



Energy Portfolio Management

Contracts for Differences (CfDs)

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Chapter 1: Overview

CfDs, or Contracts for Differences, are regulatory instruments used by SEM participants for hedging against market price swings, as well as a market power prevention tool. Generally, a CfD consists of a contract and a set of trades under that contract.

Market Operations CfD functionality allows users to enter contracts, capture deals associated with those contracts, and to manage settlement, credit cover, and accounting issues.

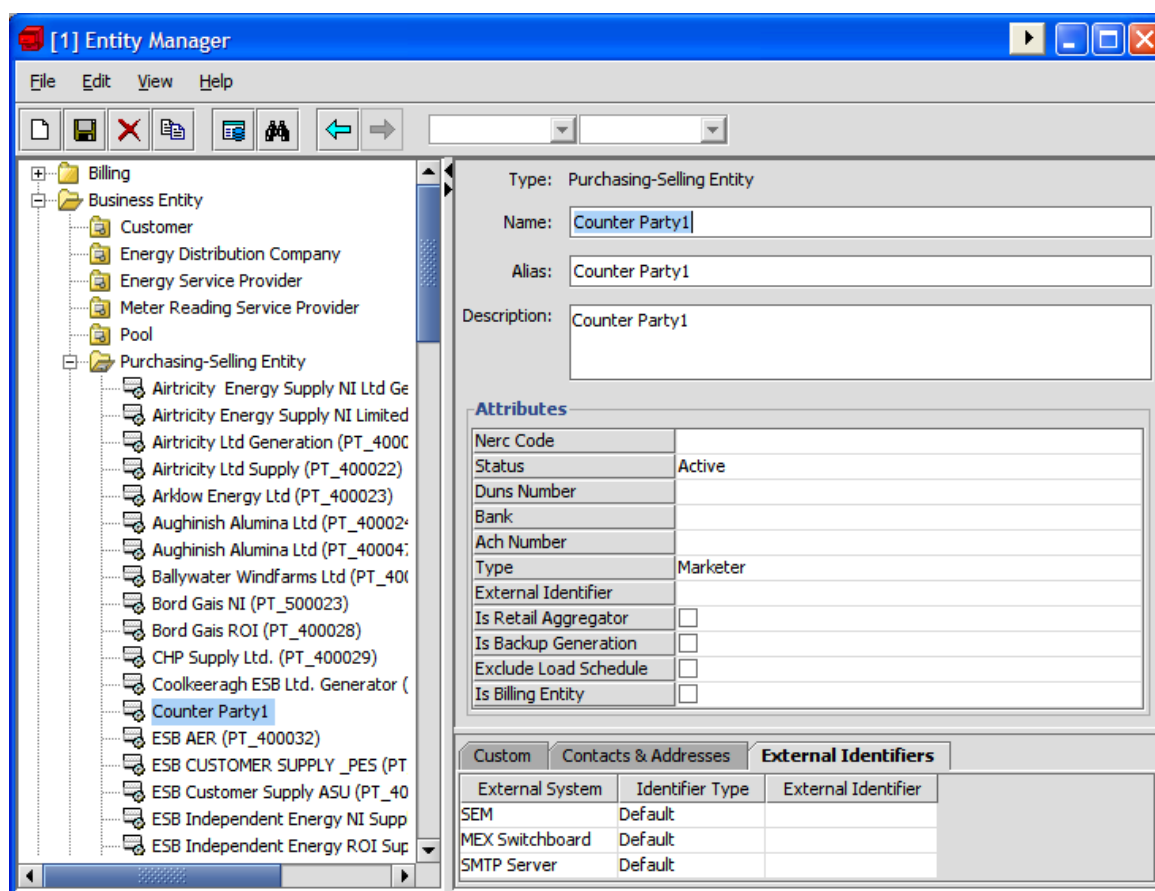
Chapter 2: Entity Setup for CfDs

Before CfD contracts or deals may be entered into Market Operations, certain entities must be configured. This section details that configuration.

2.1 Counterparties

Counterparties are purchasing-selling entities, and correspond to the buyer or seller of a CfD deal. As part of SEM configuration, Market Operations contains the full list of SEM participants as PSEs. These may be used as counterparties, or counterparty PSEs may be created specifically for a particular CfD contract.

To create a PSE, open the Entity Manager from the Tools menu, and select the Purchasing-Selling Entity folder under Business Entity.



- Counterparty PSEs only require assignment of a **Name** attribute.
- Any SEM PSE may be used as a CfD counterparty.

2.2 Billing Entity PSEs

CfDs have a "sense" of cash flow, where if a trade represents an asset for one counterparty it will represent a liability to the other counterparty. Setting the **Invoicing Party** attribute of the CfD contract to either the **buyer** or the **seller** determines this representation. More simply put, the invoicing party is "me", and is typically the same for all CfD contracts in Market Operations. The only case where multiple CfD invoicing parties will exist is when Market Operations must present invoices and exposure reports from the point of view of both the buyer and the seller.

By checking the **Is Billing Entity** attribute for the PSE, several other attributes related to settlement and invoicing may be set. While any SEM PSE may be used as a CfD counterparty, SEM billing entity PSEs should not be used as CfD billing entities.

To add a Billing Entity, create a new Purchasing-Selling Entity, and assign it a Name, Alias and Description. Check the "Is Billing Entity" attribute, then set the following attributes:

- **Time Zone:** EDT
- **Statement Interval:** Month
- **Invoice Interval:** Month
- **Week Begin:** First of Month
- **Invoice Line Item Option:** By Component

[1] Entity Manager

File Edit View Help

Type: Purchasing-Selling Entity

Name: CFD:NIE PPB (PY_000034)

Alias: PY_000034

Description: CFD:NIE PPB Billing Entity

Attributes

Nerc Code	
Status	Active
Duns Number	
Bank	
VAT Reg Number	99
Type	IPP
External Identifier	PY_000034
Is Retail Aggregator	<input type="checkbox"/>
Is Backup Generation	<input type="checkbox"/>
Exclude Load Schedule	<input type="checkbox"/>
Is Billing Entity	<input checked="" type="checkbox"/>
Time Zone	EDT
Statement Interval	Month
Invoice Interval	Month
Week Begin	First of Month
Invoice Line Item Option	By Product-Component

Custom Contacts & Addresses External Identifiers

Attribute	Begin Date	End Date	Value	Entry Date
SAP Cost ...	1/1/1900			8/13/2008
SAP Inter...	1/1/1900			8/13/2008

2.2.1 Counterparty Address and VAT Reg Number

Before generating an invoice, update the Counterparty Address and VAT reg number. To add an address, open the Entity Manager from the Tools menu, and select the **Address** folder under **Directory**. Add a new address as shown below.

The screenshot shows the Entity Manager window with the 'Address' entity selected under the 'Directory' folder. The 'Name' field is set to 'Counterparty Address'. The 'Attributes' section shows the following values:

Attribute	Value
Street	123 Street
Country	Country
State/Province	State
City	City
Postal Code	0000000
External Identifier	

Then, open the Entity Manager from the Tools menu and select the **Purchasing-Selling Entity** folder under **Business Entity**. Assign the address in the **Contacts & Addresses** tab for the "Invoice Primary" category and VAT Reg number in the "VAT Reg Number" attribute field for the counterparty.

The screenshot shows the Entity Manager window with the 'Purchasing-Selling Entity' selected under the 'Business Entity' folder. The 'Name' field is set to 'CFD: ESBi'. The 'Attributes' section shows the following values:

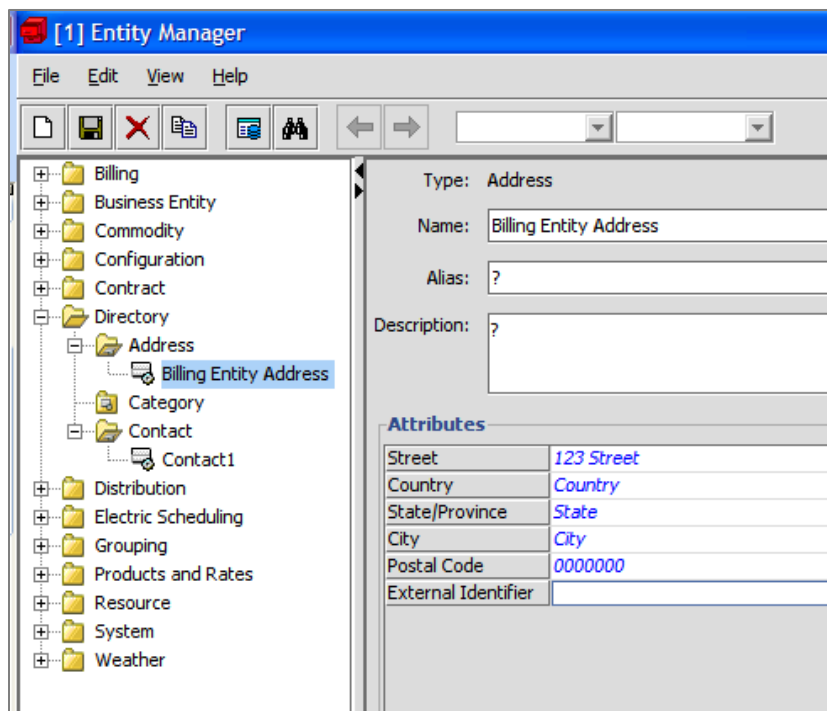
Attribute	Value
Nerc Code	
Status	Active
Duns Number	
Bank	
VAT Reg Number	123456
Type	IPP
External Identifier	
Is Retail Aggregator	<input type="checkbox"/>
Is Backup Generation	<input type="checkbox"/>
Exclude Load Schedule	<input type="checkbox"/>
Is Billing Entity	<input type="checkbox"/>

The 'Contacts & Addresses' tab is selected, showing the following table:

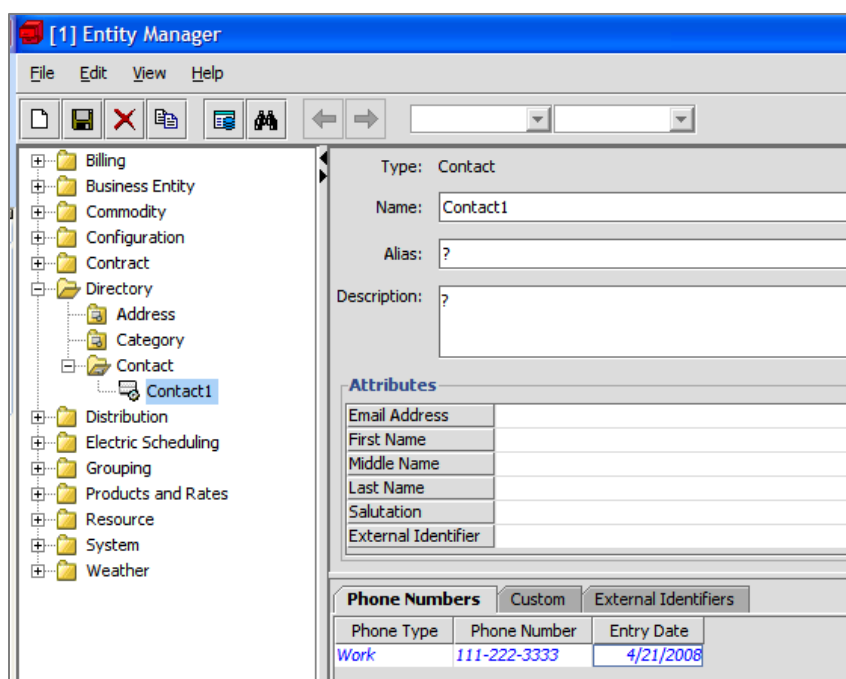
Category	Contact	Address	Entry Date
Invoice Primary	(None Av...	Counterparty Address	
Invoice Secondary			
Billing			
Payment			
Locale			

2.2.2 Billing Entity Address, Phone Number and VAT Reg Number

Before generating an invoice, update the Billing Entity address, phone number and Vat Reg. Number. To add an address, open the Entity Manager from the Tools menu, and select the **Address** folder under **Directory**. Add a new address as shown below.



To add phone number, open the Entity Manager from the Tools menu, and select the **Contact** folder under **Directory**. Create a new Contact and click the **Save** button. Assign the phone number on the **Phone Numbers** tab for "Work" Phone Type and save the changes as shown below.



Then, open the Entity Manager from the Tools menu and select the **Purchasing-Selling Entity** folder under **Business Entity**. Assign the address and contact in the **Contacts & Addresses** tab for the "Invoice Primary" category and VAT Reg number in the "VAT Reg Number" attribute field for the billing entity.

