CODA℠: Cost Offer Data Application: User Training

September 17, 2010
2:00 PM

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Monitoring Analytics

Training Agenda

- CODA – Implementation Timeline
- General Usage
  - Requesting account
  - Logging in
- Overview/Walkthrough of New Screens
  - Fuel Policy
  - Power Plant Operations Report
  - Opportunity Cost Calculator
- Reference Resources
  - User Guide
  - Monitoring Analytics website, “Tools” page
- Question & Answer

Implementation Timeline

Date:	Milestone:
Tuesday, July 27 through Wednesday, September 15	All Generators PJM CAMs fill out CODA Account Registration Form for new accounts, including for those users who already have accounts in the existing eFuel.
Wednesday, September 15	Updated CODA System implemented in MA Production Environment. CODA accounts go live. Old “Card 98” and “Card 99” screens disabled, and Card 98 and Card 99 data no longer reported.
Friday, September 17	Training Presentation
Friday, October 15	All generators accounts set up, data reporting requirement / audits begin (August Power Plant Operations data due.)
Friday, October 15	All units have approved fuel policies assigned
Friday, October 15	XML upload template available
Friday, October 29	XML upload functionality becomes available
Monday, November 15	September Power Plant Operations data due
Wednesday, December 15	October Power Plant Operations data due

General Usage

- **Requesting an Account**
  - **All PJM Generators should have their PJM CAM fill out the new CODA Registration Form,**
  - **The registration form can be found on the Monitoring Analytics website: http://www.monitoringanalytics.com/tools/tools.shtml**
- **Logging in to the System**
  - **URL:https://coda.monitoringanalytics.com/coda/login**

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CODA New Screens - Live Walk-Through

- **Fuel Policy**
  - **Save and manage fuel policy documents for all your units.**
- **Power Plant Operations Report**
  - **Monthly entry of fuel delivery and consumption data.**
- **Opportunity Cost Calculator**
  - **For units with environmental run time restrictions, enter data by 6:00 PM, and have an opportunity cost calculated by 6:00 AM the next morning.**

The following screen shots are for reference, and training will consist of a live walk-through demonstration of the tool

