



Bill Estimation Methodologies

Tucson Electric Power Company (TEP) regularly encounters situations in which TEP cannot obtain a complete and valid meter read. No matter the cause of the need to estimate the read, the following methods are used depending on the circumstances.

PREVIOUS YEAR FORMULA

SAME CUSTOMER WITH AT LEAST ONE YEAR OF HISTORY

TEP would generate a bill based on customer usage from the previous year using the "PREVIOUS YEAR" formula as follows:

If last year's usage was estimated, see Previous Month Formula:

$$\text{LAST YEAR'S USAGE FOR SAME MONTH} / \text{NUMBER OF DAYS IN BILLING PERIOD} = \text{PER DAY USAGE}$$

(FOR "TIME OF USE" (TOU) THIS WOULD BE APPLIED TO EACH PERIOD)

$$\text{PER DAY USAGE} \times \text{NUMBER OF DAYS IN THIS MONTH'S CYCLE} = \text{ESTIMATED USAGE}$$

(FOR TOU THIS WOULD BE APPLIED TO EACH PERIOD)

PREVIOUS MONTH FORMULA

SAME CUSTOMER AT SAME PREMISE WITH LESS THAN ONE YEAR OF HISTORY

TEP would generate a bill based on customer usage from the previous month using the "PREVIOUS MONTH" formula as follows:

If last month's usage was estimated, see Trend Formula:

$$\text{LAST MONTHS USAGE} / \text{NUMBER OF DAYS IN BILLING PERIOD} = \text{PER DAY USAGE}$$

(FOR TOU THIS WOULD BE APPLIED TO EACH PERIOD)

$$\text{PER DAY USAGE} \times \text{NUMBER OF DAYS IN THIS MONTH'S CYCLE} = \text{ESTIMATED USAGE}$$

(FOR TOU THIS WOULD BE APPLIED TO EACH PERIOD)

TREND FORMULA

NEW CUSTOMER AT SAME PREMISE

TEP would generate a bill using the "TREND" formula, based on customer's usage trend as described below:

TEP's customer information system (CIS) would generate a bill based on trend. Customers are assigned to a Trend area which differentiate consumption based on different geographic areas. Secondly, the customer is assigned to a Trend class which is used to differentiate consumption trends based on the type of service and type of property. An example of this would be residential, commercial, and industrial usage. Thirdly, all consumption is identified using unit of measure code and a time of use code. Within TEP's CIS, a trend record is created from each billed service. This record becomes part of a trend table. During estimation, consumption from three prior bill cycles is compared to the consumption from the same cycle in the previous month to determine a trend. This trend, plus a tolerance, is used to create a usage amount for bill estimation.

$$\text{CUSTOMER'S USAGE IN PREVIOUS PERIOD} / \text{AVERAGE CUSTOMER'S USAGE IN PREVIOUS PERIOD} \times \text{AVERAGE CUSTOMER'S USAGE IN CURRENT PERIOD} = \text{ESTIMATED CONSUMPTION FOR REGISTER READ}$$

NO HISTORY

TEP would not generate a bill until a good meter read was acquired then use known consumption to estimate previous bills.

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