that kWhs sold to customers are accurate. Since line loss is a calculated value based on the difference between kWhs generated, sold, and consumed as station service (See Chapter 2 for the equation), it is possible that some or most of a utility’s line loss is from lost sales revenue and not physical losses in the distribution lines, transformers, and other physical infrastructure. Anecdotally, it is not uncommon for meters to be read incorrectly or for meters to be malfunctioning. One easy place to start is by checking to see if the amount of electricity to customers is reasonable. If a school is only being charged for the amount of electricity that a household generally consumes, then it is likely there is an issue with the meter—either it is being read incorrectly or it is faulty.

The RCA separates sales revenue into four classes; it is not required that there are different rates for each customer class but the rates for each class should be consistent with the cost of producing and delivering power to each of the customer classes. The amount of revenue reported for each class should be the amount billed, not the amount collected. Since PCE does not directly increase revenue to the utility, but only subsidizes certain customers, PCE payments from the state are not broken out separately.

The number of kWhs sold for each class is not reported to RCA on the annual report, only the revenue, but the kWh sales by class must be reported to AEA on a monthly basis.

Although they are uncommon in PCE-eligible utilities, demand charges should be included under the sales revenue for the appropriate customer class.

#### Customer Charge

If customers are charged a monthly fee, the customer charge should be included under sales revenue.

#### Other types of sales revenue

##### Penalties

When customers fail to pay a bill on time, they increase the utility’s operating costs. The charges for recovering these types of costs are called penalties and should be charged to the individual customers.

##### Connect/disconnect, other special

Electric utilities often provide additional services to customers, such as service hook-ups or disconnects, meter replacements and sale of other products. The costs of providing these services are recovered through service charges, which only apply to customers receiving the services.

### Other revenues

Some utilities receive significant revenue from other sources besides sales of electricity. Grants, pole rentals, waste heat sales, and other revenue sources are common revenue sources across PCE-eligible communities. In addition to accounting for the revenue that is already coming into the utility, reviewing the list provides an opportunity for the utility to see if there are other sources of revenues to reduce the amount of money needed from customers.

**Grants** can come from a number of sources: the city, tribal, state and/or federal government, foundations, non-governmental organizations (NGOs), or other sources. Grants are defined as non-exchange transactions, where the grantor does not expect a service or good in return for providing the grant.

A grant can be provided to a utility as an operational or capital grant. If the grant provided operational revenue, then all expenses associated with the work performed through the grant should also be included as an expense and the grant included as revenue. On the other hand, if it was a capital grant, then any personnel or other operational expenses that were covered by the grant could be capitalized and not reported as operational expenses just as if the work had been performed for a non-grant-funded capital project. The only difference is that the grant-funded portion of a capital project cannot be depreciated. The portion of the project that was paid for by the utility is still eligible to be depreciated. As an example, if a capital project had a total cost of $1 million, with $700,000 grant funded and $300,000 debt financed by the utility, the utility would be able to depreciate $300,000 over the appropriate expected life, as seen in Chapter 3, and be PCE reimbursement eligible. The interest portion of the debt financing would be counted under “Interest expenses” on the Income Statement.

**Pole rentals** are often used for the use of electric poles. These are primarily for telephone wires.

**Waste heat In-kind** is the value of sales agreement for delivering excess heat from the power house’s heat recovery system to heat buildings. Heat recovery systems are generally quite cost effective, and sales revenue from the system both reduces the amount of rate revenue needed and provides an incentive for the utility to maintain the system. Remember that if revenues are being reported for the heat recovery system, that the operational expenses also need to be reported.

**Other (See Schedule A)** includes all other utility revenue sources and should be included on Page 4A of the annual report. The two most common other revenue sources are fuel sales and gifts. If fuel sales are part of a utility’s owner’s line of business (such as a tribe that owns the utility and the local fuel dispensary), the fuel sales should be separated from the utility accounts and the fuel should not be reported to the PCE program. But if a utility sells excess fuel, then those sales should be included under Other Revenue. Gifts, be it cash, fuel, or services, should also be included in this line item. Anything that the utility receives of value should contribute to the operational cost of the utility and must be recorded and reported.

**Total Operating Income** is the sum of all the Other Revenues. This value will be used when determining cost-based rates.

## Expenses

Although this guide uses the PCE Annual Report form as a basis for the utility’s finances, the guide will not always follow the restrictions associated with PCE reporting. In some instances, the needs and requirements for financial reporting for the PCE program are different from the needs and requirements of the utility. It is not uncommon for a utility to have more than one version of their books depending on the purpose. This guide will aim to indicate where there might be a difference between what would be best practice for the utility and the reporting requirements for PCE.

The most common difference in reporting is for **grants and grant-funded infrastructure**. Since the PCE program will only reimburse expenses paid for by the utility, grant-funded costs are generally not included in PCE reporting. However, from the utility’s perspective it is important for grant-funded expenses to be included in the yearly analysis because the utility manager needs to know the total cost of operating the utility even if the construction costs are paid for with a grant. This is especially true if it is possible that the expenses paid for by the grant funds may need to be paid for by another source of revenue in the future.