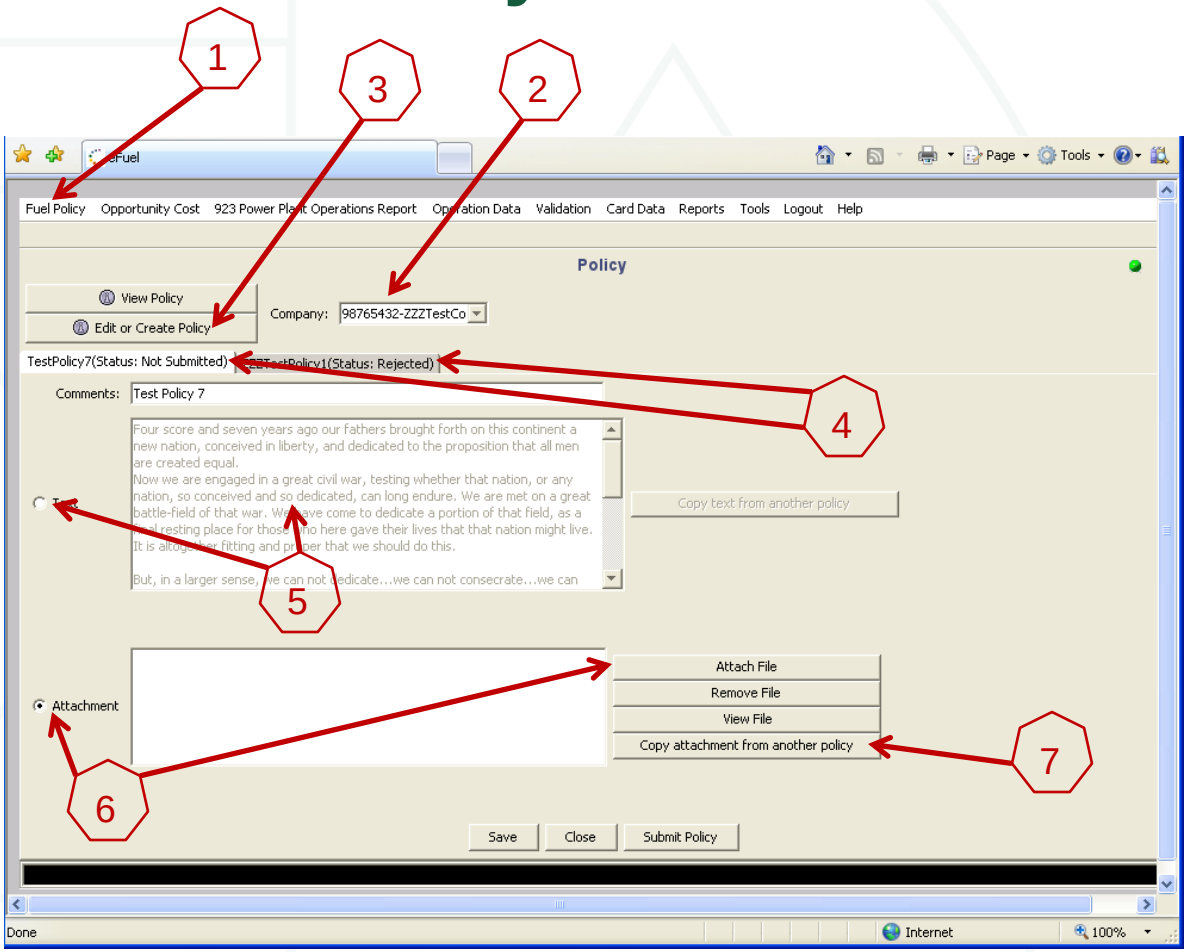
Fuel Policy Procedure

- **User saves Fuel Policy document in CODA "Fuel Policy" screen.**
- **User submits Fuel Policy for review and acceptance by MMU.**
- **MMU reviews and accepts or rejects submitted Fuel Policy.**
- **User associates accepted policy with one or more units.**
- **MMU reviews and accepts or rejects assignment of policy to unit.**
- **MMU periodically reviews units' fuel accounting calculations to determine consistency with policies.**

Fuel Policy Screen Shots

Create/Edit a Fuel Policy in eFuel

In main screen, under “Fuel Policy” (1), select “Policy”, select the company the policy is associated with (2), ,and select “Edit or Create Policy” (3). A list of existing policies will pop up, and you can either select an existing policy to edit, or create a new one. Multiple policies (4) can be opened up in this screen for viewing and editing.



To edit the policy, you can select the “Text” button, and enter the policy text in the provided window (5), or select “Attachment” button, and attach a word document or PDF policy document (6). You can also copy an existing attachment from another existing policy (7).

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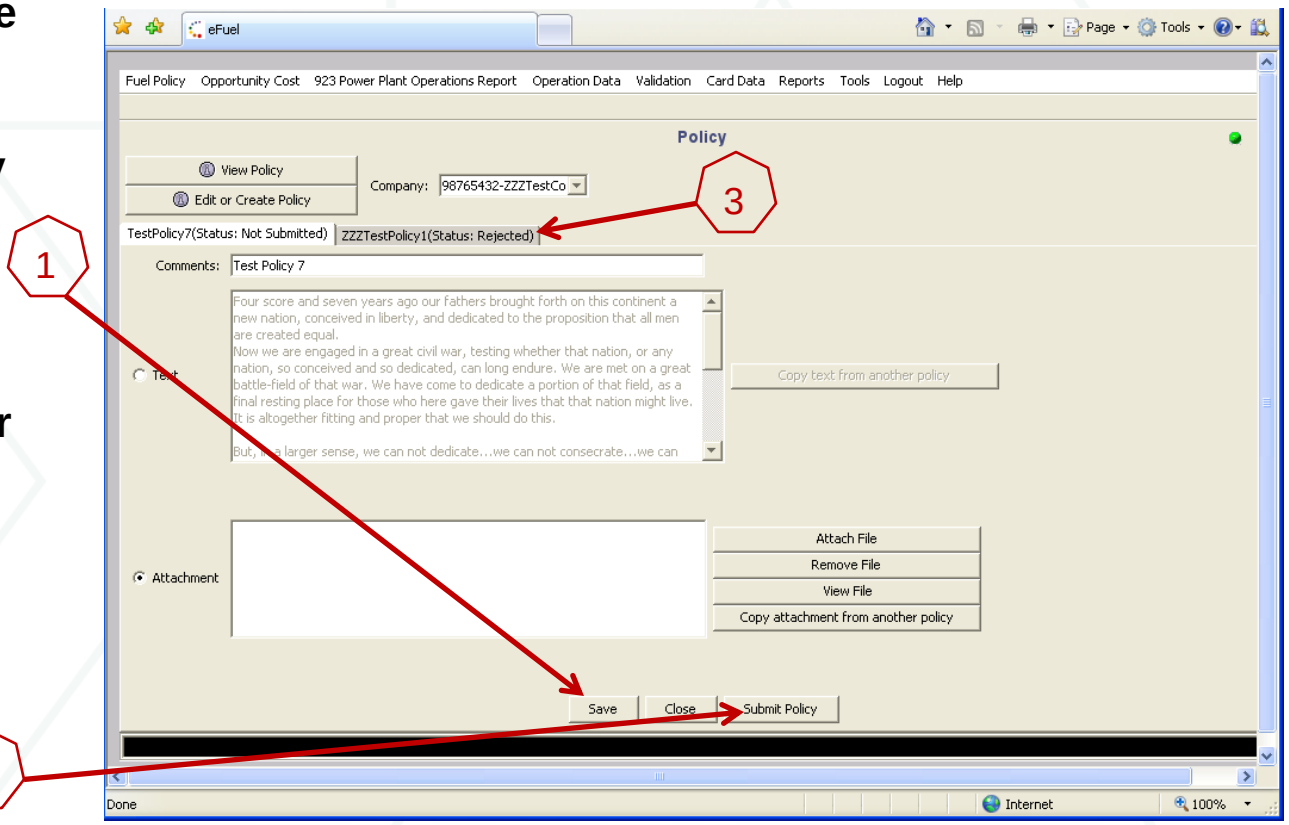
Save and Submit Fuel Policy for MMU Review

When you have updated the text, or added attachments, you can save the updated policy by clicking the "Save" button (1). This will save your work on this policy, but will not submit it to the MMU for review and approval. When you are ready to submit the Policy for MMU review and approval, select "Submit Policy" (2).



