SAP ESTIMATION LOGIC

No meter reading is obtained for meter reading on 10/11/12. The system will go to the same period of the prior year and check for actual consumption.

For the period of 7/14/11 to 10/12/11, we find actual consumption of 8 units.

The system will then determine if the period of 7/14/11 to 10/12/11 is a representative period. The current billing period is 91 days. The current period is multiplied by 60% to determine the required number of days for the representative period. 91 * .60 = 54.6.

Since the same period of the prior year is a billing period of 90 days it is considered a representative period.

The system divides the 8 units by the number of days in the representative period to arrive at a per day average. 8 / 90 = .09 units per day.

The .09 units per day from the representative period is multiplied by the number of days in the current period. 91 * .09 = 8.19 (rounded to 8.) The 8 units of estimated consumption is added to the previous read of 0111 to arrive at the current estimated reading of 0119.

A feature of SAP allows for use of 'control' reads in the estimation process. Control reads are defined as plausible readings (passed validation) from service orders (as example) that are not used to calculate the cycle billing.

The expected consumption value is used during the billing process to determine if the read provided during cycle billing is billable. Essentially the estimation routine logic runs to determine based on prior history what the expected consumption value is for the current period. As long as the current meter reading is within a configurable % of expected consumption, the actual read is considered as plausible and used for billing.

This same estimation logic applies in the event a meter reading isn't obtained for a 'move out' service order. Once the reading is obtained for the new customer of record, adjustment will be made to the prior customer of record if warranted (over-estimated.)

In our above example, if the consumption billed during the same period of the prior year had been estimated or the billing period was not for enough days to be considered as a representative period, the system would have checked for active consumption in the prior billing period. In this case, we would have looked for actual consumption in the period of 4/13/12 to 7/13/12. Had consumption for this period been based on estimated consumption the system would have gone back an additional billing period to check for actual consumption and a representative number of days.

4/13/12 to 7/13/12 Actual Consumption: No Representative Period: Yes

1/13/12 to 4/13/12 Actual Consumption: Yes Representative Period: Yes

The period of 1/13/12 to 4/13/12 would have been used to calculate the current estimated meter reading.
9 units / 91 days = .098 (rounded to .1)
91 * .1 = 9.1 (rounded to 9)

Prior read of 0111 + 9 units = 0120 for estimated consumption of 9 units for the current billing period.

The system will go backward looking at each meter reading recorded (for up to 1 year) in an attempt to find actual consumption and a representative period.

Should the system not find comparable consumption through the above methods, it will use the expected period consumption value assigned to the meter. This value is calculated dynamically by the system at the point the meter is set by averaging the annual consumption for all customers of the same bill class and rate schedule within the same meter reading route.

If the opening bill needs to be estimated, the system will use the expected period consumption value to determine the estimated meter reading.

Note: if an estimate is needed and not system calculated, the billing representative will follow the same basic steps in order to determine the estimated consumption and meter reading. These are referred to as “office estimates.”