the payee and changes the invoice status to "paid" (e.g., in the payor's ETRM), which completes the invoice cycle. Payment to a party can be made using bank checks, wire transfers, or ACH. If the received invoice is inconsistent with the internal invoice and resolution of the discrepancy is not possible by the required payment date of the terms of the master energy purchase and sale agreement executed between the counterparties, the accounts payable analyst associated with the payor prepares an invoice packet to pay a "partial payment" and at the same time initiates a dispute with the payee for the difference between the invoice amounts.

[0011] Throughout the invoice development and execution process, the financial accounting department for each party pulls information from the operational accounting system of record to determine revenue and power purchase accruals and actuals for the previous month, to manually make appropriate journal entries in the financial accounting system of record, to project cash flows for movement of funds, and to adjust the credit exposure information associated with each counterparty.

[0012] Accordingly, embodiments of the invention provide systems and methods for managing the bilateral counterparty (e.g., direct or indirect) wholesale energy transaction settlement process. In particular, the systems and methods provide collaborative, on-line workspaces that manage the workflows and notifications for tie-out, invoicing, payment execution, dispute management, and credit management activities associated with settlement of wholesale energy transactions. As used in the present application, the terms "collaborate" or "collaborative" includes providing a seamless workflow between two or more entities. For example, the workflow allows two or more independent parties to participate in a seamless workflow containing multiple steps, check-points, and confirmations. In particular, parties can access information associated with transactions and make changes and/or comments regarding the information. The workflow also automatically notifies parties of changes and/or comments made by other parties or other tasks required of a party to progress the workflow. In some embodiments, the workflow can also be automated if the parties are willing to turn this feature "on."

[0012a] According to a first aspect of the present invention, there is provided a method of automatically matching energy transactions between two or more counterparties, the method comprising: receiving, with a server, a first transaction type data from a first counterparty that was involved in a first energy transaction; establishing, with the server, a sequence of concatenated data fields based on the first transaction type data for a first data level; comparing, with the server, the sequence of concatenated data fields to a second transaction type data associated with a second counterparty that was involved in a second energy transaction;

identifying, with the server, one or more variances between the sequence of concatenated data fields and the second transaction type data; responsive to identifying the one or more variances, requesting, with the server, additional information for a second data level from one of two or more counterparties that were involved in either the first energy transaction or the second energy transaction, the additional information addressing the one or more variances, and the two or more counterparties including the first counterparty and the second counterparty; and automatically matching, with the server, the first energy transaction to the second energy transaction in response to the additional information addressing the one or more variances between the sequence of concatenated data fields and the second transaction type data, wherein requesting the additional information for the second data level from the one of the two or more counterparties that were involved in either the first energy transaction or the second energy transaction further includes automatically requesting and receiving the additional information from at least one of an information system associated with the first counterparty or an information system associated with the second counterparty, and sending the request for access to the additional information based on a pre-determined hierarchy.

[0012b] According to a second aspect of the present invention, there is provided a system for matching energy transactions, the system comprising: at least one computing device comprising memory and at least one electronic processor communicatively coupled to the memory, the at least one electronic processor configured to: receive a first transaction type data from a first counterparty that was involved in a first energy transaction; establish a sequence of concatenated data fields based on the first transaction type data for a first data level; compare the sequence of concatenated data fields to a second transaction type data associated with a second counterparty that was involved in a second energy transaction; identify one or more variances between the sequence of concatenated data fields and the second transaction type data; responsive to identifying the one or more variances, request additional information for a second data level from one of two or more counterparties that were involved in either the first energy transaction or the second energy transaction, the additional information addressing the one or more variances, and the two or more counterparties including the first counterparty and the second counterparty, and automatically match the first energy transaction to the second energy transaction in response to the additional information addressing the one or more variances between the sequence of concatenated data fields and the second transaction type data, wherein requesting the additional information for the second data level from the one of the two or more counterparties that were involved in either the first energy transaction or the second energy

transaction further includes automatically requesting and receiving the additional information from at least one of an information system associated with the first counterparty or an information system associated with the second counterparty, and sending the request for access to the additional information based on a pre-determined hierarchy.