The MMU will review your submitted policy and either Approve it or Reject it. The status (Accepted or Rejected) of a policy can be seen in the tab next to the policy name (3). Accepted policies can only be viewed, and not edited once they have been accepted. The status of all policies can be viewed by clicking on "View Policy", highlighting all policies (shift select) and clicking on "View Policy".

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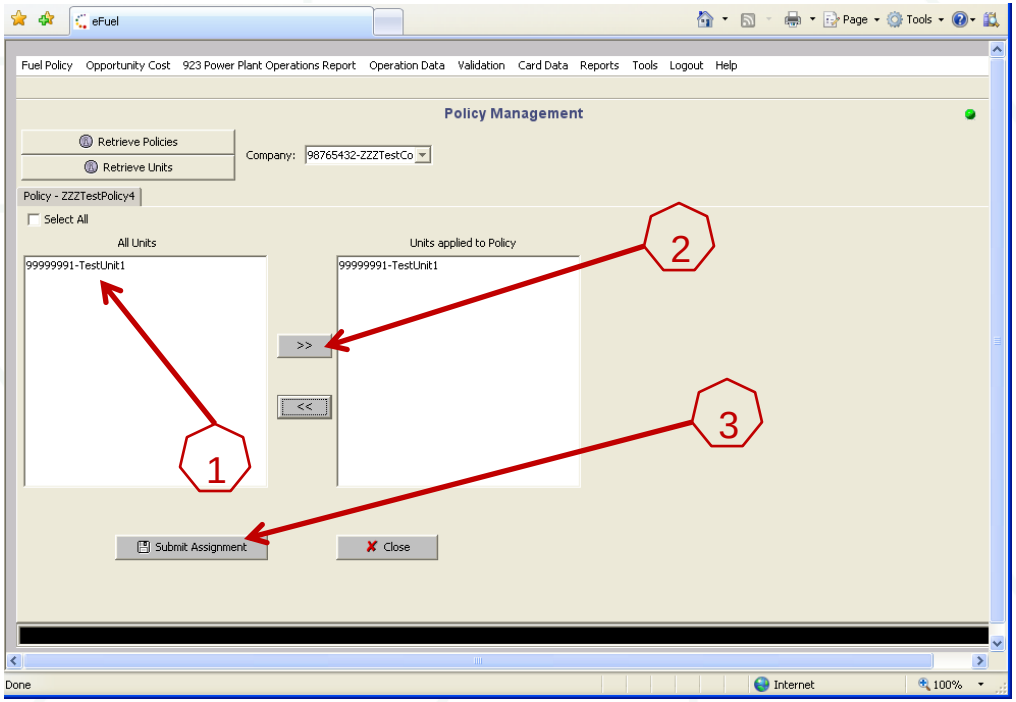
Associate Approved Fuel Policy with Units

When a policy has been approved by the MMU, it can then be associated with specific units in the "Policy Management" screen. Users can either pull up a policy, and select which units to assign it to (Retrieve Policies), or pull up a unit, and select which policy should apply to that specific unit (Retrieve Units).



When you select "Retrieve Policies", all Approved policies will appear in a pop-up window. When you select a policy, and then click on "View Units", a list of all units in that company eligible for new policy assignment will appear (1). Highlight the unit(s) you wish to apply this policy to, and select the ">>" to move them into the "Units Applied to Policy" window (2). Then select "Submit Assignment" (3). The MMU will review to make sure that the selected approved policy is compatible with the unit type of the associated unit.

When you select "Retrieve Units" the user selects a unit, and then selects an approved policy to apply to the unit.

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Power Plant Operations Report Screen Shots

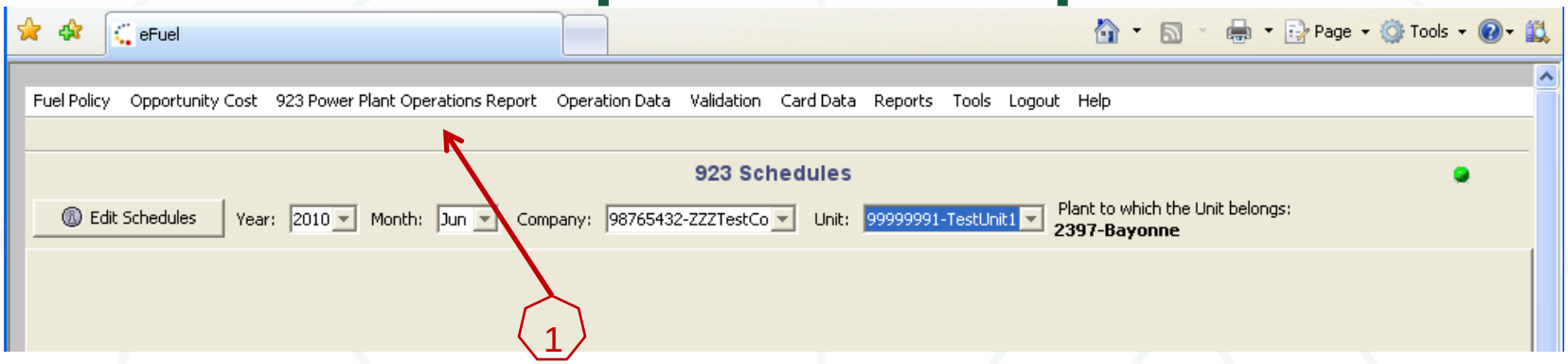
Form EIA-923, developed by the Energy Information Administration (EIA) at the U.S. Department of Energy, collects information from all electric power plants, including data on electric power generation, fuel consumption, fossil fuel stocks, and delivered fossil fuel cost and quality. These data are used to monitor the status and trends of the electric power industry and appear in many Energy Information Administration (EIA) publications. Monitoring Analytics, in its role as the Independent Market Monitor for PJM, is collecting similar data from PJM participants using the CODA electronic interface that has a similar appearance to the EIA Form 923.