The screenshot shows the Entity Manager application with the following details:

- Entity Manager [1]** window with menu: File, Edit, View, Help.
- Left Panel (Tree View):**
 - Billing
 - Business Entity
 - Customer
 - Energy Distribution Company
 - Energy Service Provider
 - Meter Reading Service Provider
 - Pool
 - Purchasing-Selling Entity (selected)
 - (EIRGRID)
 - (PT_400039)
 - (PT_500038)
 - Airtricity Energy Supply NI Ltd Gen
 - Airtricity Energy Supply NI Ltd Gen
 - Airtricity Energy Supply NI Limited (I
 - Airtricity Ltd Generation (PT_40002
 - Airtricity Ltd Generation (PY_00002
 - Airtricity Ltd Supply (PT_400022)
 - Arklow Energy Ltd (PT_400023)
 - Arklow Energy Ltd (PY_000023)
 - Aughinish Alumina Ltd (PT_400024)
 - Aughinish Alumina Ltd (PT_400047)
 - Aughinish Alumina Ltd (PY_000024)
 - Ballywater Windfarms Ltd (PT_4000
 - Ballywater Windfarms Ltd (PY_0000
 - Bord Gais NI (PT_500023)
 - Bord Gais NI (PT_500037)
 - Bord Gais ROI (PT_400028)
 - Bord Gais ROI (PY_000027)
 - CFD: Airtricity
 - CFD: Bord Gais
 - CFD: ESBI
 - CFD: Energia
 - CFD: NIE PPB (selected)
- Right Panel (Form):**
 - Type: Purchasing-Selling Entity
 - Name: CFD: NIE PPB
 - Alias: ?
 - Description: ?
 - Attributes:**

Nerc Code	
Status	Active
Duns Number	
Bank	
VAT Reg Number	GB 123 456 789
Type	IPP
External Identifier	
Is Retail Aggregator	<input type="checkbox"/>
Is Backup Generation	<input type="checkbox"/>
Exclude Load Schedule	<input type="checkbox"/>
Is Billing Entity	<input checked="" type="checkbox"/>
Time Zone	EDT
Statement Interval	Day
Invoice Interval	Month
Week Begin	First of Month
Invoice Line Item Option	By Product-Component
 - Contacts & Addresses Tab:**

Category	Contact	Address	Entry Date
Invoice Primary	Contact1	Billing Entity Address	4/21/2008
Invoice Secondary			
Billing			
Payment			
Locale			

2.3 Invoicing Contracts

Difference payments are calculated not per contract, but per billing entity. This can be seen in the list of entities in the Calculate Billing dialog – these are billing entity PSEs, rather than contracts. As a result, the relationship between billing entity, product, and component must be unique. For CfD contracts this results in the somewhat counter-intuitive restriction that CfD contracts should not have the CfD product or the CfD component assigned.

The recommended approach to dealing with this restriction is to create invoicing contracts. These contracts will only maintain the assignment of the CfD product and component to the Viridian billing entity.

An example for using an invoicing contract is the need to calculate difference payments, and subsequently generate invoices, for DC and NDC CfDs held between ESB PGEN and NIE Supply in Supply's instance of Market Operations. The invoicing contract is a new contract (named, for example, CfD: ESB PGEN). The only attributes required for this contract are begin and end dates, the billing entity, and the assignment of the product named CfD Products and the component named CFD. This setup is shown in the screenshot below.

The screenshot shows the [1] Entity Manager window with the following details:

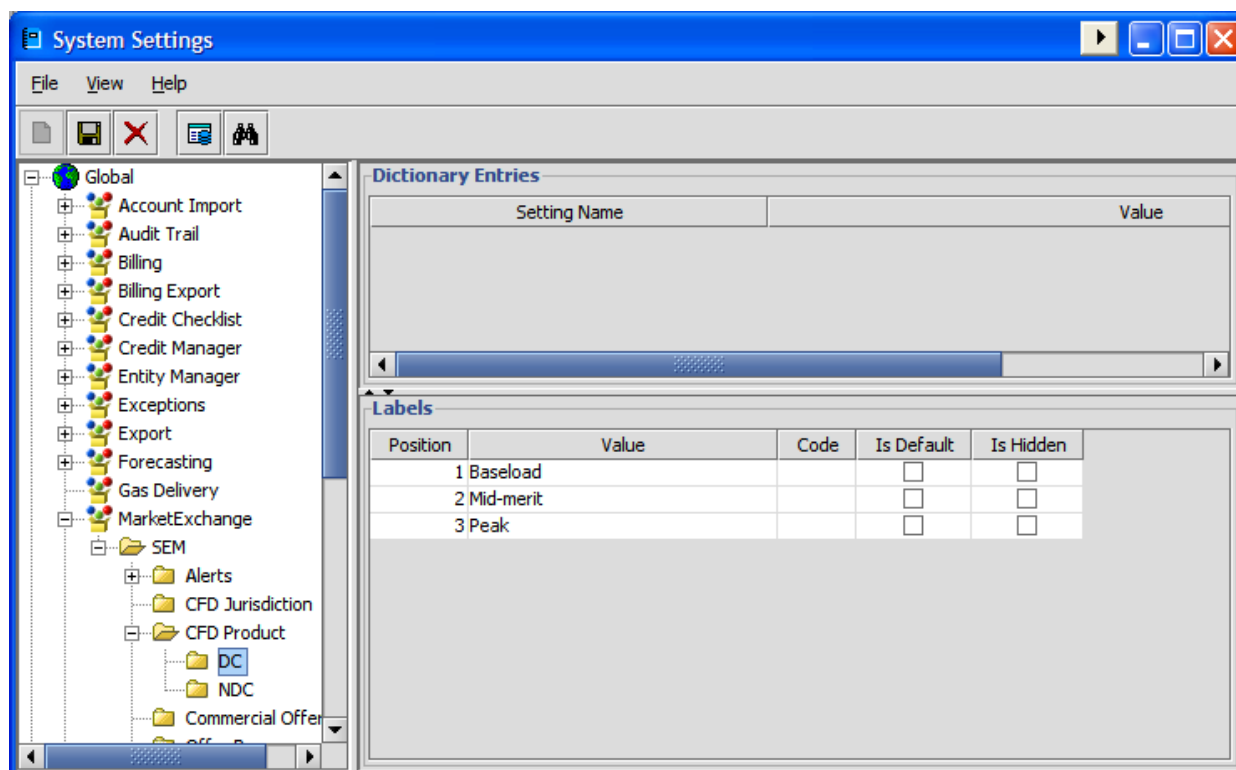
- Type:** Wholesale Contract
- Name:** CFD: NIE Supply
- Alias:** CFD: NIE Supply
- Description:** Invoicing contract for all Supply CfDs
- Attributes:**
 - Status: Active
 - Begin Date: 11/1/2007
 - End Date: 12/31/9999
 - Is Evergreen: ☐
 - Type: Supply
 - Billing Entity: CFD: NIE Supply (PY_000035)
- Products and Components:**

Product	Component	Begin Date	End Date	Entry Date
CfD Products	CFD	11/1/2007		9/29/2008

Although there will be at least one, and likely several, CfD contracts created as a result of entries on the CfD Contracts tab, this is the only contract with NIE Supply as the billing entity that should have the CfD product and component assigned to it. CfD contracts created from the Contracts report on the CfD tab do not (and should not) have this product or component assigned – doing so will prevent the difference payment calculation from running.

2.4 CfD Product Types

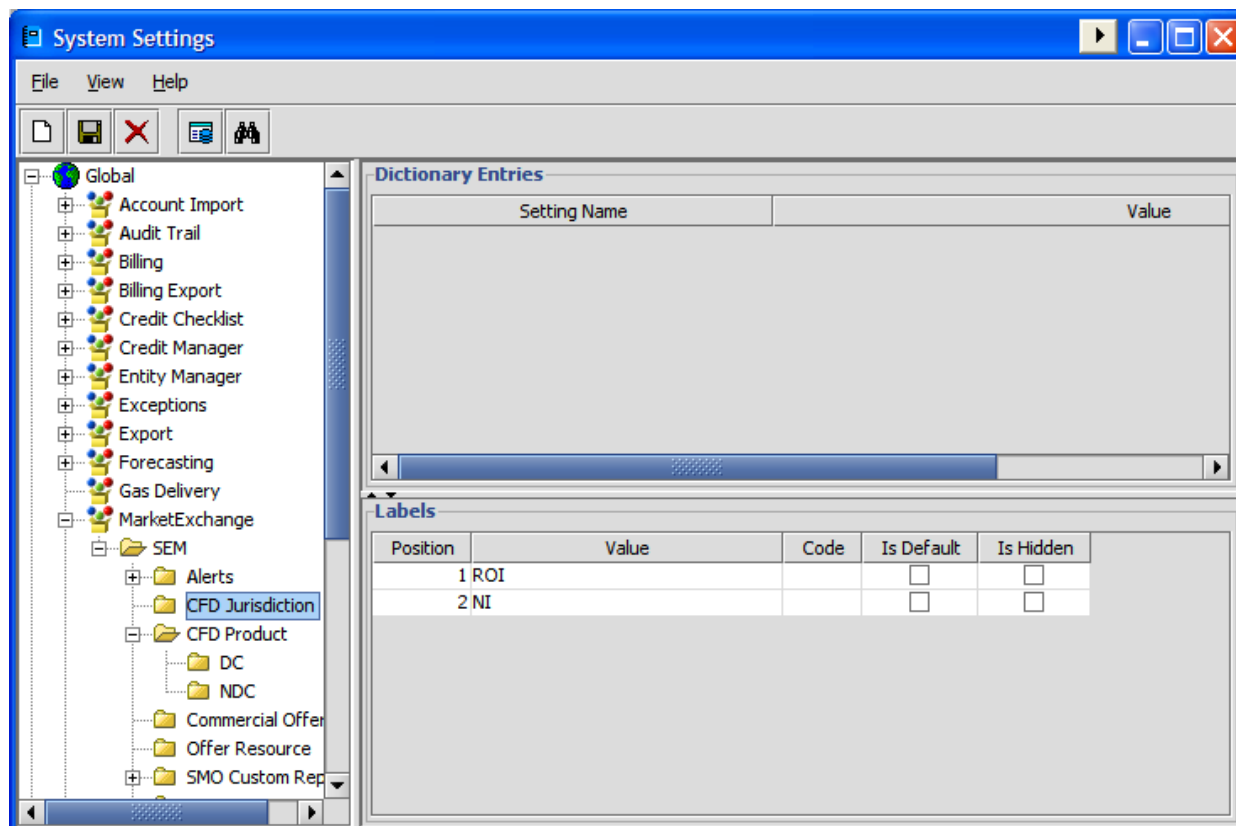
Product Types are labels with implications for the deal shape. The list of Product Types may be extended or edited via the System Settings dialog, under the Global > MarketExchange > SEM > CFD Product key. Product types are specific to either Directed Contracts (DC) or Non-Directed Contracts (NDC). Use the right-click "Insert Row" option in the lower Labels grid to add a new product and save your changes.



These entries populate the list of product types available in the Deal Entry screen. Changing the name of a product type in System Settings will not change the product name for any deals using that product.

2.5 Defining Jurisdictions

On the System Settings screen, under Global > MarketExchange > SEM > CFD Jurisdiction is where the settings for various jurisdictions reside. NI and ROI jurisdictions are provided by default. Use the right-click "Insert Row" option in the lower Labels grid to add a new jurisdiction.



These entries populate the list of jurisdictions available in the contract entry screen. Changing the name of a jurisdiction in System Settings will not change the jurisdiction for any contracts already using that jurisdiction.