The RCA and/or AEA can require a utility to provide any accounting, or other utility records, that they believe are needed to administer the PCE Program. Required supporting documentation includes invoices and/or audited financial statement, if available.

## Allowable expenses

For utilities that are not economically-regulated, expenses are submitted to the RCA only for the purpose of being eligible for the PCE program. The reporting requirements for economically-regulated utilities are more extensive, but the principles for determining what are counted as eligible expenses for economically and non-economically regulated utilities are the same for all utilities in the PCE program. The rules that the RCA draws from are not just specific to Alaska, but includes the long history of regulatory rulemaking and legal opinions that affect all utilities in the United States.

It is important for the utility manager and policy-making body to have a broad understanding of the general principals for regulation, even if the utility is not regulated, as it should try to adhere to the regulatory rules as much as possible. Since the regulatory rules protect the consumer and provide a predictable profit to the utility, the utility should know when it and why it chooses to act outside of the norms. Two broad rules developed through legal precedents since the 19th century provide a good way to understand why certain types of costs may or may not be allowed. The first is the “Used and Useful Principle” which is an idea that utility expenses and investments must benefit the current ratepayers.[[4]](#footnote-4) This means that the expense must be used to provide service to the customers (used) and serve a customer need such as reducing cost or improving reliability (be useful). This means that current customers should not pay for infrastructure or services that do not provide service.

The next rule is the “Prudent investment rule”[[5]](#footnote-5), which is a general test of if a utility investment was reasonably priced and/or necessary. Since electric utility customers do not have a choice of other providers, this rule aims to ensure that these are not being charged for unreasonable costs. Most commonly in rural Alaska utilities, these are expenses that would not have been necessary if the utility had properly planned and/or chosen the least expensive method of doing something. Examples include: late fees on loans or missed payments, overdrawn fees, or high postage costs on a part or supply that the utility should have had on hand. Another common example is that a utility cannot include travel to pick up a part, if the part could have been sent by mail instead.

Neither the “Used and Useful Principle” or “Prudent Investment Rule” keeps a utility from incurring expenses, but it may mean that an expense will not be reimbursed by PCE; or for economically regulated utilities, it may mean that the expenses cannot be recovered through rates.

Before accounting for utility expenses, it is important that the utility have a separate system of accounts for tracking expenses and revenues, this is especially true if the utility is part of a larger entity, such as a municipality or tribe. A utility should aim to be sustainable—both financially and technically—and the first step is to know the actual costs of operating the utility. At the very least, utility revenue should not be used to pay for non-utility expenses, such as other tribal or municipals costs.

Utility expenses should be paid by the utility. If another entity in a community, either the city or tribe or other organization, chooses to cover utility costs, be it fuel or personnel costs, the costs need to be accounted for so that the utility knows the total cost of utility operations. The costs will not be allowable expenses for PCE reimbursement because they were not paid for by the utility. Instead, the external funds used to purchase the fuel or personnel costs would be considered a form of revenue, unless the utility is owned by the city and city funds are being for utility purposes. Intentionally reporting costs that were not paid for by the utility as utility expenses to the RCA can result in fines and the utility removed from the PCE program.

## Categories of expenses

The annual Income Statement, shown as Figure 1, is divided into two main sections: 1) Utility Operating Income; and 2) Expenses. This chapter addresses utility expenses, Chapter 4 will cover Utility Operating Income.

Set up the accounting system to make it easy to report to the RCA, but don’t just use it for reporting purposes. Incredibly important for the utility to know the expenses and analyze.

 The expense section of the Income Statement is broken into four categories:

* Personnel Expenses
* Operating Expenses
* General & Administrative Expenses
* Other Expenses

Broad categories are useful for analyzing current expenses and will be useful for developing a budget (Chapter 9). The following sections will go into each of the categories in much more detail. The detail is provided here for two reasons.

1. The utility should strive to report expenses as accurately as possible, that includes reporting expenses in the correct category.
2. Each line item can act as a reminder for expenses that a utility will probably have. Use the line items as a way to ensure that all expenses are included.



Figure 2: PCE Income Statement with Expenses highlighted

For the purpose of this guide, all expenses, even if they were not paid for by the utility, should be included. In order to plan for the future, it is important that the utility know the total operational cost of providing utility services. That said, before filing the Annual Report to the RCA, the expenses that were not paid for by the utility should be removed or the equivalent cost must be included as revenue.

### Personnel expenses

Personnel expenses include all expenses associated with the people directly employed by the utility. A utility has three general functions that frequently require staff time: management, clerks, and operators. Utility managers are ultimately responsible for ensuring the financial and operational health of the utility. Utility clerks generally bill customers and fill out the monthly PCE forms submitted to AEA. The operators run the powerhouse, perform maintenance, and ensure that the utility provides stable and reliable power to customers. Depending on the size of the utility, each position may require only a part-time employee, whereas other utilities may require multiple people to fulfill each function.