Power Plant Operations Report Schedules

- **Schedules 1, 2, 3, 4, 5 and 9 must be filled in monthly.**
  - **Participants will report Monthly fuel delivery and consumption data into CODA 45 days following the data month.**
    - **Example: August data must be reported by October 15.**

- **Schedules 6, 7 and 8 must be filled in annually.**
  - **Participants will report annual data requirements (for Schedule 6 through Schedule 8) no later than 45 days after the form opens for data entry – typically around March 31 following the end of the reporting year.**

Power Plant Operations Report Screen



- **Under "Power Plant Operations Report" (1), select "Power Plant Operations Schedules". Then select the Year, Month, Company, and Unit to enter data, and select "Edit Schedules".**
- **Schedules 2 through 9 are to be completed at the "Plant" level**
- **Schedule 2 includes one field, the "Fuel Index" that is not originally in the EIA923 Form, and has been added by the MMU.**
- **All Power Plant Operations Schedules are reported monthly, except Schedules 6, 7, and 8, which are reported annually.**
- **Additional Unit Data is reported monthly for each "Unit".**
- **Right click on the screen to add a row of data into each screen.**

Schedule 2: Cost and Quality of Fuel Receipts – Plant Level Contract Information, Receipts and Costs

- **Plant level data for plants that use Fossil Fuels (coal, petroleum products, petroleum coke, natural gas, and other gases (including blast furnace gas)) for the generation of electric power.**

Schedule 2: Cost and Quality of Fuel Receipts – Plant Level Contract Information, Receipts and Costs

SCHEDULE 2. PAGE 1. COST AND QUALITY OF FUEL RECEIPTS - PLANT LEVEL CONTRACT INFORMATION, RECEIPTS AND COSTS
For fossil-fueled plants 50 megawatts and above
(Instructions for SCHEDULE 2. Page 1. are on page 3 of the EIA Form 923 Instructions.) Scroll Right for Page 2 >>

☐ No Receipts (If applicable, please check) ☐ Is there a fuel tolling agreement in place for this plant? (If applicable, please check.)

Contract Information			Receipts		Cost per Unit	
Complete for All Fuels			All Fuels		All Fuels	
Fuel Supplier Name	Contract Type	Contract Expiration Date (mmyy)	Energy Source	Quantity Received	Total Delivered Cost	Commodity Cost (coal, natural gas)

SCHEDULE 2. PAGE 2. COST AND QUALITY OF FUEL RECEIPTS - PLANT LEVEL QUALITY OF FUEL AND TRANSPORTATION
For fossil-fueled plants 50 megawatts and above
(Instructions for SCHEDULE 2. Page 2. are on page 4 of the EIA Form 923 Instructions.) Scroll Right for Page 3 >>

Quality of Fuel as Received				Fuel Transportation		
All Fuels	Coal, Pet Coke, and Oil	Coal Only	Coal Only	Natural Gas	Coal, Pet Coke and Oil	
Heat Content	Sulfur Content	Ash Content	Mercury Content	Firm or Interruptible	Predominant Mode	Secondary Mode

SCHEDULE 2. PAGE 3. COST AND QUALITY OF FUEL RECEIPTS - PLANT LEVEL COAL MINE INFORMATION
For fossil-fueled plants 50 megawatts and above
(Instructions for SCHEDULE 2. Page 3. are on page 7 of the EIA Form 923 Instructions.)

Coal Mine and Type					Non-EIA923 Data Required by MMU
	If you have provided the MSHA ID number, leave these items blank.				
MSHA ID Number	Name of Mine or Tipple	Mine Type	State or Country of Origin	County	Fuel Index

Schedule 3: Boiler Information: Fuel Consumption

- **Boiler specific data at plants that burn fossil/organic fuels.**
- **Excluded from this schedule are conventional hydroelectric plants and all other plants that are not required to report energy consumed (e.g., wind, solar, geothermal, and nuclear).**

Schedule 3: Boiler Information: Fuel Consumption

SCHEDULE 3. PART A. BOILER INFORMATION FOR STEAM-ELECTRIC ORGANIC-FUELED PLANTS - FUEL CONSUMPTION
(Instructions for SCHEDULE 3. Part A. are on page 7 of the EIA Form 923 Instructions.)