Chapter 3: Managing CfD Contracts and Deals

The CfD tab contains four reports for entering contract and deal configuration information. To completely specify a trade, use the following workflow:

1. Configure counterparty and billing entity PSEs
2. Configure the invoicing contract
3. Add jurisdictions and product types
4. Add ESTSEM coefficient data for the product types under the ESTSEM subtab
5. Create schedule fill templates to define deal shapes on the Schedule Fill Template subtab
6. Create a contract under the Contracts subtab
7. Create a deal in the Deal Capture report under the Deal Capture subtab
8. Apply schedule fill templates as needed in the CfD Terms report under the Deal Capture subtab

3.1 Contracts

Name	Contract Number	Buyer	Seller	Invoicing Party	Trade Type	Begin Date	End Date	Agreement Type	Currency	Jurisdiction	Execution Date	Hedge Type	Wt
ESBSG DC 2007/8 Baseload	1	CfD: NIE Supply (PY_000035)	CfD: ESB GEN (PY_000030)	CfD: NIE Supply (PY_000035) DC		11/1/2007	9/30/2008 Two-way	EUR	ROI		6/1/2007 Hedged		
ESBSG DC 2007/8 MM	2	CfD: NIE Supply (PY_000035)	CfD: ESB GEN (PY_000030)	CfD: NIE Supply (PY_000035) DC		11/1/2007	9/30/2008 Two-way	EUR	ROI		6/1/2007 Hedged		
Energia NDC 2007/8 MM	6	CfD: NIE Supply (PY_000035)	CfD: Vindan Energy Limite...	CfD: NIE Supply (PY_000035) NDC		11/1/2007	9/30/2008 Two-way	EUR	NE		7/31/2007 Hedged		
Energia NDC 2007/8 MM2	7	CfD: NIE Supply (PY_000035)	CfD: Vindan Energy Limite...	CfD: NIE Supply (PY_000035) NDC		11/1/2007	9/30/2008 Two-way	EUR	NE		7/31/2007 Hedged		
Energia NDC 2007/8 Peak	8	CfD: NIE Supply (PY_000035)	CfD: Vindan Energy Limite...	CfD: NIE Supply (PY_000035) NDC		11/1/2007	3/31/2008 Two-way	EUR	NE		7/31/2007 Hedged		
Energia NDC 2008/9 MM (EUR)	9	CfD: NIE Supply (PY_000035)	CfD: Vindan Energy Limite...	CfD: NIE Supply (PY_000035) NDC		10/1/2008	9/30/2009 Two-way	EUR	NE		5/28/2008 Hedged		
Energia NDC 2008/9 MM (GBP)	11	CfD: NIE Supply (PY_000035)	CfD: Vindan Energy Limite...	CfD: NIE Supply (PY_000035) DC		4/1/2009	9/30/2009 Two-way	GBP	NE		5/28/2008 Hedged		
Energia NDC 2008/9 Peak (EUR)	10	CfD: NIE Supply (PY_000035)	CfD: Vindan Energy Limite...	CfD: NIE Supply (PY_000035) NDC		10/1/2008	3/31/2009 Two-way	EUR	NE		5/28/2008 Hedged		
PPB NDC 2007/8 Baseload	3	CfD: NIE Supply (PY_000035)	CfD: NIE Power Procurement...	CfD: NIE Supply (PY_000035) NDC		11/1/2007	9/30/2008 Two-way	GBP	NE		7/31/2007 Hedged		
PPB NDC 2007/8 MM	4	CfD: NIE Supply (PY_000035)	CfD: NIE Power Procurement...	CfD: NIE Supply (PY_000035) NDC		11/1/2007	9/30/2008 Two-way	GBP	NE		7/31/2007 Hedged		
PPB NDC 2007/8 Peak	5	CfD: NIE Supply (PY_000035)	CfD: NIE Power Procurement...	CfD: NIE Supply (PY_000035) NDC		11/1/2007	3/31/2008 Two-way	GBP	NE		7/31/2007 Hedged		

The Contract capture report contains the counterparty and contract details around a CfD contract. Only contracts where the Begin Date and End Date overlap the date range from the toolbar are shown in the report. To add a new contract, use the right-click "Insert Row" option to add a new row, and specify the Name, Contract Number, Trade Type, Begin Date and End Date.

The following is a brief description of columns in the report:

- **Name:** The name of the contract, limited to 32 characters.
- **Contract Number:** Although denoted as a number, any text may be entered into this field to a maximum of 16 characters.
- **Buyer/Seller:** The counterparties involved in the contract.
- **Invoicing Party:** The Invoicing Party is the billing entity PSE set up during configuration of the Invoicing Contract. The Invoicing Party will be either the buyer or the seller.
- **Trade Type:** One of DC (Directed Contract) or NDC (Non-directed Contract).
- **Begin Date:** The starting date of the contract.
- **End Date:** The ending date of the contract.
- **Agreement Type:** One of Buyer pays, Seller pays or Two-way. For a Buyer Pays agreement, the seller's portion of the CfD settlement is always zero. For a Seller Pays agreement, the buyer's portion of the CfD settlement is always zero. For a Two-way agreement, the settlement amount is the net to the seller of the buyer and seller differences.
- **Currency:** One of either EUR or GBP.

- **Jurisdiction:** One of the jurisdictions defined in System Settings.
- **Execution Date:** The date the contract was signed.
- **Hedge Type:** One of Hedged or Unhedged.
- **WD to Invoice:** The number of working days after the start of the month after the billing period, on which date the invoice should be generated.
- **WD to Pay:** Number of working days the counterparty has to pay the invoice after the invoice date.
- **Receivables Cut-Off Option:** One of Last Day of Previous Month, WDx, or Until Settlement Index values unknown, as defined by the CfD contract terms.
- **WD to Receivables Cut-Off:** The number of working days used to determine forward exposure when the Receivables Cut-Off Option is WDx.
- **Credit Cover Regime:** One of Index, ESTSEM, or Percentage; determines the methodology used to calculate forward exposure.

3.2 Deal Capture and CfD Terms Entry

Contract Type	Transaction Type	Contract Name	Trade Number	Product	Start Date	End Date	Commodity
DC	Sale	DC NIE Supply - Energia	100016	Mid-merit	10/1/2008	10/31/2008	Power
DC	Sale	DC NIE Supply - Energia	100017	Mid-merit	10/1/2008	10/31/2008	Power
DC	Sale	DC NIE Supply - Energia	100018	Peak	10/1/2008	10/31/2008	Power
DC	Sale	DC NIE Supply - Energia	100019	Peak	10/1/2008	10/31/2008	Power

Month	Fill Template	Template Order	Contract Quantity	Strike Price
OCT 2008	Mid Merit	1	92.7	74.55

The upper grid in this report is used to capture deal details and the lower grid is used to capture the CfD Terms for the deal.

The upper grid contains deal details. These values can change over time, and only the values applicable during the selected toolbar date range will be shown. To set a value to change on a particular date, use the right-click "Insert Row" option to add a new row, select the Contract Name, Transaction Type, Trade Number, Product, Start Date and End Date and the Commodity. The list of deals can be filtered using the Contract Type and the Transaction Type filter. A row can be deleted using the right-click "Delete Row" option. The Deal Capture report shows the list of CfD deals for the selected Contract Type and Transactions Type filter values, where the begin and end dates of the deal do not fall wholly outside date range on the toolbar. Authorized users may add deals by inserting rows, filling in applicable deal details, and saving the report. Authorized users may delete deals by deleting rows from the report.

3.2.1 Deal Capture

The following is a brief description of columns in the Deal Capture report:

- **Contract Type:** Given by the type of the CfD contract for this deal. For new deals, this field is blank until the deal is saved.
- **Transaction Type:** Either Purchase or Sale. New deals select the transaction type from a drop-down list.
- **Contract Name:** The contract this deal is a part of. New deals select the contract name from a drop-down list.
- **Trade Number:** The trade number is a free-form text entry field, limited to 64 characters. The trade number is stored in the Alias field of the interchange transaction for this deal.
- **Product:** The CfD product type associated with this deal. New deals select the product from a drop-down list. The elements of the list are taken from the list of CfD product types configured in System Settings, as discussed in the section titled CfD Product Types. Note that if the product types are edited in System Settings, the product for the deal must also be updated.
- **Start Date:** The start date for the deal. The start date controls the earliest month shown in the CfD Terms grid.
- **End Date:** The end date for the deal. The end date controls the latest month shown in the CfD Terms grid.
- **Commodity:** Defines the units used for the deal. New deals select the commodity from a drop-down list, which is populated from the list of IT Commodity entities in the Entity Manager.
- **Execution Date:** Date the deal was executed.
- **Trader:** Free-form text entry field, limited to 128 characters, containing the name of the trader for this deal.

- **Additional Authorizer:** Free-form text entry field, limited to 128 characters, containing the name of any additional authorizer of the deal (not required).
- **Diff Pmt Index:** The index against which to calculate the difference payment. New deals select the difference payment index from a drop-down list containing all market prices with a 30-minute interval.
- **Diff Pmt VAT Schedule:** The schedule against which to calculate VAT for this deal. New deals select the VAT schedule from a drop-down list containing all interchange transactions with a transaction type of VAT Schedule.
- **CC VAT Schedule:** The schedule against which to calculate VAT for credit exposure for this deal. New deals select the VAT schedule from a drop-down list containing all interchange transactions with a transaction type of VAT Schedule.
- **CC PI Index:** The market price used for calculations utilizing the PI variable. New deals select the CC PI index from a drop-down list containing all the market prices with an interval of Month. For instructions on creating new market prices in Market Operations, refer to the standard Market Operations user documentation.
- **CC Percentage:** If the credit cover regime for this deal's contract is Percentage, then the number entered into this field is used to scale the remaining cost at strike price as the forward exposure. If the regime is ESTSEM, then the number entered into this field should match the percentage scalar given in the legal CfD document: as of this writing, the value is 85%. New deals enter a number here between 0 and 100 inclusive. If no CC Percentage value is entered, then the forward exposure on the Required Credit Cover report will always be blank.
- **CC Index:** If the credit cover regime for this deal's contract is Index, then the index referenced here is used to calculate the forward exposure in place of the ESTSEM variable. New deals select the CC Index from a drop-down list containing all market prices with an interval of Month.
- **Netting Agreement Percentage:** Potential forward exposure for the netting agreement is scaled by the factor entered here as a number between 0 and 100. If no value is entered here, a default value of 15% is used to calculate potential future exposure for the Netting Agreement.
- **MtM Index:** The index used to calculate mark-to-market valuation of the deal. The index will typically be <ESTSEM>. New deals select the MtM index from a drop-down list containing all market prices with an interval of Month, plus ESTSEM.
- **Diff Pmt Spare Num 1:** An additional scalar entry field allowing use in reporting or calculation.
- **Diff Pmt Spare Num 2:** An additional scalar entry field allowing use in reporting or calculation.
- **Diff Pmt Spare Str:** An additional text entry field allowing use in reporting or calculation.

3.2.2 Entering and Applying CfD Terms

The CfD Terms report displays the CfD Terms for the deal, where those terms are entered using Fill Templates. These terms can change over various months and the selected toolbar date range will define which months will display. Use the right-click "Insert Row" option to add a new row, select Month, Fill Template, Template order, Contract Quantity and Strike Price. A row can be deleted using the right-click "Delete Row" option.

The following is a brief description of columns in the CfD Terms report:

- **Month:** When adding a new row, select the month and year from the drop-down list. The list is populated with quarters from the selected toolbar date range. Elements of the list are each month covering the deal term, given by the start and end dates of the deal in the Deal Capture report.
- **Fill Template:** The fill template to be used when applying the CfD Terms. Each interval in the deal's schedule will be filled with the specified contract quantity and strike price.
- **Template Order:** The order in which the fill template will be used when applying the CfD Terms. Template orders do not need to be consecutive or start at 1 or 0; they will simply be applied in ascending order to the deal's schedule.
- **Contract Quantity:** The contract quantity in MW.
- **Strike Price:** The strike price in currency unit/MWH.

3.3 Schedule Fill Templates

The Schedule Fill Template report contains the inputs used when applying the CFD Terms in the Deal Capture report. Use the right-click "Insert Row" option to add a new template. A template can be deleted using the right-click "Delete Row" option.

Schedule Fill Template													
Template Name	Start Hour	Start Interval	End Hour	End Interval	Include Holidays?	Include Hour/Interval Pattern?	M	T	W	Th	F	Sa	Su
Mid Merit	19	1	23	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

The following is a brief description of columns in the report:

- **Template Name:** The name of the schedule fill template, limited to 128 characters.
- **Start Hour:** The hour of the day to begin the schedule fill. Values between 1 and 24 are chosen from a drop-down list, where 1 represents hour-ending 0100 and 24 represents hour-ending 2400.
- **Start Interval:** The interval to begin the schedule fill, relative to the Start Hour. Values of either 1 or 2 are chosen from a drop-down list, where 1 represents the first half-hour of the Start Hour, and 2 represents the second half-hour of the Start Hour.
- **End Hour:** The hour of the day to end the schedule fill. Values between 1 and 24 are chosen from a drop-down list, where 1 represents hour-ending 0100 and 24 represents hour-ending 2400.
- **End Interval:** The interval to end the schedule fill, relative to the End Hour. Values of either 1 or 2 are chosen from a drop-down list, where 1 represents the first half-hour of the Start Hour, and 2 represents the second half-hour of the Start Hour.
- **Include Holidays?:** The Schedule Fill Template will also fill holidays (as they are defined in the Entity Manager) if this option is checked.
- **Include Hour/Interval Pattern?:** If this option is checked, the fill template will include the Hour/Interval range specified by the Start Hour/Interval and End Hour/Interval. If unchecked, the Hour/Interval range specified by the Start Hour/Interval and End Hour/Interval will be excluded when using the fill template.
- **M, T, W, Th, F, Sa, Su:** Days of the week to apply the schedule fill to.

Chapter 4: Difference Payments Calculation and Reporting

4.1 Calculating Difference Payments

Difference payments are calculated using the Calculate Billing Statement dialog. The dialog may be invoked from either the CfD Difference Payments tab or the Settlement & Billing tab. Difference payments will be calculated for each entire month given in the Time Period range. Users should select the relevant CfD Invoicing Entity from the Entity List. Because CfD invoicing uses additional functionality above Market Operations standard invoice calculation, the Generate Invoice option should not be checked here.