[0012c] According to a third aspect of the present invention, there is provided a method of performing a tie-out process between information systems associated with a first counterparty and a second counterparty, the method comprising: requesting, with a server, a first level information of a first energy transaction from an information system associated with the first counterparty; determining, with the server, whether one or more variances exists between the first level information of the first energy transaction and the first level information of the second energy transaction; requesting, with the server, an additional level of information from at least one of the information system associated with the first counterparty or the information system associated with the second counterparty in response to determining that the one or more variances existing between the first level information of the first energy transaction and the first level information of the second energy transaction, the additional level of information addressing the one or more variances; and automatically matching the first energy transaction to the second energy transaction in response to the additional level of information addressing the one or more variances between the first level information of the first energy transaction and the first level information of the second energy transaction, wherein requesting the additional level of information from at least one of the information system associated with the first counterparty or the information system associated with the second counterparty further includes automatically requesting and receiving the additional level of information from the at least one of the information system associated with the first counterparty or the information system associated with the second counterparty, and sending the request for access to the additional level of information based on a pre-determined hierarchy.

[0013] In some embodiments, the systems and methods provide an interactive, on-line tool that automatically matches bilateral counterparty wholesale energy transactions during the tie-out process. Some embodiments also create and pay invoices, which may ensure that invoices are issued on time and securely facilitate payment of bilateral transactions. Using the

What is claimed is:

1. A method of automatically matching energy transactions between two or more counterparties, the method comprising:

receiving, with a server, a first transaction type data from a first counterparty that was involved in a first energy transaction;

establishing, with the server, a sequence of concatenated data fields based on the first transaction type data for a first data level;

comparing, with the server, the sequence of concatenated data fields to a second transaction type data associated with a second counterparty that was involved in a second energy transaction;

identifying, with the server, one or more variances between the sequence of concatenated data fields and the second transaction type data;

responsive to identifying the one or more variances, requesting, with the server, additional information for a second data level from one of two or more counterparties that were involved in either the first energy transaction or the second energy transaction, the additional information addressing the one or more variances, and the two or more counterparties including the first counterparty and the second counterparty; and

automatically matching, with the server, the first energy transaction to the second energy transaction in response to the additional information addressing the one or more variances between the sequence of concatenated data fields and the second transaction type data,

wherein requesting the additional information for the second data level from the one of the two or more counterparties that were involved in either the first energy transaction or the second energy transaction further includes

automatically requesting and receiving the additional information from at least one of an information system associated with the first counterparty or an information system associated with the second counterparty, and

sending the request for access to the additional information based on a pre-determined hierarchy.

2. The method of claim 1, wherein requesting the additional information includes automatically generating at least one of an email or an electronic notification provided to a representative of the one of the two or more counterparties.

3. The method of claim 1,wherein requesting additional information includes automatically accessing stored information previously submitted to the server by the one of the two or more counterparties and notifying a representative of the one of the two or more counterparties of the access.

4. The method of claim 1, wherein receiving the first transaction type data includes receiving at least one selected from a group consisting of: invoice level data, product level data, deal level data, transport level data, delivery level data, and detailed transaction level data.

5. The method of claim 4, wherein receiving the invoice level data includes receiving at least one of volumetric data or financial data.

6. The method of claim 4, wherein receiving the detailed transaction level data includes receiving at least one of volumetric data or financial data.

7. The method of claim 4, wherein receiving the transport level data includes receiving data selected from a group consisting of: pipeline data, transmission grid data, location data, delivery point data, and meter data.

8. The method of claim 1, wherein receiving the first transaction type data includes receiving data from a prior tie-out period.