If the utility is part of a larger organization, either the city or tribal government, and personnel serve multiple functions in the organization, such as the utility clerk also acting as the city clerk, personnel time should be divided accurately for all functions. For example,

All utility personnel functions should be paid for by utility revenue. The one exception is for city-owned utilities that allocate staff time. For example, if the same person is the utility clerk and city clerk, the city-owned utility can count, or allocate, a portion of the clerk’s time to the utility.

**Total Compensation** includes all salaries and fringe benefits for all employees. Fringe benefits include medical insurance, retirement plans, the value of rent if housing is supplied, and meals. Casual labor, that is labor that is temporary and short-term, can be included in Total Compensation or Operating Expenses. If other people are hired to do work that are not employees, their expense should be included under Operating Expenses or General and Administrative Expenses, depending on the nature of the work performed.

**Employer Portion of Payroll taxes** include only the portion of FICA (Social Security), Medicare, and Alaska unemployment tax that is required by the employer. The employees’ contributions are not included since it comes from their compensation.

* 1. FICA tax (or Social Security) is 6.2% of gross wages.
	2. Medicare is 1.45% of gross wages.
	3. Alaska unemployment tax (or Employment Security Tax) is the amount established by the state on a contribution report. The percentage can vary from 2.85 % to more than 5% depending on the amount of turnover the city reports.[[6]](#footnote-6)

**Workers’ compensation [insurance]** is required by state law. A utility can get workers’ compensation insurance from private insurers or be self-insured. The utility should encourage all employees to promptly report any job-related injuries and illnesses. Prompt reporting can limit liability for the utility and help make sure that issues can be limited.

**TOTAL Personnel Expenses** is the sum of all of the line items under the Personnel Expenses section (Total Compensation + Employer Portion of Payroll taxes + Worker compensation).

### Operating expenses

Operating expenses include items and activities that are necessary to ensure the long-term, on-going operation of the utility. Operations & Maintenance costs are expenses that are incurred on a regular basis (supplies, etc.) and maintenance expenses that are incurred on an annual basis, as well as replacement costs of items under $5,000. A more comprehensive look at the tasks, supplies, and materials associated with operating the utility are included in Chapter 6.

**Fuel Expense** is the largest single expense for most utilities. The fuel expense is driven by both the unit cost of the fuel and the number of gallons consumed over the year. It is important that the utility tracks both and not just the cost, especially as the kilowatt-hours per gallon of fuel is a key operational metric.

In the simplest case, the fuel expense is just the per gallon cost multiplied by the number of gallons

$$Fuel expense = Dollars per gallon x number of gallons$$

In most cases, a utility will be charged per gallon rate by the fuel deliverer, but in some cases a delivery and/or storage cost is also charged. In these cases, the total fuel expense includes the cost of fuel plus any additional costs:

$$Fuel expense =\$/gallon x gallons + delivery fee + storage cost + city sales tax + local markup + other$$

The total value of the fuel is included on the Income Sheet under “Fuel Expense”, but the number of gallons consumed per month is also reported on Page 5 of the annual report.

The fuel expenses can only be recovered as the fuel is consumed to produce electricity, but since many rural Alaska communities can only receive fuel during certain parts of the year and many months of fuel must be stored, it represents a large upfront cost. Budgeting for fuel expenses will be covered in more depth in Chapter 8, but it is important to note that a utility should only purchase the amount of fuel that will be needed in the period before they can get more fuel, as purchasing excess fuel ties up money that can be used for other utility needs. If a utility needs assistance getting a loan for bulk fuel, the State of Alaska’s Division of Community and Regional Affairs’ Bulk Fuel Loan Program is available.[[7]](#footnote-7)

In some cases, utilities carry expenses due to unpaid loans for fuel. While utilities do need to pay off overdue fuel loans and account for those expenses, these expenses will not be eligible for PCE reimbursement. Expenses such as these are ineligible because expenses are only eligible if they are for delivering the services being paid for by current customers—costs associated with future and past customers or a utility’s managerial errors are not allowed as expenses to be paid for by current customers.

**Purchased power** is reported if the utility purchases power from an independent power producer (IPP) or other power supplier. For non-economically regulated utilities, it is the responsibility of the utility manager and governing board to ensure that the utility customers are paying a fair price for the purchased power. For the purpose of the PCE program, a utility is required to report the amount and cost of purchased power monthly to AEA and annually to the RCA. The RCA maintains the right to investigate and determine if the purchased power expense is prudent and can determine how much of the expense will count towards the PCE level set by the RCA.

Purchased power is also reported on Page 5 of the PCE Annual Report and on the Non-regulated PCE Fuel and Purchased Power Cost Report Form.

**Generator [engine] oil** includes the lubricants needed for the engine. The exact schedule for the oil changes is based on each manufacturer’s specifications, but for most engines it is between 250-1000 hours of runtime between changes. This means if an engine is run 24 hours a day the oil would need to be changed 10-40 days. It would be expected that 10-40 oil changes per year, plus extra for expected oil consumption, should be included in this line item.

