1 2 2	OVERVIEW OF TECHNICAL SPECS FROM TWO LARGEST ENTERPRISE RESOURCE PLANNING SOFTWARE COMPANIES – SAP AND ORACLE
5 4	Both systems require specific modules to process and calculate interval data prior to billing.
5	NOTE: The integration process is different from "Direct Billing" - subtractive method used in the past for "Analog Meters" where monthly
6	consumption was calculated based on the difference between usage values: END Billing value – PREVIOUS Billing value = Total billable
7	monthly consumption
8	
9	<u>SAP – Billing Overview</u>
10	
11	Purpose: RTP (real-time pricing) billing is based on rate models that evaluate energy requirements over a period of time. Consumption (and
12	demand if necessary) are measured for each interval (for example 1/4-hour, 1/2-hour) or for each rate period (for example peak and off-peak).
13	The price for kWh of consumption, or kW/kWA demand is determined for every interval. This means the price may vary for every interval.
14	Billing Overview
15	
16	• <u>Process Flow</u> – IS-U-EDM module prepares data for RTP Billing then transfers to IS-U billing component
17	• Data flows through the set-up process of various algorithms, calculations, determinations etc.

18 ! Contract Billing

- 19 Billing can process **discrete*** measured data from the Meter Reading component (IS-U-DM-MR) as well as interval data from the Energy
- 20 Data Management component (IS-U-EDM)
- 21 If you have activated the business function Utilities, Quantity Determination (ISU_QD_1) and you use the quantity determination procedure
- 22 Quantity Determination During Meter Reading, the system determines a consumption value during meter reading result entry. The value is
- 23 saved to the database. In this case, billing processes the consumption quantity and not the meter reading results.
- ²⁴ * A discrete quantitative variable is one that can only take specific numeric values (rather than any value in an interval), but those numeric

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- 25 values have a clear quantitative interpretation. Examples of discrete quantitative variables are number of needle punctures, number of
- 26 pregnancies and number of hospitalizations.
- 27
- 28 For more information visit <u>SAP Help Portal</u>
- 29
- 30 Oracle Billing Overview
- 31
- 32
- 33
- 34 35



• Both Tables can be updated by applied rules and/or algorithms. PSE refused to provide them (specify DR).

- Per Meter Configuration documents, provided by PSE, the meter set up to read intervals in KW. However, uploaded interval data show UOM KWH. According to system requirements, both tables must have same KWH. Thus, KWH is just a nominal value because meters installed by PSE are "KWH" only.
- According to SAP and Oracle requirements, Interval data must be used for billing after VEE process in MDMS module. Per PSE response dated 10/21/2022 "Answering paragraph 1 of the Complaint, PSE denies the allegations in paragraph 1 of the Complaint. PSE provided information to the Commission and its customers about the switch to AMI meters consistent with the purpose and usage of AMI meters. While AMI meters have the capability to transmit readings in 15-minute intervals, this functionality is not used for the calculation of total monthly usage when billing customers. To determine the usage of a particular customer, a meter read is obtained at the end of each monthly billing period by subtracting the beginning read at the beginning of the month from the end read at the end of the month. The customer is then billed based on the total kWh and charged the kWh rate."
 Their response contradicts to one of the most requirements and processes described in SAP, Oracle and AMI deployment documentation. It also contradicts to monthly bills we received while our accounts were set up for Commercial Rate. All three accounts were billed for Demand charges which can be billed only based on Interval data, and this method has not changed since then.