--Click here for instructions--

☐ Did any boiler produce steam for purposes other than electric power generation during this reporting period? (If applicable, please check)

Prime Mover Code	Boiler ID	Boiler Status	Energy Source (See Table 8 on pages 22 through 23 in the Instructions.)	Quantity Consumed (Enter zero when a fuel has no consumption for this reporting period.)	Type of Physical Units (tons, barrels or Mcf)	Average Heat Content (as burned) (MMBtu per ton, barrel or Mcf)	Sulfur Content (petroleum and coal only, to nearest 0.01%)	Ash Content (coal only, to nearest 0.1%)

If Energy Source reported is OTH, OBS, OBG, OBL, or OG, please specify:

SCHEDULE 3. PART B. FUEL CONSUMPTION - PRIME MOVER LEVEL
(Instructions for SCHEDULE 3. Part B. are on page 9 of the EIA Form 923 Instructions.)

--Click here for instructions--

☐ Was steam produced for purposes other than electric power generation during this reporting period? (If applicable, please check.)

Prime Mover Code	Energy Source (See Table 8 on pages 22 through 23 in the Instructions).	Quantity Consumed (Enter zero when a fuel has no consumption for this reporting period.)	Type of Physical Units (tons, barrels, or Mcf)	Average Heat Content (MMBtu per ton, barrel or Mcf)

If Energy Source reported is OTH, OBS, OBG, OBL, or OG, please specify:

Save

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Schedule 4: Fossil/Organic Fuel Stocks

- **Must be completed by all plants that burn the following fossil/organic fuels: COAL, WASTE COAL, DISTILLATE FUEL OILS (NO. 2, 4), RESIDUAL FUEL OIL (NO. 6), JET FUEL, KEROSENE, PETROLEUM COKE, NATURAL GAS, BIO-FUEL.**
- **Natural Gas "stocks": Balance between receipts and consumed fuel.**
- **Include back-up fuels and start-up and flame-stabilization fuels.**
- **Note that MMU is requiring the reporting of WASTE COAL and BIO-FUEL stocks.**

Schedule 4: Fossil Fuel Stocks

SCHEDULE 4. FOSSIL FUEL STOCKS AT THE END OF THE REPORTING PERIOD AND DATA BALANCE
For Coal, Oil, and Natural Gas Plants
(Instructions for SCHEDULE 4. are on page 10 of the EIA Form 923 Instructions.)

--Click here for instructions--

Energy Source (See Table 8 on pages 22 through 23 in the Instructions.)	Type of Physical Units (tons or barrels)	Previous Month's Ending Stocks (1)	Current Month's Receipts (2)	Current Month's Consumption (3)	Ending Stocks (4)	Adjustment to Stocks (5)	Balance (6) 4 = (1+2-3+5)

Previous Month's Stocks plus Receipts minus Consumption plus (or minus) Adjustment should equal Ending Stocks.
The balance will appear in column (6). If the balance is not zero, provide a comment below. Identify the fuel code in the comment.

Balance (from Column 6 above)	Energy Source	Comment

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Schedule 5: Generator Information

- **This schedule will be completed for all plants**

Schedule 5: Generator Information

SCHEDULE 5. PART A. GENERATOR INFORMATION FOR STEAM-ELECTRIC ORGANIC-FUELED PLANTS
(Instructions for SCHEDULE 5. Part A. are on page 11 of the EIA Form 923 Instructions.)

This schedule will be completed ONLY for generators at steam-electric organic-fueled plants with a total steam turbine capacity of 10 megawatts and above.
--Click here for instructions--

Prime Mover Code	Generator ID	Generator Status	Gross Generation (MWh)	Net Generation (MWh)
	99999991-TestUnit1			

SCHEDULE 5. PART B. PRIME MOVER LEVEL GENERATION
(Instructions for SCHEDULE 5. Part B. are on page 12 of the EIA Form 923 Instructions.)

This schedule will be completed by steam-electric organic-fueled plants with a total steam turbine capacity less than 10 megawatts,
--Click here for instructions--

Prime Mover Code	Gross Generation (MWh)	Net Generation (MWh)

SCHEDULE 5. PART C. GENERATION FROM NUCLEAR AND OTHER NON-COMBUSTIBLE ENERGY SOURCES
(Instructions for SCHEDULE 5. Part C. are on page 12 of the EIA Form 923 Instructions.)

This schedule will be completed by all nuclear plants and by all wind, solar, geothermal, hydroelectric, or other plants where the energy source is noncombustible,
--Click here for instructions--

Prime Mover Code	Energy Source	Unit Code (nuclear)	Gross Generation (MWh)	Net Generation (MWh)

Schedule 6: Source and Disposition of Electricity

- **This schedule will be completed by nonutility plants**

Schedule 6: Source and Disposition of Electricity

U.S.Department of Energy Energy Information Administration Form EIA-923 (2008)	POWER PLANT OPERATIONS REPORT	Form Approval OMB No. 1905-0129 Approval Expires: 12/31/2010

Plant Name: Bayonne

Plant ID: 2397 State: Reporting Year: 2010

SCHEDULE 6. NONUTILITY ANNUAL SOURCE AND DISPOSITION OF ELECTRICITY
(Instructions for SCHEDULE 6. are on page 13 of the EIA Form 923 Instructions.)

SCHEDULE 6 collects calendar year data (no monthly detail).
Annual data are due by March 30 following the reporting year.
Report all generation in megawatthours (MWh) rounded to a whole number.