**Generator [engine] filters** includes oil filters for the engine, which are replaced on the same schedule as oil changes, and various other filters required for the engine including: fuel filters, air filters, filters in the coolant system, etc.

**Generator [engine] repairs/maintenance (Parts and Freight)** includes routine maintenance that does not extend the life or change the value of the engine and generator. Routine maintenance includes oil and filter changes, coolant changes, replacing belts, hoses and light—any of the activities set out in Figure 16. Improvements that increase the life or value of the infrastructure, such as increasing efficiency or meeting regulatory requirements, should not be included as maintenance. Engine overhauls are the most common example of an improvement that extends the life of an engine that should not be included in this line item. Engine overhauls should be included under “Depreciation Expense”. In general, the expenses for items or activities covered under repairs and maintenance should cost less than $5,000. A cost in excess of $5,000 should be capitalized and depreciated.

Employee time to perform repairs and maintenance should not be included in this line item, but only under Personnel Expenses. Contractor expenses for providing minor repair and maintenance, including travel costs, should be included here, but would probably be better put in the “Other Operating Expenses” as a separate line item.

All types of generators, including wind, solar, and hydro, can be included here or under the line item “Other”. Since there is not a specific line item for distribution systems, repairs to the distribution system can be included here or under Page 4A (“Other Operating Expenses”).

The utility should account for all repairs and maintenance expenses, including those that are not paid for by the utility, including AEA’s Circuit Rider program. Although these will not be reported to the RCA for reimbursement through the PCE program, since they are not expenses incurred by the utility, these external services should still be accounted for by the utility, so that the utility management has a true picture of the total cost of running the utility. In order to budget for the future, the utility needs to know all current and past costs for providing utility services. The utility may need to be able to pay for those services through ratepayers if they are not available through state or federal programs.

**Tools** are hand tools and small power tools under $5,000 that are used to support utility operations. Tools and other purchases that are greater $5,000, including vehicles, should be included under “Depreciation Expense”.

**Equipment rental** includes all equipment that is rented to perform utility day-to-day tasks. If equipment is rented to perform work for capital projects, those expenses should be included in the project’s capital cost and included under “Depreciation Expenses”.

**Other** operational expenses are included on Form 4A of the Annual Power Cost Equalization Report for Nonregulated Utilities. Depending on the choices made by the utility, other expenses can include costs less than $5,000 for the distribution system, renewable energy systems, metering, etc.

Form 4A

**Total Operating Expenses** sums up all of the line items under the Operating Expenses section (Fuel expense, Purchased power, Generator oil, Generator filters, Generator repairs/maintenance, Tools, Equipment rental, Other).

### General & Administrative Expenses

In addition to the O&M costs, an electric utility must perform work in order to provide the financial, regulatory, and legal management of the utility. G&A costs include office expenses for billing customers, insurance, office supplies, bad debt, interest on loans, etc.

**Outside professional services** include services that do not directly support the generation and distribution of electricity. Depending on the needs of the utility, these services can include auditors, legal services, bookkeepers, consultants that compiled the PCE Annual Report, and other “office workers”. Services that are provided by contractors for maintenance and repair of the generation and distribution system should either be included under the “Operational Expenses” or included within the capital cost of a project and be included under “Depreciation Expenses”.

**Insurance:** Although insurance is not required by any state or federal agencies, except as a condition for a loan, a utility should carry liability and property insurance to protect itself and its assets from unforeseen events. Several insurance providers and brokers can serve the needs of utilities with a number of different types of insurance products—blanket policies that may encompass liability and property insurance to a la carte options.

Liability insurance—including General Liability, Product Liability, Directors & Officers Liability, etc.—protects the utility from lawsuits that arise from various utility activities. *General Liability*protects the business from the cost of failure to major facilities, such as transmission lines and storage tanks, and from suits arising from accidents that occur to individuals who are injured as a result of entering an unsafe “attractive nuisances” area that is owned or controlled by the business, such as falling from the top of a powerhouse. Directors & officers Insuranceprotects the policy-making body and the staff from malpractice suits, including employment lawsuits. Additional liability insurance can be purchased for other specific needs and/or extend the amount of coverage.

Property and Casualty Insurance can be purchased to protect the utility’s property, included grant-funded property, from fire, theft/vandalism, and water damage. The utility can also be protected against the cost of unexpected equipment breakdowns. The utility’s insurance premiums will reflect the value of the utility’s property and an analysis of the risk.

Since it is in the insurance company’s best interest to limit their exposure to risk, many insurance companies have personnel specifically tasked with providing risk assessments to their policyholders. The recommendations provided to the utility can be a valuable tool from a disinterested third-party to identify potential improvements to the utility.

Adequate insurance benefits the utility by reducing the need for a reserve account to cover unexpected events. For instance, instead of having a reserve account with sufficient funds to cover an unexpected breakdown of an engine ($100,000 or more), insurance can be purchased to assist with these potential issues. Obviously, there will be conditions and events, such as negligence, that will not be covered by an insurance policy.

