



Summary **Completeness** Timeliness Correctness Data Profile
Manage Watch List Manage Condition Manage Recipients Manage Tables

Load: User: ZE Administrator Electricity and Natural Gas

Source: Show Reset

To: Apply

Errors Only

50/page Page 1 of 1

Table Name	Row Count	Column	Days Ahead	Holidays	Min	Max	Expected Days	Tue, Jan 14	Mon, Jan 13	Sun, Jan 12	Sat, Jan 11	Fri, Jan 10	Thu, Jan 09	Wed, Jan 08
ACCU_WEATHER_REALFEEL	OPR_DATE	-1	No Holidays	1000	3250	Daily	827	1608	1622	2472	1605	1608	1608	161
AESO_CSD_GAS	OPR_DATE	0	AESO (Alberta)	25857	80000	Daily	27216	74520	74520	69930	73494	74466	743	
BANK_OF_CAN_CA_INT_RATE_DLY	OPR_DATE	-1	No Holidays	17	17	MON-FRI	0	17	0	0	17	17		
CME_DME_FUTURES	OPR_DATE	0	NYMEX	121	480	MON-FRI	0	426	0	0	426	426	4	
ENVIRONMENT_CANADA_FORECAST	OPR_DATE	0	No Holidays	3846	38800	Daily	0	7374	7077	6205	6746	7050	70	
												841	833	8
												10963	10864	109
												75706	75757	757
												12092	12064	123
												301	296	3
												4320	4320	43
												145728	145728	1457
												3377	3267	33
												288	288	2
												0	46824	468

ZEMA Data Validation is a pivotal application that monitors the integrity of data collected in the ZEMA Suite system against pre-defined and user customizable parameters.

Data Validation provides real-time logging, notifications, and on-screen identifiers that report on the success or failures of data events.

Know the Quality of Data

As data is being imported into the ZEMA system, clients need to know the quality of that data. Data Validation provides intuitive visual screens that make potential errors easy to find and understand. The application features on-screen visual indicators and filters that help users understand which sources are passing or failing the data tests.

Checks include:

- Completeness – Is all of the data being collected?
- Correctness – Are the data values within acceptable boundaries?
- Timeliness – Is the data arriving on time?
- Newness – Is the data up to date or different than the previous entry?

ZE Data Monitoring Services

As a dedicated service provider, ZE is constantly monitoring the market and the data feeds that ZE clients depend on. ZE's dedicated data monitoring group watches for issues and errors and works with its clients and its partners to ensure that data is as timely and accurate as possible. The ZE team works 24x7x365 watching out for its clients. Correct, complete, and accurate data is ZE's ongoing goal.

The combination of Data Validation and Data Monitoring Services is designed to provide users and their companies with peace of mind for the information they depend on.

Customize the Rules

Companies can configure a variety of rules within **Data Validation** according to their unique business needs. These rules can be applied against any data report, in real-time or on a schedule.

Organizations can also use multiple tests and conditions, including thresholds, percentage checks, and standard deviations. With **Data Validation**, users can filter and sort the results making it easy to find the status of specific data points.

Create “Watch Lists”

Rather than being presented with the status of a full corporate data list, users that need to monitor or know the status of specific items can create “Watch Lists”. A Watch List is a unique feature of **Data Validation** that allows users to create predefined groups of data so that groups can be quickly retrieved in the future. The filters are useful to check the status of data used for invoicing, end-of-day processes, models or any other business purpose. Creating a Watch List is easy: users can simply add the data of interest, save the list, name it, and then use it in any of the **Data Validation** screens.

Provide Detailed Reporting

The **Data Validation** screens summarize whether data has either passed, failed or is still waiting to be evaluated. **Data Validation** produces detailed real-time reporting on the different checks it performs. **Data Validation** can also email alerts to specific users when data fails quality checks (for example, if a source is late or a data test has failed).

Users also can export the results of validation to any of the Microsoft Excel formats for easy use and sharing across a company.

Source	Report Name	Correctness	Schema Name	Table Name	Completeness	Timeliness	Timeliness Updated
AESO	Daily Outage	✓	ZE_DATA	AESO_DAILY_OUTAGE	✓	✓	2014-01-06 17:00:02
AESO	Energy Merit Order Snapshot	✓	ZE_DATA	AESO_ENERGY_MERIT_ORDER	✓	✓	2014-01-07 07:08:04
AESO	Gas - Supply Demand	✓	ZE_DATA	AESO_CSD_GAS	✓	✓	2014-01-07 15:10:01
AESO	Pool Price	✓	ZE_DATA	ABPP_POOL_PRICE	✓	✓	2014-01-07 14:45:05
EIA	Natural Gas Futures Prices (NYMEX)	✗	ZE_DATA	EIA_NG_FUTURES_PRICE	✗	✓	2014-01-06 12:10:15
NOAA	City Degree Days	✓	ZE_DATA	NOAA_DEGREE_DAY_CITY	✓	✓	2014-01-06 14:45:10
NOAA	Global Surface Summary of Day	✓	ZE_DATA	NOAA_ISH_INDEX	✓	✓	2014-01-06 12:40:16
NOAA	Global Surface Summary of Day	✓	ZE_DATA	NOAA_NCDC_GSOD	✓	✓	2014-01-06 14:08:05
NOAA	State Degree Day Forecast	✓	ZE_DATA	NOAA_DEGREE_DAY_FCT	✓	✓	2014-01-06 16:19:30
NOAA	State Degree Days	✓	ZE_DATA	NOAA_DEGREE_DAY_STATE	✓	✓	2014-01-06 14:01:11
NOAA	Weather Observations	✓	ZE_DATA	NOAA_WEATHER_OBS	✓	✓	2014-01-07 14:39:16
NOAA	Weather Observations	✓	ZE_DATA	NOAA_WEATHER_OBS_STATIONS	✓	✓	2014-01-06 14:07:11
NYMEX	Future Settlements	✓	ZE_DATA	NYMEX_FUTURES_SETTLEMENT	✓	✓	2014-01-06 21:30:28
NYMEX	Future Settlements	✓	ZE_DATA	NYMEX_INDEX	✓	✓	2014-01-06 12:14:11
PJM	Day Ahead - Aggregate	✓	ZE_DATA	PJM_DAY_AHEAD_A	✓	✓	2014-01-07 06:06:05
PJM	Day Ahead - Gen	✓	ZE_DATA	PJM_DAY_AHEAD_G	✓	✓	2014-01-07 06:06:05
PJM	Day Ahead - Hub	✓	ZE_DATA	PJM_DAY_AHEAD_H	✓	✓	2014-01-07 06:06:05
PJM	Day Ahead - Load	✓	ZE_DATA	PJM_DAY_AHEAD_L	✓	✓	2014-01-07 06:06:05
PJM	Day Ahead - Zone	✓	ZE_DATA	PJM_DAY_AHEAD_Z	✓	✓	2014-01-07 06:06:05
PJM	Day Ahead Final - Aggregate	✓	ZE_DATA	PJM_DAY_AHEAD_FINAL_A	✓	✓	2014-01-07 06:06:05
PJM	Day Ahead Final - Hub	✓	ZE_DATA	PJM_DAY_AHEAD_FINAL_H	✓	✓	2014-01-07 06:06:05
PJM	Hourly Load	✓	ZE_DATA	PJM_HOURLY_LOAD	✓	✓	2013-12-10 08:04:34
PJM	Real Time - Aggregate	✓	ZE_DATA	PJM_REAL_TIME_A	✓	✓	2014-01-07 09:34:19