Calculate Billing Statement

Time Period

Begin: 10/28/2008

End: 10/28/2008

Billing Action

Calculate Billing Statement

Statement Type

Indicative

Entity List

- CFD: NIE Supply (PY_000035)
- Market Price Calculator PSE
- NIE Power Procurement Business (PY_000034)
- SEM:PT_500028:CA
- SEM:PT_500028:EN
- SEM:PT_500028:FMO
- SEM:PT_500028:MO
- SEM:PT_500034:CA
- SEM:PT_500034:EN

Refresh

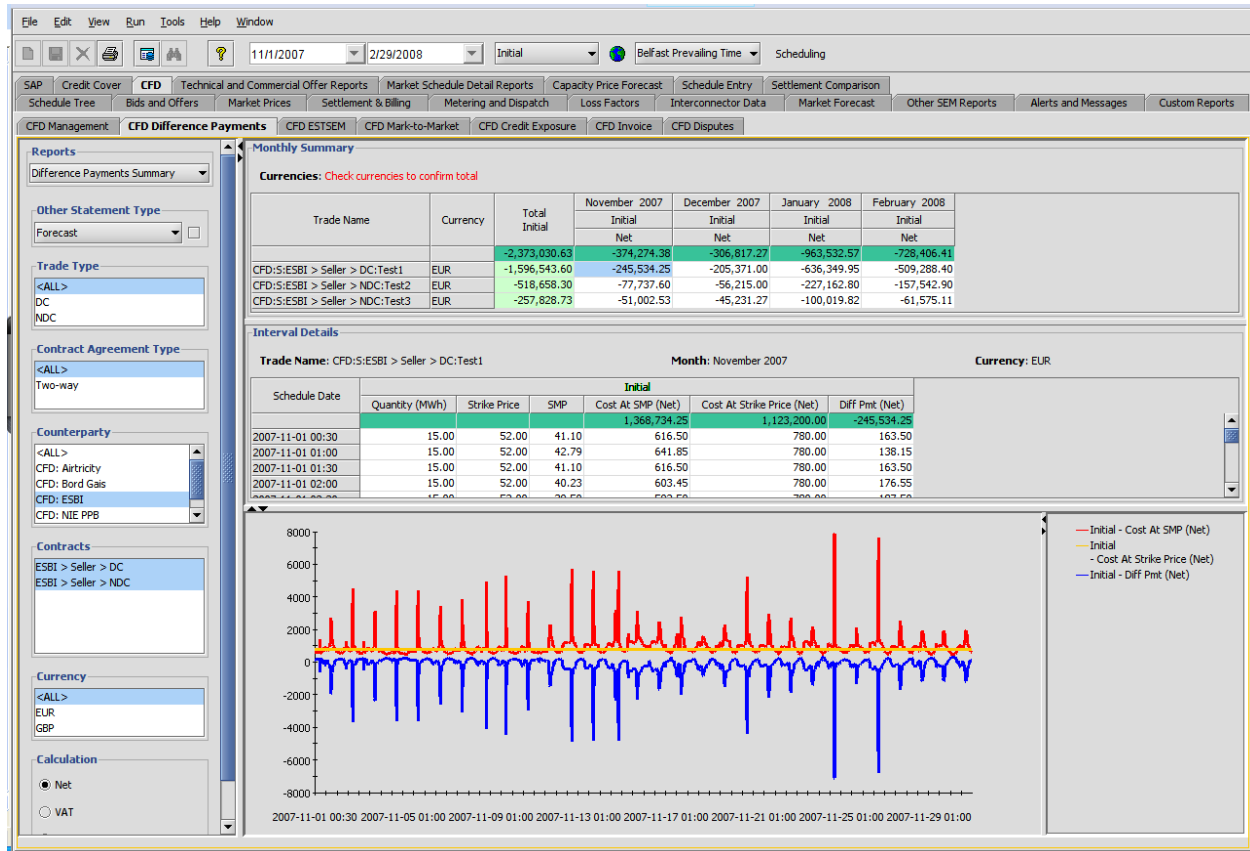
Options

☐ Generate Invoice

Run Close

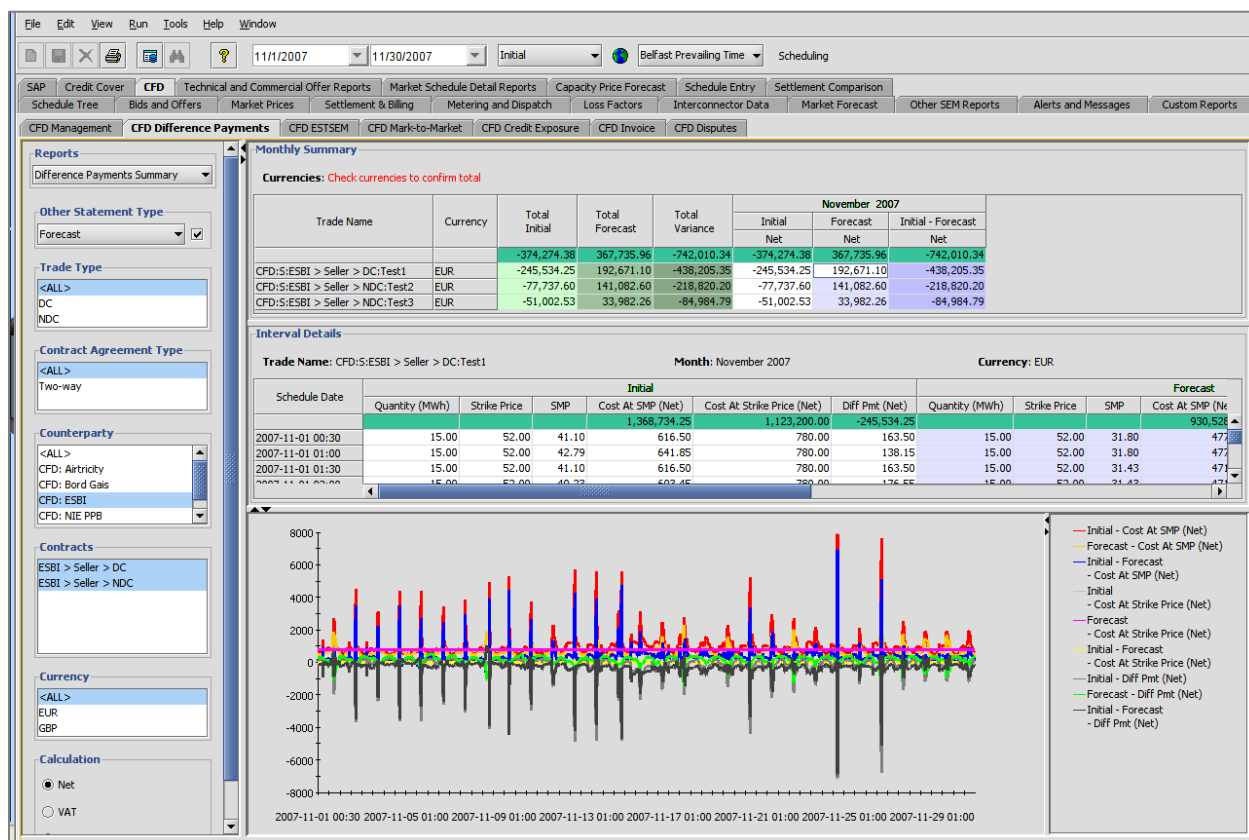
4.2 Difference Payments Summary Report

The difference payments summary report contains the results of the CFD Billing Statement Run. Below is a screen capture of the report configured to show only the Initial Statement Type, and the Net column.



The list of trades shown in the report can be filtered by Trade Type, Contract Agreement Type, Counterparty, Contract, and Currency. The "Other Statement Type" filter allows you to select another Statement Type with which to compare the results when the checkbox is checked. For example, selecting "Initial" in the toolbar, and then selecting "Indicative" in the Other Statement Type filter, with its checkbox checked, will show you a comparison between Initial and Indicative in the report. The "Calculation" filters allow you to display Net, VAT, and Gross columns for both the top and bottom grids.

Below is a screen capture displaying a comparison of Initial results to Forecast results, and showing only the "Net" columns in both grids.



- Monthly Summary:** The Monthly Summary grid in the Difference Payments report contains a row for each Trade that matches the selected filters. Each row contains a block of columns for each month for which the Billing Statement has been run that shows the total Difference Payments amount for the given month, in the currency of the Trade. Totals by Trade are shown in the Total columns on the left. Totals for all selected Trades by month are shown in the Total Row across the top.
- Interval Details:** Selecting a cell for a particular month in the Monthly Summary grid causes the Interval Details grid to be populated with the half-hourly detail for the selected Month and Trade. This grid contains the Contract Quantity, Strike Price, SMP, and Difference Payment amounts for each half-hourly interval. SMP and Difference Payment (Net, VAT, and Gross) are shown by Statement Type if an "Other Statement Type" is selected.

4.3 Summary of Trades Report

The Summary of Trades Report is shown below. It uses the standard CFD filters to filter the set of Transactions, and shows Trade Details by Month (including Contract Level, Strike Price, Contract Volume, and Cost at Strike Price) for each Transaction meeting the filter criteria. Its date range spans all months included in the Toolbar Date Range. It also summarizes the Total Contract Volume, Contract Cost, and Weighted Average Unit Price for all Months included in the date range.

File Edit View Run Tools Help Window

11/11/2007 2/29/2008 Initial Belfast Prevailing Time Scheduling

SAP Credit Cover CFD Technical and Commercial Offer Reports Market Schedule Detail Reports Capacity Price Forecast Schedule Entry Settlement Comparison

Schedule Tree Bids and Offers Market Prices Settlement & Billing Metering and Dispatch Loss Factors Interconnector Data Market Forecast Other SEM Reports Alerts and Messages Custom Reports

CFD Management CFD Difference Payments CFD ESTSEM CFD Mark-to-Market CFD Credit Exposure CFD Invoice CFD Disputes

Reports

Summary of Trades

Trade Type

<ALL>
DC
NDC

Contract Agreement Type

<ALL>
Two-way

Counterparty

<ALL>
CFD: Airtricity
CFD: Bord Gais
CFD: ESBI
CFD: NIE PPB

Contracts

Airtricity > Seller > NDC
Bord Gais > Buyer > NDC
ESBI > Seller > DC
ESBI > Seller > NDC
NIE Supply > Seller > NDC

Currency

<ALL>
EUR
GBP

Jurisdiction

<ALL>
NI
ROI

Currencies: Check currencies to confirm total

Trade Name	Trade Number	Type	Currency	Jurisdiction	TOTAL Contract Volume (MWh)	TOTAL Contract Cost	Weighted Avg Unit Price (Currency/MWh)	Nov 07	Dec
CFD:S:ESBI > Seller > DC:Test1	Test1	Baseload	EUR	ROI	138,262.00	7,554,881.60		59.47	
CFD:S:ESBI > Seller > NDC:Test2	Test2	Mid-merit Type 1	EUR	ROI	87,120.00	4,357,440.00	50.02	30.00	
CFD:S:ESBI > Seller > NDC:Test3	Test3	Mid-merit Type 2	EUR	ROI	37,510.00	2,457,060.00	65.50	20.00	
					13,632.00	840,381.60	61.65	9.47	

File Edit View Run Tools Help Window

11/1/2007

2/29/2008

Initial

Belfast Prevailing Time

Scheduling

SAP

Credit Cover

CFD

Technical and Commercial Offer Reports

Market Schedule Detail Reports

Capacity Price Forecast

Schedule Entry

Settlement Comparison

Schedule Tree

Bids and Offers

Market Prices

Settlement & Billing

Metering and Dispatch

Loss Factors

Interconnector Data

Market Forecast

Other SEM Reports

Alerts and Messages

Custom Reports

CFD Management

CFD Difference Payments

CFD ESTSEM

CFD Mark-to-Market

CFD Credit Exposure

CFD Invoice

CFD Disputes

Reports

Summary of Trades

Trade Type

<ALL>

DC

NDC

Contract Agreement Type

<ALL>

Two-way

Counterparty

<ALL>

CFD: Airtricity

CFD: Bord Gas

CFD: ESBI

CFD: NIE PPB

Contracts

Airtricity > Seller > NDC

Bord Gas > Buyer > NDC

ESBI > Seller > DC

ESBI > Seller > NDC

NIE Supply > Seller > NDC

Currency

<ALL>

EUR

GBP

Jurisdiction

<ALL>

NI

ROI

Currencies: Check currencies to confirm total

Trade Name	Contract Level (MW)				Strike Price (Currency/MWh)				Contract Volume (MWh)			
	Nov 07	Dec 07	Jan 08	Feb 08	Nov 07	Dec 07	Jan 08	Feb 08	Nov 07	Dec 07	Jan 08	Feb 08
CFD:S:ESBI > Seller > DC:Test1	30.00	30.00	30.00	30.00	52.00	52.00	48.00	48.00	21,600.00	22,320.00	22,320.00	21,600.00
CFD:S:ESBI > Seller > NDC:Test2	20.00	20.00	20.00	20.00	66.00	66.00	65.00	65.00	9,300.00	9,610.00	9,610.00	9,300.00
CFD:S:ESBI > Seller > NDC:Test3	9.47	9.23	9.42	9.45	61.00	61.00	62.30	62.30	3,408.00	3,432.00	3,504.00	3,408.00