**Office supplies** are common supplies such as paper and pens, and more specific supplies such as preprinted letterhead and envelopes, checks for the various bank accounts, and forms or booklets. A utility could choose to include other lower cost items such as printers, computers, scanners, faxes, etc. under office supplies, but it is more common to depreciate the expenses associated with items with a useful life of greater than one year.

**Postage** includes the cost of stamps but also freight. Be sure not to double count freight expenses associated with Operational Expenses, all expenses should only be counted once.

**Office rent** includes the expense for the office space used by the utility. If the utility office is located in the same space as other non-utility businesses or functions, the utility should estimate the utility’s share of the space. However, if the utility does not pay for use of the space, the value of the rent should not be reported to the RCA for determining the PCE rate. For example, if the city owns the building and does not charge the utility rent.

**Travel** expenses can be incurred for both employees (full or part-time paid workers) and utility officials, (board, and/or council). Travel expenses include the direct cost of transportation, per diem, lodging, and other. Transportation includes airfare, automobile mileage allowances, taxis and any other form of essential transportation expense incurred on official business. Per diem is paid to an employee or official to cover the cost of lodging and meals. Lodging is backed up with receipts and meals are usually a flat rate. Per Diem is usually on top of lodging, it’s usually meals and includes tips. Other charges may include telephone, parking fees (not parking tickets), emergency purchases of supplies, and other charges to complete official business.

Travel for contractors, both for operations and professional services, is included in the specific line items for those services, not under the travel expense category.

**Training** expenses are those associated with training utility personnel to perform their jobs. If the utility did not pay for the entire cost of training, as may be the case for AEA-sponsored power plant operator or bookkeeper training, only the expense that the utility paid will be an eligible expense when being reported to the RCA.

If the training is associated with bringing a new asset into service, such as a newly installed wind turbine or a new make of engine, and specialized training is need to ensure the safe and efficient operation of the asset, the training can be added to the capital cost of the asset and included under “Depreciation expenses”.

**Bad debt expenses** can be confusing. The bad debts are not the utility’s debts, but are the unpaid and uncollected customer bills that the utility has written off and does not expect to collect. The bad debt expense line item spreads the unrecovered revenue over all the utility customers.

Prior to writing off bad debt expenses, a utility should have an internal policy about how to decide that a debt is not expected to be collected. The policy could be a set time period (generally 12-18 months) or some other factor. The DCRA has an excellent guide, written for water and wastewater utilities, that gives guidelines on how to improve a utility’s bill collection rate.[[8]](#footnote-8)

Bad debt expenses are included in the income statement as a way to account for collection rates that are less than 100%. Reporting bad debt also allows the utility to recover the expense through customer rates and is a reimbursable expense for setting the PCE rate.

**RCA fees** include a number of fees required by the RCA. Fees are charged when utilities submit a fuel report ($39), request a rate change ($39), or request a change in the fuel surcharge ($39). A fee is also levied when the RCA analyzes the Annual Power Cost Equalization Report for Nonregulated utilities in order to recalculate the PCE level ($471), this is done approximately every three years or at the utility’s request.

**Other** General and Administrative expenses should be included on Form 4A of the Annual Power Cost Equalization Report for Nonregulated Utilities under “G & A Expenses”. Other expenses include:

1. Utilities, internet, and phone for the office and/or powerhouse
2. Taxes
3. If assets have been sold, the expense of selling them (such as advertisements). If the asset was sold for less than the book value, then the difference between the sales price and book value can be included. If it was sold for greater than the book value, then the difference between purchase and sale price should be included as a revenue.
4. Stipends for officials, board members, or council members for utility activities.
5. Meeting fees such as facility rentals, teleconference charges, etc. Note that if travel for a meeting is requested, the expense should go under the travel line item.

If the expense is not related to the function of the utility, such as scholarship funds and other charitable activities, the expenses will not be counted as an eligible expense by the RCA. The utility and governing body decide if the ineligible activities are important functions for the utility to continue supporting as the program would come out of utility profit.

**TOTAL General and Administrative** sums up all of the line items under the General and Administrative section: Outside professional services, Insurance, Office supplies, Postage, Office rent, Travel, Training, Bad debt, RCA fees, and Other G&A expense.

### Other expenses

**Interest** expense includes the amount of interest paid in a given year for loans. The interest paid is reimbursable by the PCE program. The most common loans that rural Alaska utilities hold are for bulk fuel purchases, but a number of utilities have loans through AEA’s Power Project Loan Fund or various USDA programs.

If the interest payments on a capital loan start prior to the project being put into service, the interest payments should be included in the capital cost and depreciated.

If a utility bank or investment account earns interest, then that should be included as a revenue in the section.

**Depreciation expense** is an accounting method to estimate the loss of an asset’s value over time. An asset is something that has value after purchasing it—generally because it will be used to generate revenue for the utility in the future. Common utility assets include engines and generators, meters and transformers, computers and other office equipment. Improvements to assets, especially engine overhauls, which increase the life or performance of the asset can also be included under depreciation. In order for the asset to be depreciated it must be in use by the utility to deliver services to customers and useful in improving and/or maintaining service to customers (the Used and Useful Principle).

