Claims

1. A method validating data for an energy management system, comprising:

receiving a primary data from a plurality of apparatus available within the energy management system;

identifying outliers within the primary data based on a statistical computation of the primary data and further based on received secondary data;

filtering the outliers out from the primary data to generate a filtered primary data;

processing the filtered primary data; and

validating the processed primary data based on statistical computation at a global level of the primary data,

wherein the secondary data is based on information derived from specification of at least one of the plurality of apparatus, and

wherein the identification of outliers based on the statistical computation of the primary data further comprises:

computing a mean value of the primary data;

computing a standard deviation value of the primary data; and

identifying the outlier when a piece of the primary data is outside a range provided by the standard deviation value from the mean value.

2. The method as defined in claim 1, wherein the primary data includes a group of data consisting of: power, temperature, flow and pressure.

3. The method as defined in claim 1, wherein the identification of the outliers at the identifying step are performed at a local data level.

4. The method as defined in claim 1, wherein the validating the processed primary data based on the statistical computation of the primary data at the global level further comprises:

comparing the primary data with a domain knowledge.

5. The method as defined in claim 1, wherein the validating the processed primary data based on the global level statistical computation of the primary data further comprises:

comparing the primary data with a benchmarked information.

6. The method as defined in claim 1, wherein the validating the processed primary data based on the global level statistical computation of the primary data further comprises:

comparing the primary data with an expected profile of the primary data.

7. A system for validating data in an energy management system, wherein the system comprises:

a personal computer executing a computer code to perform a method for validating data in the energy management system, wherein the computer code comprises:

a data controversy engine that receives the primary data, wherein the data controversy engine computes statistics for the primary data and data and receives secondary data for identifying outliers within the primary data;

a data validation engine that receives the primary data from the data controversy engine, wherein the data validation engine validates the primary data by comparing to a predefined domain knowledge; and

a data processing and profiling engine that receives a filtered primary data, wherein the data processing and profiling engine extracts patterns from the filtered primary data,

wherein the secondary data is based on information derived

from specification of at least one of the plurality of apparatus, and

wherein the identification of outliers based on the statistical computation of the primary data further comprises:

computing a mean value of the primary data;

computing a standard deviation value of the primary data; and

identifying the outlier when a piece of the primary data is outside a range provided by the standard deviation value from the mean value.

8. The system as defined in claim 7, wherein the computer code further comprises:

a configuration unit that is adapted receive primary data from a plurality of apparatuses within the energy management system.

9. The system as defined in claim 7, wherein the computer code further comprises:

a filtering unit that receives the primary data from the data validation engine and generates the filtered primary data after obtaining a determination of the outliers data from the data controversy engine and the data validation engine.

10. The system as defined in claim 7, wherein the data controversy engine identifies a data loss rate by computing a data consistency rate.

11. The system as defined in claim 7, wherein the data validation engine further validates the primary data by comparing primary data with a set of benchmark data.

12. The system as defined in claim 7, wherein the data validation engine further validates the primary data by comparing the primary data with data profiles.

13. A non-transitory medium storing computer-readable, computer-executable process steps for an energy management system, wherein the process comprising:

receiving primary data from a plurality of apparatuses formed within the energy management system;

identifying outliers within the primary data based on a statistical computation of the primary data;

;

filtering out the outlier from the primary data and further based on received secondary data;

processing the primary data to a pattern of data; and

validating the processed primary data based a statistical computation of the primary data at a global level,

wherein the secondary data is based on information derived from specification of at least one of the plurality of apparatus, and wherein the identification of outliers based on the statistical computation of the primary data further comprises:

computing a mean value of the primary data;

computing a standard deviation value of the primary data; and

identifying the outlier when a piece of the primary data is outside a range provided by the standard deviation value from the mean value.

14. The non-transitory medium storing as defined in claim 13,

wherein the identification of the outliers based on the statistical computation of the primary data further comprises:

computing a mean value of the primary data;

computing a standard deviation value of the primary data; and

identifying the outlier when a piece of the primary data is located outside of a range that is provided by the standard deviation value from the mean value,

wherein the secondary data is based on information derived from specification of at least one of the plurality of apparatus.