Source of Electricity		Disposition of Electricity	
(1) Gross Generation (Annual)		(4) Station Use	
(2) Other Incoming Electricity		(5) Direct Use (For CHPs only)	
		(6) Total Facility Use (4 + 5)	
		(7) Retail Sales to Ultimate Customers	
		(8) Sales for Resale	
		(9) Other Outgoing Electricity	
(3) Total Sources (1 + 2)		(10) Total Disposition (6 + 7 + 8 + 9)	

Total Sources must equal Total Disposition (3 = 10)

Schedule 7: Annual Revenues from Sales for Resale

- **Schedule 7 will be completed by respondents who report a positive value on Schedule 6, Disposition of Electricity.**

Schedule 7: Annual Revenues from Sales for Resale

Plant Name: Bayonne

Plant ID: 2397 State: Reporting Year: 2010

SCHEDULE 7. ANNUAL REVENUES FROM SALES FOR RESALE
(Instructions for SCHEDULE 7. are on page 14 of the EIA Form 923 Instructions.)

SCHEDULE 7 is to be completed by respondents who entered a positive amount on SCHEDULE 6, Disposition of Electricity, Item 8, Sales for Resale. Annual data are due by March 30 following the reporting year.
Sales for Resale is energy supplied to other electric utilities, cooperatives, municipalities, Federal and State electric agencies, or other entities for resale to end-use consumers.

Annual Revenues from Sales for Resale (in thousand dollars):

Schedule 8, Part A: Environmental – Byproduct Disposition

- **Schedule 8 will be completed by fossil/organic-fueled power plants.**

Schedule 8, Part A: Environmental – Byproduct Disposition

SCHEDULE 8. ANNUAL ENVIRONMENT INFORMATION

SCHEDULE 8. PARTS A through F are filed annually and must be reported by steam-electric organic-fueled power plants with a total steam turbine capacity of 100 megawatts and above (only plants that reported boiler-level consumption on SCHEDULE 3 Part A)
All steam-electric organic-fueled power plants with a total steam turbine capacity of 10 megawatts and above are responsible for filing Schedule 8, Parts C,E, and F.
Annual data are due by March 30 following the reporting year.

SCHEDULE 8. PART A. ANNUAL BYPRODUCT DISPOSITION
(Instructions for SCHEDULE 8 Part A. are on page 14 of the EIA Form 923 Instructions.)

Enter the quantity of combustion byproducts for the year by type of disposal (to nearest 0.1 thousand tons).
Report sales of steam in million Btu (MMBtu). If actual data are not available, provide an estimated value.

☐ NO BYPRODUCTS

Byproduct	Disposal			Sale or Beneficial Use			Stored On-site	Stored Off-site	Total
	On-Site Landfill	On-Site Ponds	Disposal Off-site	Sold	Used On-site	Used Off-site			
Fly Ash from standard boiler/PCD units									
Fly Ash from units with dry FGC									
Fly Ash from FBC units									
Bottom Ash from standard boiler units									
Bottom (bed) Ash from FBC units									
FCD Cypaum									
Other FGD byproducts									
Ash from coal gasification (IGCC) units									
Other (specify via footnote on SCHEDULE 9)									
Steam Sales (MMBtu)									

Schedule 8, Part B: Environmental – Financial Information

SCHEDULE 8. PART B. FINANCIAL INFORMATION
(Instructions for SCHEDULE 8 Part B. are on page 15 of the EIA Form 923 Instructions.)

If actual data are not available, provide an estimated value.

Operation and Maintenance (O&M) Expenditures During Year (Thousand Dollars)

Type	(1) Fly Ash	(2) Bottom Ash	(3) Flue Gas Desulfurization	(4) Water Pollution Abatement	(5) Other Pollution Abatement	(6) Total (1+2+3+4+5)
Collection						
Disposal						
Other						

Capital Expenditures for New Structures and Equipment During Year, Excluding Land and Interest Expense (Thousand Dollars)

Type	(7) Air Pollution Abatement	(8) Water Pollution Abatement	(9) Solid/Contained Waste	(10) Other Pollution Abatement
Amount				

Byproduct Sales Revenue During Year (Thousand Dollars)

Type	(11) Fly Ash	(12) Bottom Ash	(13) Fly and Bottom Ash Sold Intermingled	(14) Flue Gas Desulfurization Byproducts	(15) Other Byproduct Revenue	(16) Total (11+12+13+14+15)
Amount						

Schedule 8, Part C: Environmental – Boiler NOx Controls

SCHEDULE 8. PART C. BOILER INFORMATION NITROGEN OXIDE EMISSION CONTROLS
(Instructions for SCHEDULE 8 Part C. are on page 16 of the EIA Form 923 Instructions.)

Complete a separate row for each boiler.
Note: The Boiler ID must match the Boiler ID as reported on Form EIA-860, "Annual Electric" Generator Report.

☐ No NOx Controls

Boiler ID	NOx Control In-Service (hours)	NOx Emission Rate (lbs/MMBtu)	
		Entire Year	May through September

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Schedule 8, Part D: Environmental – Cooling System Info

SCHEDULE 8. PART D. COOLING SYSTEM INFORMATION, ANNUAL OPERATIONS
(Instructions for SCHEDULE 8 Part D. are on page 16 of the EIA Form 923 Instructions.)

Note: Cooling System ID must match the ID as reported on Form EIA-860, "Annual Electric Generator Report."
Complete a separate row for each cooling system.