FileEditViewRunToolsHelpWindow

11/1/20072/29/2008InitialBelfast Prevailing TimeScheduling

SAPCredit CoverCFDTechnical and Commercial Offer ReportsMarket Schedule Detail ReportsCapacity Price ForecastSchedule EntrySettlement Comparison

Schedule TreeBids and OffersMarket PricesSettlement & BillingMetering and DispatchLoss FactorsInterconnector DataMarket ForecastOther SEM ReportsAlerts and MessagesCustom Reports

CFD ManagementCFD Difference PaymentsCFD ESTSEMCFD Mark-to-MarketCFD Credit ExposureCFD InvoiceCFD Disputes

Reports

Summary of Trades

Trade Type

<ALL>

DC

NDC

Contract Agreement Type

<ALL>

Two-way

Counterparty

<ALL>

CFD: Airtricity

CFD: Bord Gas

CFD: ESBI

CFD: NIE PPB

Contracts

Airtricity > Seller > NDC

Bord Gas > Buyer > NDC

ESBI > Seller > DC

ESBI > Seller > NDC

NIE Supply > Seller > NDC

Currency

<ALL>

EUR

GBP

Jurisdiction

<ALL>

NI

ROI

Currencies: Check currencies to confirm total

Trade Name	Strike Price (Currency/MWh)			Contract Volume (MWh)				Contract Income (Cost) at Strike Price (MWh)			
	Dec 07	Jan 08	Feb 08	Nov 07	Dec 07	Jan 08	Feb 08	Nov 07	Dec 07	Jan 08	Feb 08
CFD:S:ESBI > Seller > DC:Test1	179.00	175.30	175.30	34,308.00	35,362.00	35,434.00	33,158.00	1,944,888.00	2,004,252.00	1,914,309.20	1,791,432.40
DC	52.00	48.00	48.00	21,600.00	22,320.00	22,320.00	20,880.00	1,123,200.00	1,160,640.00	1,071,360.00	1,002,240.00
CFD:S:ESBI > Seller > NDC:Test2	66.00	65.00	65.00	9,300.00	9,610.00	9,610.00	8,990.00	613,800.00	634,260.00	624,650.00	584,350.00
CFD:S:ESBI > Seller > NDC:Test3	61.00	62.30	62.30	3,408.00	3,432.00	3,504.00	3,288.00	207,888.00	209,352.00	218,299.20	204,842.40

4.4 Difference Payment Matrix Report

The Difference Payment Matrix Report is shown below. It uses the standard CFD filters to filter the set of Transactions, and shows a matrix of trading intervals of the day for each day in the date range. The data in the grid can be one of Net Difference Payment, VAT for Difference Payment, Gross Difference Payment, or Contract Volume, depending on the setting specified in the "Type" filter. The values are summed across all selected trades as a single row for the selected day.

The difference payment matrix report always displays 50 trading intervals. On a standard 24-hour day, 48 values in chronological order (0000 – 2400) are followed by two null values. On the DST short day, the report displays two values in chronological order (0000 – 0100), followed by two null or zero values to represent the "skipped" hour (0100 – 0200), followed by 44 values in chronological order (0200 – 2400), followed by two null values. On the DST long day, the report displays 48 values in chronological order (0000 – 2400, ignoring the repeated hour), followed by two values representing the repeated hour (0100' - 0200').

Day	Currency	0030	0100	0130	0200	0230	0300	0330	0400	0430	0500	0530	0600	0630	0700	0730
2007-11-01	EUR	163.50	138.15	163.50	176.55	187.50	187.65	187.80	187.80	187.80	187.80	187.80	-633.60	268.50	217.50	315.00
2007-11-02	EUR	133.65	133.65	133.65	193.05	193.05	217.50	217.50	217.50	217.50	195.15	193.05	213.15	213.15	213.15	270.80
2007-11-03	EUR	200.10	200.10	200.10	207.60	223.65	223.65	223.65	223.65	223.65	235.20	235.20	-497.25	213.00	190.35	263.05
2007-11-04	EUR	43.35	110.40	113.85	125.10	138.90	140.40	186.00	205.05	205.05	205.05	230.85	230.85	265.35	259.95	365.27
2007-11-05	EUR	231.15	235.95	237.45	239.55	259.95	265.35	265.35	265.35	265.35	265.35	265.35	265.35	265.35	193.95	224.40
2007-11-06	EUR	135.90	193.95	193.95	193.95	193.95	193.95	233.25	233.25	193.95	193.95	193.95	193.95	175.05	175.05	230.80
2007-11-07	EUR	175.05	193.95	218.10	264.75	264.75	264.75	218.10	218.10	218.10	218.10	218.10	218.10	210.45	210.45	302.00
2007-11-08	EUR	192.75	192.75	192.75	228.00	228.00	228.00	265.50	265.50	265.50	265.50	265.50	265.50	223.80	175.35	227.80
2007-11-09	EUR	136.95	184.05	185.40	187.35	196.95	241.05	241.05	241.05	241.05	241.05	201.45	194.40	216.15	143.70	229.20
2007-11-10	EUR	143.70	216.15	194.70	216.15	216.15	216.15	216.15	216.15	216.15	216.15	216.15	162.60	162.60	241.96	241.96
2007-11-11	EUR	157.65	162.60	162.60	162.60	162.60	200.55	175.65	175.65	210.00	210.00	-72.45	273.90	273.90	345.70	345.70
2007-11-12	EUR	128.25	128.25	142.50	146.25	152.10	193.50	193.50	193.50	193.50	193.50	155.70	142.65	105.45	92.60	92.60
2007-11-13	EUR	105.45	105.45	119.85	142.65	142.65	165.30	165.30	165.30	165.30	170.55	165.30	165.30	142.65	118.05	72.40
2007-11-14	EUR	118.05	132.00	142.65	155.70	156.30	198.60	181.80	181.80	181.80	156.30	156.30	156.30	126.45	97.20	92.20
2007-11-15	EUR	2.85	35.40	42.15	51.15	97.20	97.20	97.20	97.20	97.20	97.20	97.20	-11.55	-45.30	-1,261.80	-1,261.80
2007-11-16	EUR	-256.05	-256.05	-228.90	-204.15	-216.30	-215.10	-215.10	-203.40	-199.05	-212.40	-215.10	-215.10	51.75	11.85	-113.00
2007-11-17	EUR	11.85	11.85	11.85	43.95	91.05	91.05	91.05	91.05	91.05	114.90	114.90	91.05	291.90	116.55	98.51
2007-11-18	EUR	45.60	13.65	45.60	45.60	45.60	46.05	49.35	49.35	61.20	104.10	104.10	104.10	181.65	181.65	266.00
2007-11-19	EUR	-83.85	67.65	67.65	67.65	178.65	178.65	178.65	178.65	178.65	178.65	178.65	178.65	104.55	96.60	71.00
2007-11-20	EUR	7.35	37.65	45.75	45.75	45.75	202.50	202.50	158.25	118.80	202.50	202.50	202.50	104.70	96.75	45.00
2007-11-21	EUR	32.55	34.95	96.75	104.70	104.70	138.15	151.80	104.70	104.70	186.00	151.80	151.80	108.60	106.65	-145.20
2007-11-22	EUR	45.75	63.30	106.65	108.60	108.60	116.55	200.55	200.40	276.15	276.15	200.55	200.55	92.25	79.95	-248.40
2007-11-23	EUR	79.95	79.95	92.25	92.25	138.90	200.40	278.10	278.10	278.10	278.10	200.55	92.25	60.00	44.40	-49.00
2007-11-24	EUR	-262.20	16.05	44.40	50.55	50.55	102.90	102.90	209.55	286.50	286.50	286.50	286.50	209.70	157.50	184.20
2007-11-25	EUR	77.55	73.20	100.65	102.60	117.00	157.50	157.50	157.50	157.50	167.85	167.85	157.50	158.85	158.85	237.21
2007-11-26	EUR	-54.15	26.85	37.80	46.50	159.90	159.90	159.90	159.90	159.90	159.90	159.90	89.10	203.10	137.55	115.60
2007-11-27	EUR	83.25	84.90	137.55	138.45	138.45	150.45	281.25	281.25	281.25	281.25	281.25	281.25	143.10	140.10	-92.60
2007-11-28	EUR	-8.10	-7.20	-1.65	34.95	52.95	64.05	191.25	191.25	191.25	198.75	191.25	191.25	271.05	188.55	220.20
2007-11-29	EUR	134.70	186.00	188.55	202.35	257.70	271.05	274.35	274.35	274.35	274.35	271.05	271.05	178.65	178.65	115.60
2007-11-30	EUR	178.65	178.65	258.15	284.85	284.85	284.85	291.15	291.15	291.15	291.15	284.85	284.85	282.90	190.20	230.80

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Chapter 5: ESTSEM Inputs, Calculation and Reporting

5.1 Commodity Prices and Exchange Rates for ESTSEM

ESTSEM calculations are based on several commodity prices and exchange rates. Market Price entities defining these prices and rates are added to Market Operations as part of CfD functionality.

Commodity prices are updated in the Market Prices tab. As shown in the screenshot below, each commodity price has an Interval of Month, and a Market Price Type of Commodity Price. The following commodity prices are used to calculate ESTSEM:

- Forward Carbon Price in EUR
- Forward Gasoil Cargo Swaps Price in USD
- Forward Gasoil Frontline Swaps Price in USD
- Forward Gasoil Price in USD
- Forward Low Sulphur Fuel Oil Price in USD
- Forward Natural Gas Price in p/Therm

Date	Forward Carbon Price in EUR	Forward Gasoil Cargo Swaps Price in USD	Forward Gasoil Frontline Swaps Price in USD	Forward Gasoil Price in USD	Forward Low Sulphur Fuel Oil Price in USD	Forward Natural Gas Price in GBP
2008-01-01	21.9100	3.5000	772.2500		471.0000	0.5469
2008-02-01	21.9100	3.5000	772.2500		471.0000	0.5469
2008-03-01	21.9100	3.5000	772.2500		471.0000	0.5469
2008-04-01	21.9100	3.5000	745.2500		464.2500	0.4430
2008-05-01	21.9100	3.5000	745.2500		464.2500	0.4430
2008-06-01	21.9100	3.5000	745.2500		464.2500	0.4430
2008-07-01	21.9100	3.0000	738.5000		459.2500	0.4159
2008-08-01	24.3200	0.0000	1,070.2500		642.2500	0.5250
2008-09-01	24.3200	5.2500	1,075.7500		643.0000	0.5680
2008-10-01	24.3200	5.2500	1,075.7500		643.0000	0.5680

Exchange rates are updated in the Market Prices tab. As shown in the screenshot below, each exchange rate has an interval of Day, and a Market Price Type of Exchange Rate. The following exchange rates are used to calculate ESTSEM:

- ECB Exchange Rate (GBP/EUR)
- Exchange Rate: Euro to USD
- Exchange Rate: GBP to USD

Date	ECB Exchange Rate (GBP/EUR)	Exchange Rate: Euro to USD	Exchange Rate: GBP to USD
2007-11-01	0.6924	1.4423	
2007-11-02	0.6951	1.4479	
2007-11-03			
2007-11-04			
2007-11-05	0.6962	1.4488	
2007-11-06	0.6968	1.4547	
2007-11-07			
2007-11-08	0.6962	1.4666	
2007-11-09			
2007-11-10			
2007-11-11			
2007-11-12	0.7044	1.4579	
2007-11-13			
2007-11-14	0.7104	1.4700	
2007-11-15			
2007-11-16	0.7162	1.4651	
2007-11-17			
2007-11-18			
2007-11-19			
2007-11-20	0.7172	1.4785	
2007-11-21	0.7197	1.4814	

5.2 ESTSEM Coefficients

Alerts and Messages		Custom Reports		SAP	Credit Cover	CFD	Technical and Commercial Offer Reports			Market Schedule Detail Reports			Capacity Price Forecast		Schedule	
Schedule Tree			Bids and Offers			Market Prices			Settlement & Billing			Metering and Dispatch				
CFD Management		CFD Difference Payments		CFD ESTSEM		CFD Mark-to-Market		CFD Credit Exposure		CFD Invoice		CFD Disputes				
<div>Reports</div> <div>ESTSEM Coefficients</div>																
Product		Quarter		Alpha		Beta		Gamma		Delta		Epsilon		Zeta		Eta
Baseload		Q4 2007		26.59000		36.41000		-0.03038		0.08980		0.01167		0.51130		0.00000
Baseload		Q1 2008		22.62000		39.89000		-0.02098		0.07911		0.00534		0.61160		0.00000
Baseload		Q2 2008		-7.74000		93.70000		0.02916		0.00000		0.00491		1.88750		-2.59020
Baseload		Q3 2008		1.68000		76.71000		0.02614		0.00000		0.00426		1.88660		-2.52620
Baseload		Q4 2008		7.54000		66.14000		0.00768		0.00000		0.00435		0.50370		0.00000
Mid-merit Type 1		Q4 2007		36.92000		26.68000		-0.03197		0.12235		0.01911		0.56420		0.00000
Mid-merit Type 1		Q1 2008		35.62000		28.58000		-0.04534		0.14238		0.00837		0.67590		0.00000
Mid-merit Type 1		Q2 2008		-15.45000		117.55000		0.04178		0.00000		0.00710		2.52290		-3.80530
Mid-merit Type 1		Q3 2008		-2.73000		94.04000		0.03781		0.00000		0.00652		2.60060		-3.81480
Mid-merit Type 1		Q4 2008		7.47000		71.80000		0.02085		0.00000		0.00613		0.54490		0.00000
Peak		Q4 2007		71.01000		2.52000		-0.04106		0.21422		0.01671		0.68630		0.00000
Peak		Q1 2008		57.63000		6.07000		-0.06377		0.22704		0.01042		0.80910		0.00000
Peak		Q2 2008		0.00000		0.00000		0.00000		0.00000		0.00000		0.00000		0.00000
Peak		Q3 2008		0.00000		0.00000		0.00000		0.00000		0.00000		0.00000		0.00000
Peak		Q4 2008		106.01000		-15.01000		-0.20394		0.30136		0.01694		0.70400		0.00000

The ESTSEM Coefficients report allows entry of various ESTSEM coefficients. These values can change over various quarters and the selected toolbar date range will show the quarters within the date range. Use the right-click "Insert Row" option to add a new row, and select Product, Quarter and the values for various coefficients. A row can be deleted using the right-click "Delete Row" option.