*What can be depreciated?*

When a new asset is initially brought into service, all of the costs associated with bringing it into service should be capitalized and depreciated. These costs can include:

* 1. Studies (wind study, conceptual design, final design),
	2. Interest and principal paid prior to the asset being put into service
	3. Personnel expenses that were incurred in the design and construction of the asset. It is important that the personnel expenses are not double counted, if the expenses were already reported under Personnel Expenses, they should not be counted here
	4. Any hard and soft costs of infrastructure
	5. Training needed for personnel to operate the asset
	6. Expenses that were necessary for meeting safety and regulatory requirements

Renewal and replacement (R&R) activities should be capitalized and depreciated, so that the costs can be spread over multiple years. These costs are those expenses defined as items costing greater than $5,000 and/or that are not incurred on an annual basis and are required to ensure the long-term, on-going operation of the facility. Examples include powerhouse roof repair, generator replacement, belt replacement, meter replacement, and other such big ticket items. Maintenance that it done on an annual basis should be included under Operating Expenses.

*What cannot be depreciated?*

If the utility did not pay for the asset, then it will not count as an eligible expense for the RCA in calculating the PCE level. The most common reason why an asset cannot be included is that it was paid for by state or federal grants. Additionally, if the asset was paid for through a community contribution, a regional entity, or other non-ratepayer or equity investor, the costs cannot be recovered through rates. The utility should still track the depreciation of grant-funded infrastructure so that it can plan for the future replacement of the infrastructure.

If the capital costs did not result in an asset that is being used by the utility to produce or deliver power to customers, the utility cannot recover the costs. Examples of the types of costs that could result in ineligible capital costs include studies and reports that do not lead to an operational project, and unused or underutilized infrastructure. If the utility is unable to recover the costs from ratepayers, it could result in the utility having to cover the expense through another method or could even lead to bankruptcy.

If a utility has a capital cost that is ineligible because it is not used or useful, the utility can petition the RCA, which can make a determination if the expenses can be amortized. If the RCA makes the determination that the expenses are allowed, then the capital costs can be amortized based on an agreed upon schedule.

*Expected life*

All assets have an expected life, also called a book life, useful life, or economic life. The expected life is simply how long the asset is expected to remain useful. At the end of its life, the asset will have no value on the books, even if it is still operational and being used by the utility. Different types of assets have different expected lives. The expected life may depend on who the utility is reporting to. Since the utility may have a different set of books for tax reporting than for reporting to the RCA, the assets may have different expected lives for tax purposes than for regulatory purposes.

Depreciation expenses are reported because utility assets, such as an engines or powerhouses, are expected to last many years. If the asset was not 100% grant-funded, the utility will need to be able to recover the cost of the asset. The utility recovers costs by charging ratepayers. Since the asset is being used over multiple years, the cost is recovered over multiple years—the expected life of the asset. This also protects the ratepayer from large changes in rates to cover the cost of the asset, the cost of the asset is spread out over many years instead of just when it was purchased. The asset could have been purchased outright by the utility (through equity) or paid through a loan (debt), or some combination of equity and debt. If it was paid for through a loan, the loan does not need to have the same life as the expected life, although the loan should not be longer than the expected life.

In most cases, the amount recovered by the utility is the same every year. This is called straight-line depreciation. Straight-line depreciation divides the cost of the asset by the number of years of the expected life, so that an equal percentage of the asset’s value is depreciated every year (the annual rate). Table 2 includes the life and annual rate of depreciation or amortization that is used by the RCA, as adopted from the USDA Rural Electrification Administration Bulletin 183-1 (1988). Other expected lives or annual rates would require RCA approval.

Table 2: RCA Depreciation & Amortization Lives/Rates

|  |
| --- |
| **Depreciation:** |
| **Plant Type** | **Life** | **Annual Rate** |
| Generators | 14 | 7%  |
| Transformers | 2 0 – 25 | 4% – 5% |
| P ole s, Towers | 25 | 4 % |
| Overhead Lines | 25 | 4 % |
| Underground Conduit | 25 | 4 % |
| Meters | 2 0 – 25 | 4% – 5% |
| Services | 25 | 4 % |
| Buildings | 30 | 3.3 % |
| Office Equipment | 10 | 10% |
| Vehicles | 4 – 6 | 16% – 25% |
| Fu el Tanks | 15 | 6.6 % |
| Computers | 6 | 16. 67% |
| Street Lights | 20 | 5 % |
| Power Stat Meters/Displays | 10 | 10% |
| S mall Engines | 5 | 20% |
| **Amortization:** (suggested) |
| Top End Generator Overhaul | 3 | 33.3% |
| Full Generator Overhaul | 5 | 20% |
| Training | 3-5 | 20%-33.3% |
| Oil Spill Clean Up | 3-5 | 20%-33.3% |

Calculating straight-line depreciation is not difficult. For example, assume that a new small engine cost $100,000 to install. The expected life of the small engine is 5 years. That means that the depreciation expense for the small engine will be 20% per year.