9. The method of claim 1, further comprising:

establishing, with the server, a second sequence of concatenated data fields based on the additional information for the second data level when the additional information does not completely remove the one or more variances between the sequence of concatenated data fields and the second transaction type data, wherein the second sequence of concatenated data fields includes a second sequence of data fields different than a sequence of data fields included in the sequence of concatenated data fields;

comparing, with the server, the second sequence of concatenated data fields to the second transaction type data associated with the second counterparty;

identifying, with the server, any variances between the second sequence of concatenated data fields and the second transaction type data;

requesting, by the server, additional information at different data levels to address the any variances between the second sequence of concatenated data fields and the second transaction type data; and

automatically matching the first energy transaction to the second energy transaction in response to the additional information at the different data levels addressing the any variances between the sequence of concatenated data fields and the second transaction type data.

10. A system for matching energy transactions, the system comprising:

at least one computing device comprising memory and at least one electronic processor communicatively coupled to the memory, the at least one electronic processor configured to:

receive a first transaction type data from a first counterparty that was involved in a first energy transaction;

establish a sequence of concatenated data fields based on the first transaction type data for a first data level;

compare the sequence of concatenated data fields to a second transaction type data associated with a second counterparty that was involved in a second energy transaction;

identify one or more variances between the sequence of concatenated data fields and the second transaction type data;

responsive to identifying the one or more variances, request additional information for a second data level from one of two or more counterparties that were involved in either the first energy transaction or the second energy transaction, the additional information addressing the one or more variances, and the two or more counterparties including the first counterparty and the second counterparty, and

automatically match the first energy transaction to the second energy transaction in response to the additional information addressing the one or more variances between the sequence of concatenated data fields and the second transaction type data,

wherein requesting the additional information for the second data level from the one of the two or more counterparties that were involved in either the first energy transaction or the second energy transaction further includes

automatically requesting and receiving the additional information from at least one of an information system associated with the first counterparty or an information system associated with the second counterparty, and

sending the request for access to the additional information based on a pre-determined hierarchy.

11. The system of claim 10, wherein the at least one electronic processor is further configured to automatically generate at least one of an email or an electronic notification provided to a representative of the one of the two or more counterparties.

12. The system of claim 10, wherein the at least one electronic processor is further configured to automatically access stored information previously submitted to a server by the one of the two or more counterparties and notifying a representative of the one of the two or more counterparties of the access.

13. The system of claim 10, wherein the first transaction type data includes at least one selected from a group consisting of: invoice level data, product level data, deal level data, transport level data, delivery level data, and detailed transaction level data.

14. The system of claim 13, wherein the detailed transaction level data includes at least one of volumetric data or financial data.

15. The system of claim 13, wherein the transport level data is selected from a group consisting of: pipeline data, transmission grid data, location data, delivery point data, and meter data.

16. The system of claim 12, wherein the first transaction type data includes data from a prior tie-out period.

17. A method of performing a tie-out process between information systems associated with a first counterparty and a second counterparty, the method comprising:

requesting, with a server, a first level information of a first energy transaction from an information system associated with the first counterparty;

requesting, with the server, a first level information of a second energy transaction from an information system associated with the second counterparty;

determining, with the server, whether one or more variances exists between the first level information of the first energy transaction and the first level information of the second energy transaction;

requesting, with the server, an additional level of information from at least one of the information system associated with the first counterparty or the information system associated with the second counterparty in response to determining that the one or more variances existing between the first level information of the first energy transaction and the first level information of the second energy transaction, the additional level of information addressing the one or more variances; and

automatically matching the first energy transaction to the second energy transaction in response to the additional level of information addressing the one or more variances between the first level information of the first energy transaction and the first level information of the second energy transaction,

wherein requesting the additional level of information from at least one of the information system associated with the first counterparty or the information system associated with the second counterparty further includes

automatically requesting and receiving the additional level of information from the at least one of the information system associated with the first counterparty or the information system associated with the second counterparty, and

sending the request for access to the additional level of information based on a pre-determined hierarchy.

18. The method of claim 17, further comprising:

requesting the additional level of information from the information system of the second counterparty when the information system of the first counterparty has not provided the additional level of information.