The following is a brief description of columns in the report:

- **Product:** Any of the DC or NDC products specified in section 2.3. New rows choose from a drop-down list of these products.
- **Quarter:** The quarters contained in the selected toolbar date range. New rows choose from an inclusive list of the quarters contained in the selected toolbar date range,
- **Alpha/Beta/Gamma/Delta/Epsilon/Zeta/Eta:** The value of the pertinent ESTSEM coefficient. Typically these coefficient values are given in the CfD agreement.

5.3 ESTSEM Calculation Results

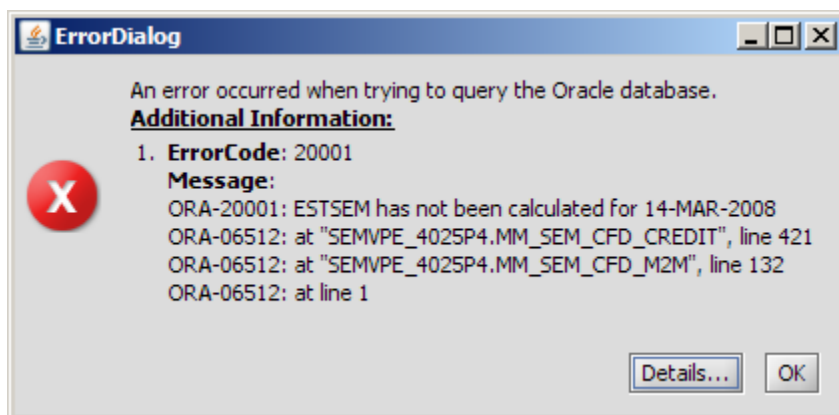
The ESTSEM Calculation Results report allows the user to calculate and display the calculated value of ESTSEM and all ESTSEM coefficient and commodity price inputs for a given assessment date. All greek coefficients are displayed as entered, and all commodity prices are shown in Euros, using the appropriate exchange rate for the assessment date. The Currency column only relates to the value of ESTSEM.

Alerts and Messages Custom Reports SAP Credit Cover CFD Technical and Commercial Offer Reports Market Schedule Detail Reports Capacity Price Forecast Schedule Entry Settlement Comparison Interconnector Data Market Forecast OK																	
CFD Management CFD Difference Payments CFD ESTSEM CFD Mark-to-Market CFD Credit Exposure CFD Invoice CFD Disputes																	
Reports ESTSEM Calculation Results																	
Calculate ESTSEM Calculate ESTSEM Assessment Date 6/10/2008 Currency EUR GBP																	
ESTSEM: $\alpha + \beta \text{NatGas} + \gamma \text{LowSulph} + \delta \text{NatGas} \text{LowSulph} + \epsilon (\text{GasolFrontline} + \text{GasolCargo}) + \zeta \text{Carbon} + \eta \text{NatGas} \text{Carbon}$																	
Assessment Date	Product	Price Month	Currency	ESTSEM	Alpha	Beta	Gamma	Delta	Epsilon	Zeta	Eta	Nat Gas	Low Sulphur Fuel	Gasol (Frontline)	Carbon	Gasol (Cargo)	
6/10/2008 Baseload		11/1/2007 EUR		65.0938	26.59000	36.41000	-0.03038	0.08980	0.01167	0.51130	0.00000	0.623	305.560	510.423	0.070	0	
6/10/2008 Baseload		12/1/2007 EUR		63.1325	26.59000	36.41000	-0.03038	0.08980	0.01167	0.51130	0.00000	0.623	305.560	510.423	0.070	3.386	
6/10/2008 Baseload		1/1/2008 EUR		76.4640	22.62000	39.89000	-0.02098	0.07911	0.00534	0.61160	0.00000	0.691	303.787	498.088	21.910	2.257	
6/10/2008 Baseload		2/1/2008 EUR		76.4640	22.62000	39.89000	-0.02098	0.07911	0.00534	0.61160	0.00000	0.691	303.787	498.088	21.910	2.257	
6/10/2008 Baseload		3/1/2008 EUR		76.4640	22.62000	39.89000	-0.02098	0.07911	0.00534	0.61160	0.00000	0.691	303.787	498.088	21.910	2.257	
6/10/2008 Baseload		4/1/2008 EUR		65.3872	-7.74000	93.70000	0.02916	0.00000	0.00491	1.88750	-2.59020	0.559	299.433	480.673	21.910	2.257	
6/10/2008 Baseload		5/1/2008 EUR		65.3872	-7.74000	93.70000	0.02916	0.00000	0.00491	1.88750	-2.59020	0.559	299.433	480.673	21.910	2.257	
6/10/2008 Baseload		6/1/2008 EUR		65.3872	-7.74000	93.70000	0.02916	0.00000	0.00491	1.88750	-2.59020	0.559	299.433	480.673	21.910	2.257	
6/10/2008 Baseload		7/1/2008 EUR		64.0141	1.68000	76.71000	0.02614	0.00000	0.00426	1.88660	-2.52620	0.525	296.208	476.319	21.910	1.935	
6/10/2008 Baseload		8/1/2008 EUR		64.0141	1.68000	76.71000	0.02614	0.00000	0.00426	1.88660	-2.52620	0.525	296.208	476.319	21.910	1.935	
6/10/2008 Baseload		9/1/2008 EUR		64.0141	1.68000	76.71000	0.02614	0.00000	0.00426	1.88660	-2.52620	0.525	296.208	476.319	21.910	1.935	
6/10/2008 Mid-merit Type 1		11/1/2007 EUR		75.8730	36.92000	26.68000	-0.03197	0.12235	0.01911	0.56420	0.00000	0.623	305.560	510.423	0.070	0	
6/10/2008 Mid-merit Type 1		12/1/2007 EUR		75.8730	36.92000	26.68000	-0.03197	0.12235	0.01911	0.56420	0.00000	0.623	305.560	510.423	0.070	3.386	
6/10/2008 Mid-merit Type 1		1/1/2008 EUR		90.4518	35.62000	28.58000	-0.04534	0.14238	0.00837	0.67590	0.00000	0.691	303.787	498.088	21.910	2.257	
6/10/2008 Mid-merit Type 1		2/1/2008 EUR		90.4518	35.62000	28.58000	-0.04534	0.14238	0.00837	0.67590	0.00000	0.691	303.787	498.088	21.910	2.257	
6/10/2008 Mid-merit Type 1		3/1/2008 EUR		90.4518	35.62000	28.58000	-0.04534	0.14238	0.00837	0.67590	0.00000	0.691	303.787	498.088	21.910	2.257	
6/10/2008 Mid-merit Type 1		4/1/2008 EUR		74.8841	-15.45000	117.55000	0.04178	0.00000	0.00710	2.52290	-3.80530	0.559	299.433	480.673	21.910	2.257	
6/10/2008 Mid-merit Type 1		5/1/2008 EUR		74.8841	-15.45000	117.55000	0.04178	0.00000	0.00710	2.52290	-3.80530	0.559	299.433	480.673	21.910	2.257	
6/10/2008 Mid-merit Type 1		6/1/2008 EUR		74.8841	-15.45000	117.55000	0.04178	0.00000	0.00710	2.52290	-3.80530	0.559	299.433	480.673	21.910	2.257	
6/10/2008 Mid-merit Type 1		7/1/2008 EUR		74.0592	-2.73000	94.04000	0.03781	0.00000	0.00652	2.60060	-3.81480	0.525	296.208	476.319	21.910	1.935	
6/10/2008 Mid-merit Type 1		8/1/2008 EUR		74.0592	-2.73000	94.04000	0.03781	0.00000	0.00652	2.60060	-3.81480	0.525	296.208	476.319	21.910	1.935	

The data shown is filtered by Assessment Date and the selected Currency. The equation used for ESTSEM is shown above the grid. Note that ESTSEM does not include the Pi coefficient, as it will be added in calculations when it is needed.

To calculate ESTSEM, select an Assessment Date (which should be "today" in most cases) and click the **Calculate ESTSEM** button. ESTSEM will be calculated starting 14 months prior to the month of the assessment date, through the last month of the last quarter where ESTSEM coefficients have been entered.

Any reports that rely on ESTSEM will use the ESTSEM with an Assessment Date of "today" (unless the report is being run before 6am, in which case it will look for yesterday's ESTSEM). If you try to view a report that relies on ESTSEM, but the ESTSEM is not available for the appropriate Assessment Date, an error will be raised. This error is shown below.



Running the ESTSEM calculation for the date in the error message (in this case 14-MAR-2008) will allow the report in question to be viewed.

5.4 Automatic Recalculation of ESTSEM

ESTSEM can always be manually calculated for a given assessment date via the **Calculate ESTSEM** button on the CfD ESTSEM report. To schedule the calculation, add the following lines to the tex.dispatch file:

```
<taskname>.storedProcedure = MM_SEM_CFD_CREDIT.FILL_ESTSEM_DAILY  
<taskname>.ASSESSMENT_DATE = = now
```

Chapter 6: Mark-to-Market Reporting

The Mark-to-Market Report shows the results of the Mark-to-Market calculations. It is shown in the screen capture below.

File Edit View Run Tools Help Window

The Mark to Market Report utilizes a set of filters consistent with other CfD screens reports with one exception – the END DATE selection on the toolbar (3/14/2008 in the screen-shot above) is, essentially, ignored. The report automatically displays information for the period spanning the first day of the month for a selected BEGIN DATE (2/25/2008) through the contractual end of the selected Trades (*Evaluation Period*).

The Mark to Market Report requires ESTSEM calculation results. An error message will be displayed to the end-user, if ESTSEM is not available (see ESTSEM section of this document).

The Mark to Market report provides a master/detail view with a summary of Trade information residing in the top section (M2M Summary) and details below (Trade Valuation Details):

M2M Summary displays a list of Trades matching filter selection criteria with all applicable Trade attributes (Contract, Trade Name, DC/NDC, Type, Currency, Buyer, Seller, Product, VAT), Grand Total Net, VAT and Gross starting from the beginning of the *Evaluation Period* through the end of each Trade. In addition, the report displays monthly sub-totals for Net, VAT and Gross for each month in the *Evaluation Period*.

Trade Valuation Details displays half-hourly determinants and Net Valuation for the selected Trade for the entire *Evaluation Period*.

All calculated results (Net, VAT and Gross) are color-coded based on the sign of the result, with green representing positive values and red representing negative ones.

The summary and detail sections can both be exported into CSV format in a manner consistent with the rest of the application.

Chapter 7: Credit Exposure and Accruals

7.1 Required Credit Cover

The Required Credit Cover Report is shown below. It uses the standard CFD filters to filter the set of Transactions, and shows Consumed Not Billed, Billed Not Paid, Forward Exposure, and Required Credit Cover for each Transaction that meets the filter criteria.