Depreciation expense = Capital cost x Annual rate

 = $100,000 x 20%

 =$20,000/year for five years

So in this case, the utility would be able to recover $20,000 per year from ratepayers for the infrastructure. If the new engine was paid for by a loan, the principle could be paid for by the depreciation expense, whereas any interest payments would be captured under the “Interest expense” line item.

Other methods, or so-called accelerated methods, can also be used to depreciate assets, but this is uncommon in reporting to the RCA. Some benefits may exist for accelerated methods for tax purposes, but these are outside the scope of this guide.

*Schedule of Depreciation*

The PCE Annual Report, requires the utility to provide a Schedule of Depreciation and Amortization, included as Page 6 and printed here as Figure 3. The utility can choose to use the Schedule of Depreciation provided by the RCA or use their own. The purpose of the schedule is to help keep track of assets, purchase and depreciation information. Since assets and the associated depreciation may need to be tracked for 20 to 50 years, it is important that the utility have a system in place for calculating and recording depreciation.

The schedule is probably easiest to use as a spreadsheet, which is how it is included in the *Annual Power Cost Equalization Report for Nonregulated Utilities*. If the utility does not have a depreciation schedule, an initial inventory of all assets should be conducted—taking note of if the asset was grant-funded or paid for by the utility. Only assets that the utility has paid for can recover depreciation costs through rates (and thus be reimbursed by the PCE program), but the utility should still track the depreciation of all assets. The columns need to be updated every year but if the schedule is maintained on a yearly basis, as it should be for the annual report, it should be a relatively easy task. Filling out the depreciation for each asset requires straightforward addition and subtraction.

1. Asset: Includes a listing of most common types of assets to depreciate.
2. Cost: The initial capital cost of the asset, including all costs that were needed to bring it into service [training, interest payments before being brought into service, studies, etc.].
3. Accum Dep [date]: The accumulated depreciation from the previous year. This is a summation of the yearly depreciation for all previous years.
4. Book Value [date]: The difference between the values in “Cost” and the “Accum Dep”.
5. [Year] Depreciation: The amount of depreciation, as calculated using the appropriate annual rate, of the current year.
6. Accum Dep [Date]: The accumulated depreciation that is calculated by adding the depreciation of the current year to the previous accumulated depreciation.
7. Book Value [Date]: The difference between the values in “Cost” and the most recent “Accum Dep”.



Figure 4: PCE Depreciation Schedule

Each year the accumulated depreciation will increase and the book value will decrease for a specific asset until it has been fully depreciated. At that point, the book value will be zero.

At the bottom of the form, the most recent year should have a sum of the accumulated depreciation for all assets for the year (Column O on RCA form). This is the value that is reported on the Income Statement under “Depreciation Expenses”.

### R&R Accounts

Although the business plans sponsored by AEA and Denali Commission for many powerhouse built since 2000 have suggested and/or required that utilities set up an account for repair and replacement (R&R account), deposits into the account are not allowable expenses for setting the PCE rate. Saving for a future event is not considered an expense, because the utility has not actually spent money on a product or service. Additionally, charging current customers for future expenses could be considered not fair for current customers. Since customers should only be charged for the cost of delivering the utility service, saving for future upgrades and/or replacement does not directly benefit the current customers, and are not allowed expenses.

Although a utility should have sufficient savings to deal with unforeseen events such as spikes in fuel costs, utilities generally take out a loan to pay for needed infrastructure. The cost of the loan can be recovered in rates through the interest and depreciation expenses—both of which are eligible for PCE reimbursement—over the life of the project.

Most of the utilities in rural Alaska are not economically regulated, so utilities can choose to set rates in any manner that the utility board approves. If a utility chooses to set aside money for an R&R account instead of taking out loans to pay for new and/or upgraded infrastructure, that is allowed, but the PCE program is unable to reimburse costs that are above those that are reported and allowed by the regulatory rules.

The RCA approves the rates of economically-regulated utilities; included within the rate is an amount of profit that has been deemed reasonable by the RCA. In general, the amount of profit allowed is based on the amount of net plant in service (which is covered in Chapter 5). A rate of return for the amount of equity and loan invested in the plant is used as the basis for determining the profit. Although not required to abide by all of the rules for economically regulated utilities, if nonregulated utilities choose to set their rates above a cost-based rate, there should be a clear and understandable reason.

Total Utility Operating Expenses

The line item Total Utility Operating Expenses sums all of the expenses: Total Personnel Expenses, Total Operating Expenses, Total General and Administrative, and Total Other Expenses. For non-regulated utilities, the Total Utility Operating expense will be one of the factors used to set rates and to determine the PCE level. For regulated utilities it will be a factor determining the rates and the PCE level.

## Page 5: Data Form

Included on Page 5, KWH sold. Not broken out by customer class.