Cooling System ID	Cooling System Status	Annual Amount of Chlorine added to Cooling Water (1000 lbs)	Average Annual Rate of Cooling Water (0.1 ft^3/sec)			Maximum Cooling Water Temperature at intake (F)		Maximum Cooling Water Temperature at Discharge Outlet (F)	
			Withdrawal	Discharge	Consumption	Winter Peak Month	Summer Peak Month	Winter Peak Month	Summer Peak Month

Schedule 8, Part E: Environmental – Flue Gas Particulate Collection

SCHEDULE 8. PART E. FLUE GAS PARTICULATE COLLECTION INFORMATION
(Instructions for SCHEDULE 8 Part E. are on page 17 of the EIA Form 923 Instructions.)

☐ Does not apply.

Complete a separate row for each flue gas particulate collector.

Flue Gas Particulate Collector ID	FGP Collector Status	Hours In-Service	Typical Particulate Emissions Rate (nearest .01 lb/MMBtu)	Removal Efficiency of Particulate Matter (nearest 0.1% by weight)		
				At Annual Operating Factor	At 100% Load or Tested Efficiency	Date of Most Recent Efficiency Test (e.g., 12-2005)

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Schedule 8, Part F: Environmental – Flue Gas Desulfurization

SCHEDULE 8. PART F. FLUE GAS DESULFURIZATION UNIT INFORMATION - ANNUAL OPERATIONS
(Instructions for SCHEDULE 8 Part F. are on page 19 of the EIA Form 923 Instructions.)

☐ Does not apply.

Note: Flue Gas Desulfurization ID must match the ID as reported on Form EIA-860,"Annual Electric Generator Report."
Complete a separate row for each Flue Gas Desulfurization Unit.

ANNUAL OPERATIONS

Flue Gas Desulfurization Unit ID	FGD Unit Status	Hours In-Service	Quantity of FGD Sorbent Used (0.1 thousand tons)	Electrical Energy Consumption (MWh)	Removal Efficiency of Sulfur Dioxide (nearest 0.1% by wt)		
					At Annual Operating Factor	At 100% Load or Tested Efficiency	Date of Most Recent Efficiency Test (e.g.,12-2005)

OPERATION AND MAINTENANCE EXPENDITURES DURING YEAR, EXCLUDING ELECTRICITY (THOUSAND DOLLARS)

Flue Gas Desulfurization Unit ID	Feed Materials and Chemicals	Labor and Supervision	Waste Disposal	Maintenance, Materials, and All Other Costs	Total

Schedule 9: Comments

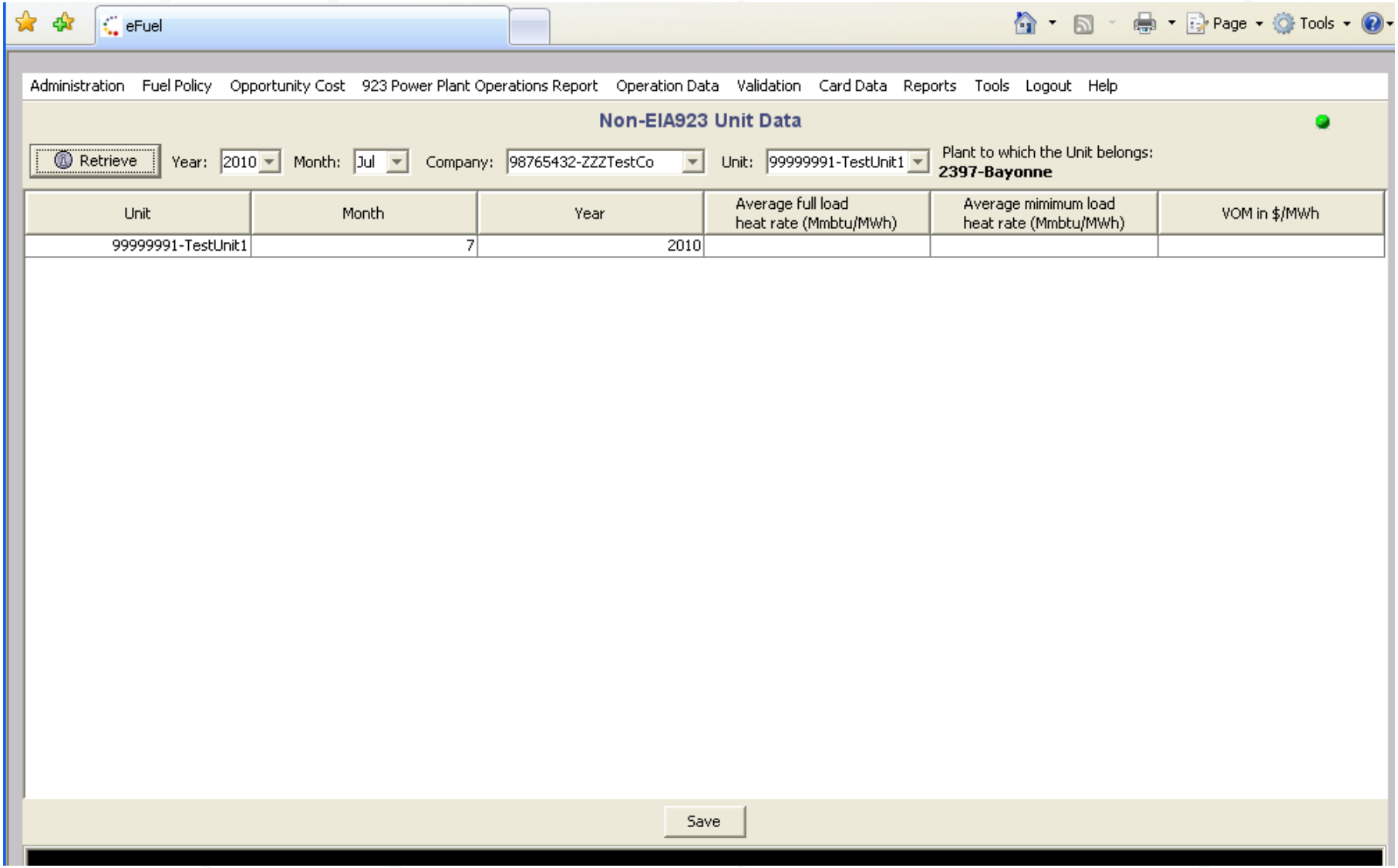
SCHEDULE 9. COMMENTS
(Instructions for SCHEDULE 9. are on page 20 of the EIA Form 923 Instructions.)