File Edit View Run Tools Help Window

11/1/2007 2/29/2008 Initial Belfast Prevailing Time Scheduling

SAP Credit Cover CFD Technical and Commercial Offer Reports Market Schedule Detail Reports Capacity Price Forecast Schedule Entry Settlement Comparison

Schedule Tree Bids and Offers Market Prices Settlement & Billing Metering and Dispatch Loss Factors Interconnector Data Market Forecast Other SEM Reports Alerts and Messages Custom Reports

CFD Management CFD Difference Payments CFD ESTSEM CFD Mark-to-Market **CFD Credit Exposure** CFD Invoice CFD Disputes

Reports

Required Credit Cover

Trade Type

<ALL>
DC
NDC

Contract Agreement Type

<ALL>
Two-way

Counterparty

<ALL>
CFD: Airtricity
CFD: Bord Gais
CFD: ESBI
CFD: NIE PPB

Contracts

Airtricity > Seller > NDC
Bord Gais > Buyer > NDC
ESBI > Seller > DC
ESBI > Seller > NDC
NIE Supply > Seller > NDC

Currency

<ALL>
EUR
GBP

Currencies: Check currencies to confirm total

Transaction Name	Currency	Consumed Not Billed	Billed Not Paid	Forward Exposure	Net Credit Cover	VAT	Gross Credit Cover	Dispute Text
			728,406.41	838,181.76	1,566,588.17	211,489.41	1,778,077.58	
CFD:ESBI > Seller > DC:Test1	EUR		509,288.40	711,152.90	1,220,441.30	164,759.58	1,385,200.88	
CFD:ESBI > Seller > NDC:Test2	EUR		157,542.90	79,745.02	237,287.92	32,033.87	269,321.79	
CFD:ESBI > Seller > NDC:Test3	EUR		61,575.11	47,283.84	108,858.95	14,695.96	123,554.91	

7.2 Credit Cover Date Ranges

The Credit Cover Date Ranges Report is shown below. This report provides some transparency into the other Credit Reports by showing the credit-related date information currently in use. First, it has three labels that show the Last day for which the SMP is currently available, the ESTSEM Assessment Date that is in use, and the Assessment Date for ESTSEMM that is in use. In the grid, it shows the date range for the Billed Not Paid and Consumed Not Billed period for each Transaction, as well as the beginning of the Future Period. All credit cover date ranges are calculated based on the system date of the Market Operations database ("today").

Reports
Credit Cover Date Ranges

Trade Type
<ALL>
DC
NDC

Contract Agreement Type
<ALL>
Buyer pays
Two-way

Counterparty
<ALL>
CFD: Airbricity
CFD: Bord Gais
CFD: Energia
CFD: ESBI

Contracts
Airbricity > Seller > NDC
AM Test
Bord Gais > Buyer > NDC
DST Test Contract
ESBI > Seller > DC
ESBI > Seller > NDC

Currency
<ALL>
EUR
GBP

Last Day for Which SMP is Available: 29/02/2008
Current ESTSEM Date: 11/03/2008
Current ESTSEMM Date: 15/02/2008

Transaction Name	Receivables Cutoff Option	Billed Not Paid Begin	Billed Not Paid End	Consumed Not Billed Begin	Consumed Not Billed End	Future Begin
CFD:Pi:Bord Gais > Buyer > NDC:Test7	Until Index Unknown	2/1/2008	2/29/2008			3/1/2008
CFD:Si:Airbricity > Seller > NDC:Test4	Until Index Unknown	2/1/2008	2/29/2008			3/1/2008
CFD:Si:Airbricity > Seller > NDC:Test5	Until Index Unknown	2/1/2008	2/29/2008			3/1/2008
CFD:Si:ESBI > Seller > DC:Test1	Until Index Unknown	2/1/2008	2/29/2008			3/1/2008
CFD:Si:ESBI > Seller > NDC:Test2	Until Index Unknown	2/1/2008	2/29/2008			3/1/2008
CFD:Si:ESBI > Seller > NDC:Test3	Until Index Unknown	2/1/2008	2/29/2008			3/1/2008

- **Receivables Cutoff Option:** This field duplicates the receivables cutoff option for the deal, as it was entered on the Deal Capture report.
- **Billed Not Paid Begin:** The Billed Not Paid Begin date depends on where "today" falls relative to the invoice date and the pay date. If "today" is between the invoice date and the invoice pay date, then the Billed Not Paid Begin date is the first day of the previous month. Otherwise, the Billed Not Paid Begin date is blank.
- **Billed Not Paid End:** The Billed Not Paid End date depends on where "today" falls relative to the invoice date and the pay date. If "today" is between the invoice date and the invoice pay date, then the Billed Not Paid End date is the last day of the previous month. Otherwise, the Billed Not Paid End date is blank.
- **Consumed Not Billed Begin:** The Consumed Not Billed Begin date is typically either the first day of the current month (if "today" is equal to or greater than the invoice date) or the first day of the previous month (if "today" is between the first day of the month and the invoice date). However, the Consumed Not Billed Begin date will be blank in the following cases:
 - ♦ If the Consumed Not Billed End date is the same as the Billed Not Paid End date
 - ♦ If the Consumed Not Billed End date is prior to or the same as the Consumed Not Billed Begin date
- **Consumed Not Billed End:** The Consumed Not Billed End date depends on the Receivables Cutoff Option of the deal:
 - ♦ **Until Index Unknown:** The Consumed Not Billed End date is set to the last date for which the SMP is available.

- ♦ End of Month: The Consumed Not Billed End date is set to the first day of the month following the last date for which the SMP is available.
- ♦ Working Days to Receivables Cutoff: The Consumed Not Billed End date is set to the first day of the month following the last date for which the SMP is available, plus the number of working days specified in the deal's WD to Receivables Cut-Off parameter.
- **Future Begin:** The Future Begin date also depends on the deal's Receivables Cutoff Option:
 - ♦ Until Index Unknown: The Future Begin date is set to the first day of the last month for which the SMP is available.
 - ♦ End of Month: The Future Begin date is set to the first day of the month following the last date for which the SMP is available
 - ♦ Working Days to Receivables Cutoff: The Future Begin date is set to the first day of the month following the last date for which the SMP is available, plus the number of working days specified in the deal's WD to Receivables Cut-Off parameter.

7.3 Accruals

The Accruals Report is shown below. This report displays the Receivables information for the Transactions that meet the selected filter criteria.

File Edit View Run Tools Help Window

11/1/2007 2/29/2008 Initial Belfast Prevailing Time Scheduling

SAP Credit Cover CFD Technical and Commercial Offer Reports Market Schedule Detail Reports Capacity Price Forecast Schedule Entry Settlement Comparison
Schedule Tree Bids and Offers Market Prices Settlement & Billing Metering and Dispatch Loss Factors Interconnector Data Market Forecast Other SEM Reports Alerts and Messages Custom Reports

CFD Management CFD Difference Payments CFD ESTSEM CFD Mark-to-Market **CFD Credit Exposure** CFD Invoice CFD Disputes

Reports
Accruals

Trade Type
<ALL>
DC
NDC

Contract Agreement Type
<ALL>
Two-way

Counterparty
<ALL>
CFD: Airtricity
CFD: Bord Gais
CFD: ESB
CFD: NIE PPB

Contracts
Airtricity > Seller > NDC
Bord Gais > Buyer > NDC
ESB > Seller > DC
ESB > Seller > NDC
NIE Supply > Seller > NDC

Currency
<ALL>
EUR
GBP

Currencies: Check currencies to confirm total

Transaction Name	Currency	Consumed Not Billed	Billed Not Paid	Net Accrual	VAT	Gross Accrual
CFD:S:ESB > Seller > DC:Test1	EUR		-728,406.41	-728,406.41	-96,334.86	-826,741.27
CFD:S:ESB > Seller > NDC:Test2	EUR		-509,288.40	-509,288.40	-68,753.93	-578,042.33
CFD:S:ESB > Seller > NDC:Test3	EUR		-157,542.90	-157,542.90	-21,268.29	-178,811.19
			-61,575.11	-61,575.11	-8,312.64	-69,887.75

7.4 Intra-Month Credit Cover Margin Call Threshold

The Intra-Month CC Margin Call Threshold Report is shown below. This report shows the IMCCMCTV for all Transactions that meet the filter criteria. The date of the ESTSEMM value in use can be seen on the Credit Cover Date Ranges Report described above.

Reports
Intra-Month CC Margin Call

Trade Type
<ALL>
DC
NDC

Contract Agreement T
<ALL>
Two-way

Counterparty
<ALL>
CFD: Bord Gais
CFD: ESBI
CFD: NIE PPB

Contracts
Bord Gais > Buyer > NDC
ESBI > Seller > DC
ESBI > Seller > NDC

Currency
<ALL>
EUR
GBP

Currencies: Check currencies to confirm total

Transaction Name	Currency	Consumed Not Billed	Billed Not Paid	Forward Exposure Equivalent	Net Threshold Call Value	VAT	Gross Threshold Call Value	Dispute Text
CFD:S:ESBI > Seller > DC:Test1	EUR		728,406.41	-2,308,492.94	-1,580,086.53	-213,311.68	-1,793,398.21	
CFD:S:ESBI > Seller > NDC:Test2	EUR		509,288.40	-1,564,175.74	-1,054,887.34	-142,409.79	-1,197,297.13	
CFD:S:ESBI > Seller > NDC:Test3	EUR		157,542.90	-434,099.20	-276,556.30	-37,335.10	-313,891.40	
			61,575.11	-310,218.00	-248,642.89	-33,566.79	-282,209.68	

7.5 Netting Agreement

The Netting Agreement Report is shown below. It uses the standard CFD filters to filter the set of Transactions, including only Contracts that have a Credit Cover Regime of "Netting Agreement." It shows Consumed Not Billed, Billed Not Paid, Net Receivables, Mark-to-Market, Potential Future Exposure, Indicative Forward Exposure, and Indicative Net Exposure for each Transaction that meets the filter criteria. The report has three modes of calculation: Net, VAT, and Gross.

Reports
Netting Agreement

Trade Type
<ALL>
DC
NDC

Contract Agreement Type
<ALL>
Two-way

Counterparty
<ALL>
CFD: Airtricity
CFD: Bord Gais
CFD: ESB
CFD: NIE PPB

Contracts
Airtricity > Seller > NDC
Bord Gais > Buyer > NDC
ESB > Seller > DC
ESB > Seller > NDC
NIE Supply > Seller > NDC

Currency
<ALL>
EUR
GBP

Calculation
☒ Net
☐ VAT
☐ Gross

Currencies: Check currencies to confirm total

Transaction Name	Currency	Consumed Not Billed	Billed Not Paid	Net Receivables	Mark-to-Market	Potential Future Exposure	Indic. Forward Exposure	Indic. Net Exposure
CFD:S:ESB > Seller > DC:Test1	EUR		728,406.41	728,406.41	2,676,072.93	-1,837,828.66	838,244.27	1,566,6
CFD:S:ESB > Seller > NDC:Test2	EUR		509,288.40	509,288.40	1,777,413.10	-1,066,245.34	711,167.76	1,220,4
CFD:S:ESB > Seller > NDC:Test3	EUR		157,542.90	157,542.90	522,687.59	-442,914.36	79,773.23	237,3
			61,575.11	61,575.11	375,972.24	-328,668.96	47,303.28	108,8

Chapter 8: Invoicing for CfDs

The CFD Invoice tab contains two sub-tabs: Monthly Invoice and Monthly Invoice Data. The list of contracts on both the tabs can be filtered by Billing Entity and Counterparty. Only one contract at a time can be selected from the Contract filter. The toolbar date range will determine the choices in the Month filter. The Statement Type can be selected from the toolbar.

CFD: NIE PPB
123 Street
City
State
0000000
Country
Vat Reg No: GB 617 5181 42

Invoice **Payment due by 14-Dec-2007**

Buyer:
CFD: ESBI
123 Street
City
State
0000000
Country
Vat Reg No: 123456

Reference Number: CFD/CFD: ESBI/DC/2007-NOV
For billing enquiries: 111-222-3333
The billing period: November 2007
Date of this bill: 07-Dec-2007

Cfd Difference Payment Charges for November 2007

Product	Payment owing Buyer to Seller (Seller to Buyer)		[EUR] Gross
	Net	VAT	
Baseload	290,246.70	39,183.30	329,430.00
TOTAL	290,246.70	39,183.30	329,430.00

Notes:
1. Supporting data at the trade level is provided on the next sheet.

Payment is due by 14-Dec-2007 via the Bankers Automated Clearing System (BACS)

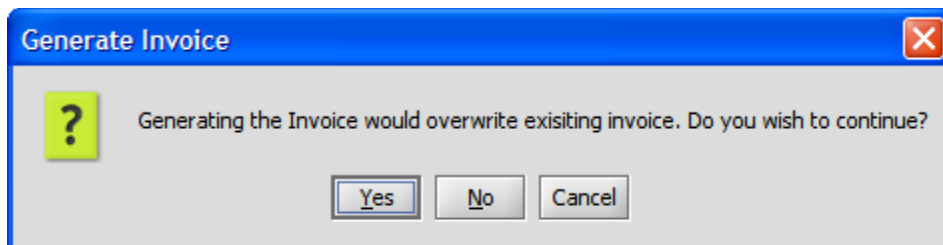
The crystal report templates for Monthly Invoice and Monthly Invoice Data report on the CfD Invoice tab must be uploaded before use. Refer to previous documentation on Crystal reports for instruction to upload Crystal report template. Following are the three Monthly Invoice crystal report templates suffixed with the business unit name.