# Page 6: Schedule of Depreciation and Amortization

# Page 7:

## Other RCA Reporting

In addition to filing the PCE Annual Report, non-regulated utilities are required to submit whenever new fuel is purchased or purchased power costs change by filing the Non-Regulated PCE Fuel and Purchased Power Cost Report Form—generally referred to as the Fuel Report Form (see Figure 2). Since fuel costs are likely to change, the RCA provides an easy way to adjust eligible fuel costs. As the unit cost (cost per gallon) of fuel increases or decreases, the fuel surcharge can be adjusted by submitting the Fuel Report Form.

Unless the utility has little fuel storage (less than 10% of the entire year’s consumption), a weighted average fuel rate will be used. The spreadsheet provided by the RCA provides the calculations needed to determine a blended rate. The spreadsheet allows the total cost and total number of gallons of fuel to be aggregated so that a weighted average per gallon cost can be determined. The cost and number of gallons purchased by the utility during the reporting period are added to the initial fuel inventory. The weighted averaged is just the total cost of fuel from all purchases divided by the total number of gallons stored. Any fuel that the utility did not purchase, even if it was invoiced for it, must be recorded as having no cost.

The fuel surcharge is determined by how much the new fuel cost will change the previously approved rate. Since customers are charged by a kWh rate, the per gallon cost is converted into a per kWh rate.

Fuel cost per kWh = cost per gallon / generation efficiency (in kWh/gallon)

 $ per kWh = ($ per gal) / (kWh per gal)

For example, if the weighted average cost of fuel is $4.00 per gallon and the generation efficiency is 12 kWh per gallon, the fuel cost per kWh can be found by:

 Fuel cost per kWh = $4.00 per gallon / 12 kWh per gal

 $/kWh = $0.33/kWh



Figure 3: PCE fuel form

The process for regulated utilities is very similar, except that the utility will submit a letter requesting a revision to the Cost of Power Adjustment (COPA). Regulated utilities are required to submit a COPA on a quarterly basis. The COPA filing must include the information required by the applicable statutes and regulations. Filed through a tariff advice letter, the format and information requirements are laid out in 3 AAC 48.270.[[9]](#footnote-9),[[10]](#footnote-10) In addition to information about the utility and filing number, the proposed tariff revision must be explained, including if and how the filing will affect current customers. The utility must also propose an effective date for the change.

The regulations specific to the COPA filing can be found at 3 AAC 52.504.[[11]](#footnote-11) The COPA requirements include sufficient information to show that a change in the customer rate is needed and what that change should be. To make a convincing case, the utility must include the actual kilowatt-hour generation and sales, the fuel and purchased power expenses, and documentation of any expected changes.

If the COPA will require an adjustment to PCE reimbursement, the tariff advice letter must include the requirements of 3 AAC 52.640(d),[[12]](#footnote-12) which include updated tariff sheets for the per kWh PCE reimbursement rate and the appropriate calculations to determine the PCE reimbursement rate.

The way in which a COPA rate is determined is essentially the same as for a fuel surcharge, except that regulated utilities are required to have a balancing account that captures any revenue that is above or below the amount approved by the RCA. The balancing account provides a way to protect consumers from a utility overcharging for fuel or energy costs in any period. For instance, if a utility had collected more revenue than was needed in the previous period, the balance would need to be subtracted from the next period’s estimated fuel or power costs.

1. NOTE: An account is a means of tracking the financial elements of the utility, they do not have to be a bank account. Everything that contributes to the financial picture of the utility will be in an account. So the dollar value of physical objects, such as an engine, will be in an account, just as cash in a bank account will be in a different account. [↑](#footnote-ref-1)
2. <https://www.law.cornell.edu/cfr/text/18/part-101> [↑](#footnote-ref-2)
3. <https://www.commerce.alaska.gov/web/Portals/4/pub/Utility%20Collections%20Handbook.pdf?ver=2016-10-07-112921-043> [↑](#footnote-ref-3)
4. <https://en.wikipedia.org/wiki/Used_and_Useful_Principle> [↑](#footnote-ref-4)
5. <https://en.wikipedia.org/wiki/Prudent_Investment_Rule> [↑](#footnote-ref-5)
6. <http://labor.alaska.gov/estax/forms/taxbook.pdf> [↑](#footnote-ref-6)
7. <https://www.commerce.alaska.gov/web/dcra/BulkFuelLoanProgram.aspx> [↑](#footnote-ref-7)
8. <https://www.commerce.alaska.gov/web/Portals/4/pub/Utility%20Collections%20Handbook.pdf?ver=2016-10-07-112921-043> [↑](#footnote-ref-8)
9. http://www.touchngo.com/lglcntr/akstats/aac/title03/chapter048/section270.htm [↑](#footnote-ref-9)
10. AAC stands for Alaska Administrative Code and is the system that Alaska uses to organize its regulations. AS stands for Alaska Statute and is the system that Alaska uses to organize its laws. [↑](#footnote-ref-10)
11. <http://www.touchngo.com/lglcntr/akstats/aac/title03/chapter052/section504.htm> [↑](#footnote-ref-11)
12. http://www.touchngo.com/lglcntr/akstats/aac/title03/chapter052/section640.htm [↑](#footnote-ref-12)