1. CfDMonthlyInvoice-Energia.rpt
2. CfDMonthlyInvoice-PPB.rpt
3. CfDMonthlyInvoice-Supply.rpt

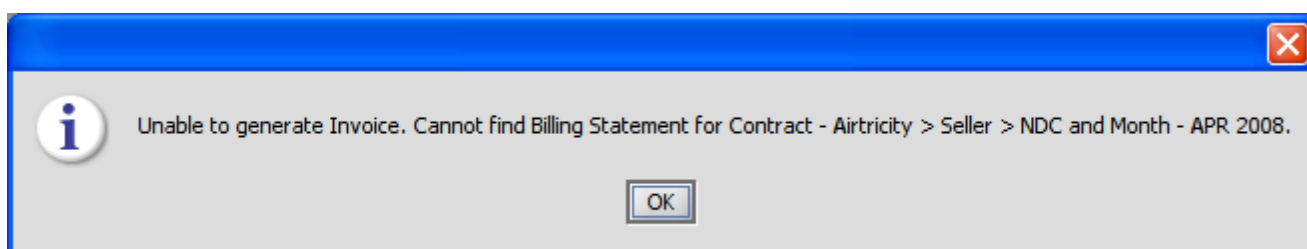
Upload the template as appropriate to each business unit. All business units will use CfDMonthlyInvoiceData.rpt template for Monthly Invoice Data.

8.1 Invoice Generation

To generate an invoice, select a Contract, Month and Statement Type; and click on the **Generate Invoice** button. If the invoice has already been generated, the following screen would be displayed.



If Billing Statement has not been calculated for the Billing Entity, the following screen will be displayed.



8.2 Monthly Invoice

The Monthly Invoice screen displays the Monthly Invoice and also manages the generation of invoice. Invoice Number and Payment due date can be edited from this screen.

To view the Monthly Invoice report, select a Contract, Month and Statement Type; and click on the refresh icon of the toolbar. This report will display a summary of the difference payment values by Contract. A portion of report can be seen in the screen capture below.

Monthly Invoice Monthly Invoice Data

1 / 1 100%

Billing Entity
CFD: NIE PPB

Counterparty
<ALL>
CFD: Airtricity
CFD: Bord Gas
CFD: ESB
CFD: Energia

Contract
ESBI > Seller > DC
ESBI > Seller > NDC

Month
NOV 2007

Generate Invoice
Edit Invoice...

Invoice **Payment due by 14-Dec-2007**

Northern Ireland Electricity plc,
Castlereagh House Control Centre,
12 Marne Road,
BELFAST
BT6 9RT
VAT Reg No: GB 617 5181 42

Buyer:
CFD: ESB
123 Street
City
0000000
Country
Vat Reg No: 123456

Reference Number: CID/CFD: ESB/DC/2007-NOV
For billing enquiries:
The billing period: November 2007
Date of this bill: 07-Dec-2007

Cfd Difference Payment Charges for November 2007

Product	Payment owing Buyer to Seller (Seller to Buyer)		[EUR] Gross
	Net	VAT	
Baseload	(290,246.70)	(39,183.30)	(329,430.00)
TOTAL	(290,246.70)	(39,183.30)	(329,430.00)

Notes:
1. Supporting data at the trade level is provided on the next sheet.

8.3 Monthly Invoice Data

To view the Monthly Invoice Data report, select a Contract, Month and Statement Type; and click the refresh icon on your toolbar. This report will display trade level and strike price details broken down for both business and non-business days. A portion of report can be seen in the screen captures below.

The screenshot shows the 'Monthly Invoice Data' report for November 2007. The left sidebar contains filters for Billing Entity (CFD: NIE PPB), Counterparty (CFD: Airtricity, CFD: Bord Gais, CFD: ESB, CFD: Energia, CFD: NIE Supply), Contract (ESB > Seller > DC, ESB > Seller > NDC), and Month (NOV 2007). The main area displays a table titled 'Values for Monthly Invoice' for the month of November 2007.

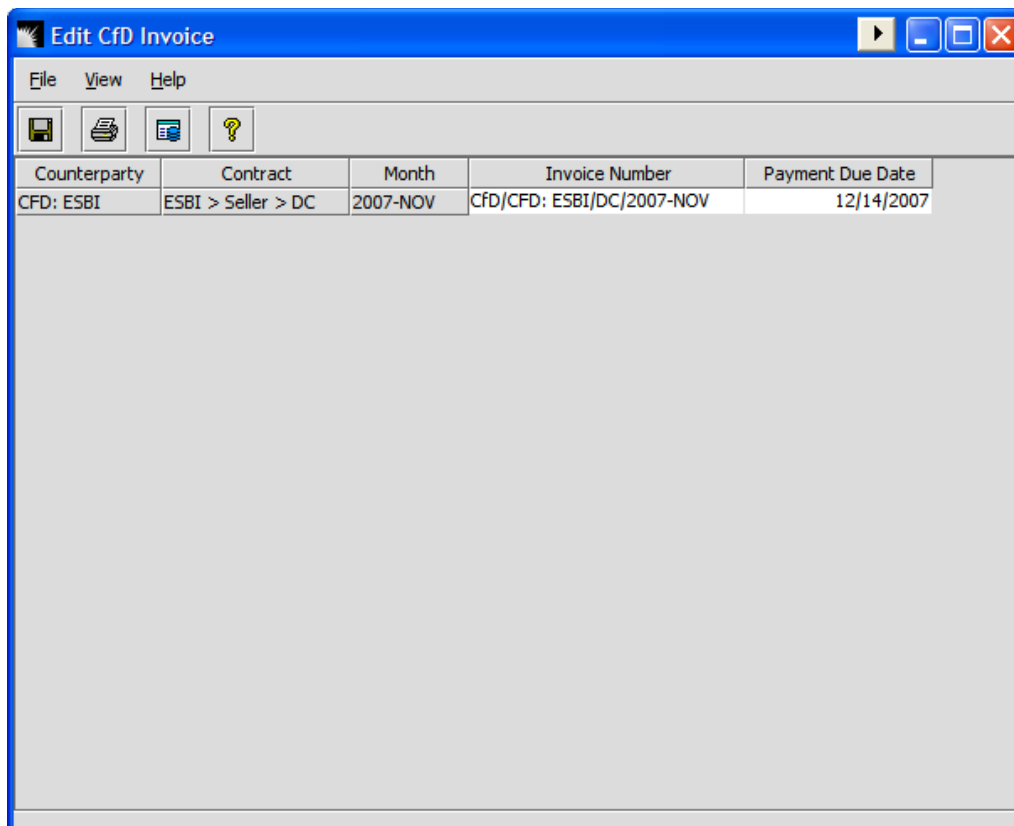
Trade Details					Business Day Variables				
Trade Name	Type	Currency	Strike Price (MWh)	Level (MW)	Avg SMP (MWh)	Difference (SP-AvSMP) (MWh)	Trading Periods	Volume (MWh)	Avg SMP (MWh)
CFD:ESB > Seller > DC: Test1	Baseload	EUR	52.00	30.00	68.10	(16.10)	1056	15840.00	58.11
		EUR		30.00				15840.00	

The screenshot shows the 'Monthly Invoice Data' report for November 2007, displaying a detailed breakdown of variables and payments. The left sidebar is identical to the previous screenshot. The main area displays a table with three sections: Business Day Variables, Non-Business Day Variables, and Difference Payment (Owing By Counterparty).

Business Day Variables			Non-Business Day Variables			Difference Payment (Owing By Counterparty)			
Difference (SP-AvSMP) (MWh)	Trading Periods	Volume (MWh)	Avg SMP (MWh)	Difference (SP-AvSMP) (MWh)	Trading Periods	Volume (MWh)	Net	VAT	Gross
(16.10)	1056	15840.00	58.11	(6.11)	384	5760.00	(290246.70)	(39183.30)	(329430.00)
		15840.00				5760.00	(290246.70)	(39183.30)	(329430.00)

8.4 Invoice Editing

To edit the Invoice Number and Payment Due Date, select a Contract, Month and Statement Type; and click the **Edit Invoice...** button. The edit screen is shown below.



The screenshot shows a window titled "Edit CfD Invoice" with a menu bar (File, View, Help) and a toolbar with icons for save, print, list, and help. Below the toolbar is a table with the following data:

Counterparty	Contract	Month	Invoice Number	Payment Due Date
CFD: ESBI	ESBI > Seller > DC	2007-NOV	CFD/CFD: ESBI/DC/2007-NOV	12/14/2007

The rest of the window is a large, empty gray area for editing.

8.5 Credit Notes

The Credit Note can be viewed on the CFD > Monthly Invoice tab. To view the Credit Note report, select a Contract, Month and Statement Type; select the "Show As Credit Note" checkbox and click the refresh icon on your toolbar. A portion of this report can be seen in the screen capture below.

The screenshot displays the BusinessObjects CFD Invoice interface. The left sidebar contains filters for Billing Entity (CFD: NIE PPB), Counterparty (CFD: NIE PPB), Contract (ESBI > Seller > DC), Month (NOV 2007), and a checkbox for "Show As Credit Note" which is checked. The main area shows the invoice details for NIE energy, including address, VAT Reg No, and the invoice number. The invoice is dated 07-Dec-2007 and is due by 14-Dec-2007. The table below shows the CfD Difference Payment Charges for November 2007.

Product	Payment owing Buyer to Seller (Seller to Buyer)		[EUR] Gross
	Net	VAT	
Baseload	290,246.70	39,183.30	329,430.00
TOTAL	290,246.70	39,183.30	329,430.00

Notes:
1. Supporting data at the trade level is provided on the next sheet.

Payment is due by 14-Dec-2007 via the Bankers Automated Clearing System (BACS).

Chapter 9: Dispute Management

The CFD Dispute screen displays and manages dispute records related to CFDs (see screen captures below). There are 4 main filters on the CFD Dispute screen:

- **Type:** "Credit Cover" or "Diff Payment". A single screen supports both types of disputes. Only one type can be visible and managed at a time.
- **Status:** <ALL>, Pending, Accepted, Rejected
 - ♦ <ALL>: selection will display all disputes regardless of status
 - ♦ Pending: currently opened and pending resolution
 - ♦ Accepted: dispute has been resolved and record contains the final outcome
 - ♦ Rejected: dispute has been closed as invalid
- **Counterparty:** a list of all possible CFD counterparties
- **Reference Date Filtering:** Restrict Dates setting will only display disputes where Reference Date corresponds to the timeframe selected in the application toolbar. Otherwise, all disputes matching the three top filters will be shown regardless of dates.

Note: The Dispute screen automatically filters databases on the Settlement Type selected in the main application toolbar (for example, Indicative, Initial, etc.)

The body of the screen contains following data elements for each dispute:

- Transaction (Deal)
- Reference Date (for example, invoice month)
- Status
- Category (Income vs. Expenditure)
- Description (text)
- Suggested amount, if applicable
- Payment Shortfall amount, if applicable
- Apply Shortfall to CC (credit cover) flag: check to apply specified shortfall to be applied to CC calculations
- Apply suggested to invoice: needs to be set to apply suggested amount to the invoice
- Create Date/time
- Last Update Date/time
- Last modified by: user name

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CFD Management CFD Difference Payments CFD ESTSEM CFD Mark-to-Market CFD Credit Exposure CFD Invoice **CFD Disputes**

Type

Credit Cover

Diff Payment

Status

<ALL>

Pending

Accepted

Rejected

Counterparty

<ALL>

CFD: Airtricity

CFD: Bord Gais

CFD: Energia

CFD: ESB

CFD: NIE PPB

Reference Date Filtering

☐ Restrict Dates

Transaction	Reference Date	Status	Category	Description	Suggested Amount	Payment Shortfall Amount	Apply Sh
CFD:P:AM Test:123	4/3/2008	Rejected	Expenditure	TEST DESCRIPTION	456,231	50,154	
CFD:P:AM Test:123	4/9/2008	Pending	Expenditure				
CFD:P:AM Test:123	4/12/2008	Pending	Expenditure				
CFD:P:AM Test:123	4/17/2008	Accepted	Income				

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CFD Management CFD Difference Payments CFD ESTSEM CFD Mark-to-Market CFD Credit Exposure CFD Invoice **CFD Disputes**

Type

Credit Cover

Diff Payment

Status

<ALL>

Pending

Accepted

Rejected

Counterparty

<ALL>

CFD: Airtricity

CFD: Bord Gais

CFD: Energia

CFD: ESB

CFD: NIE PPB

Reference Date Filtering

☐ Restrict Dates

Suggested Amount	Payment Shortfall Amount	Apply Shortfall To Cc	Apply Suggested To Invoice	Create Date	Last Update Date	Last Updated By
456,231	50,154	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2008-04-11 10:48	2008-04-11 10:50	abotvinik
		<input type="checkbox"/>	<input type="checkbox"/>	2008-04-11 10:31	2008-04-11 10:48	abotvinik
		<input type="checkbox"/>	<input type="checkbox"/>	2008-04-11 10:49	2008-04-11 10:49	abotvinik
		<input type="checkbox"/>	<input type="checkbox"/>	2008-04-11 10:46	2008-04-11 10:49	abotvinik