Comment Section: Explain any unusual values, occurences, or changes in ownership.

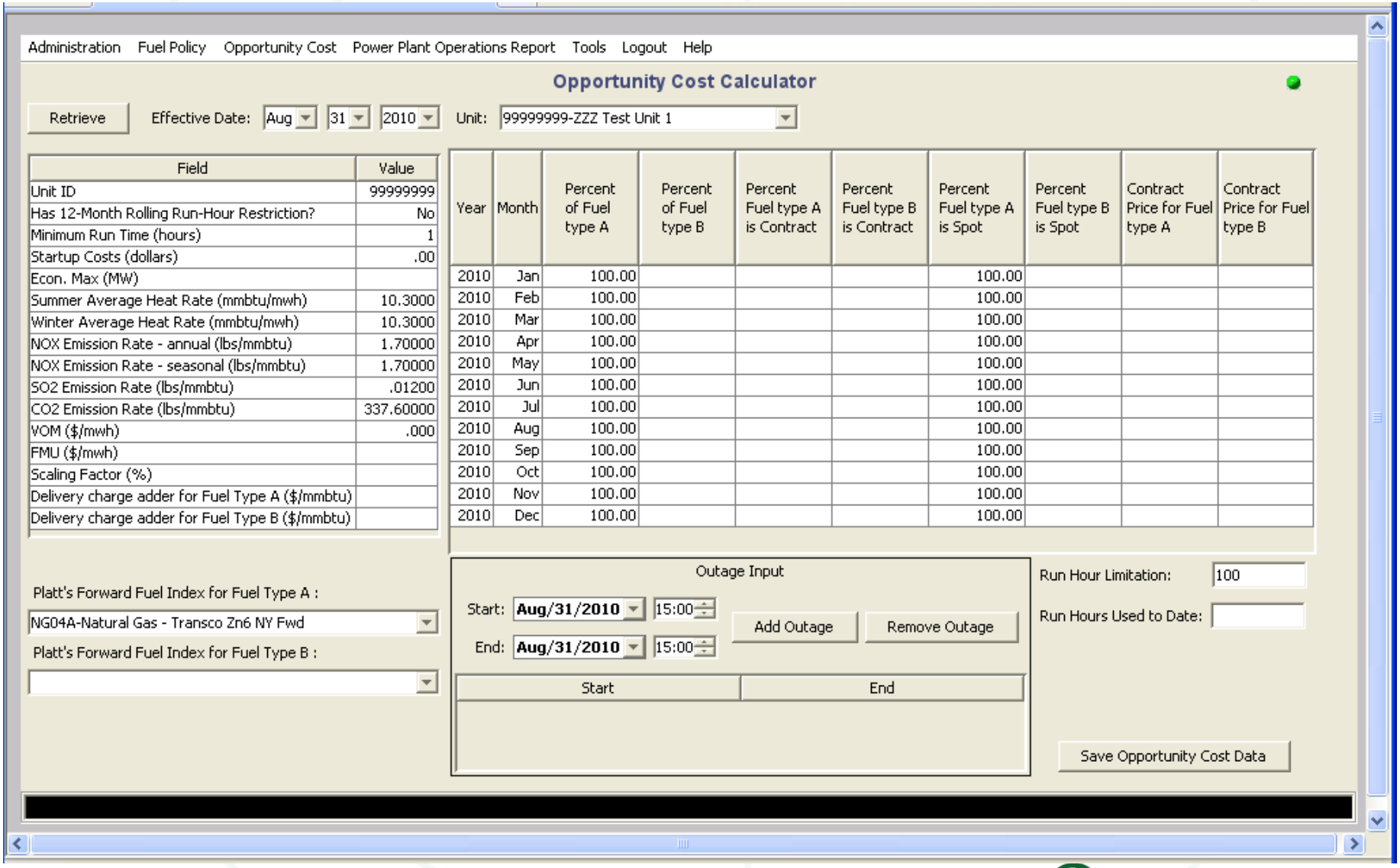
Schedule	Part	Item	Comment

Changes in Ownership
(Provide name of purchaser and date sold.)

Additional Unit Data



Opportunity Cost Calculator



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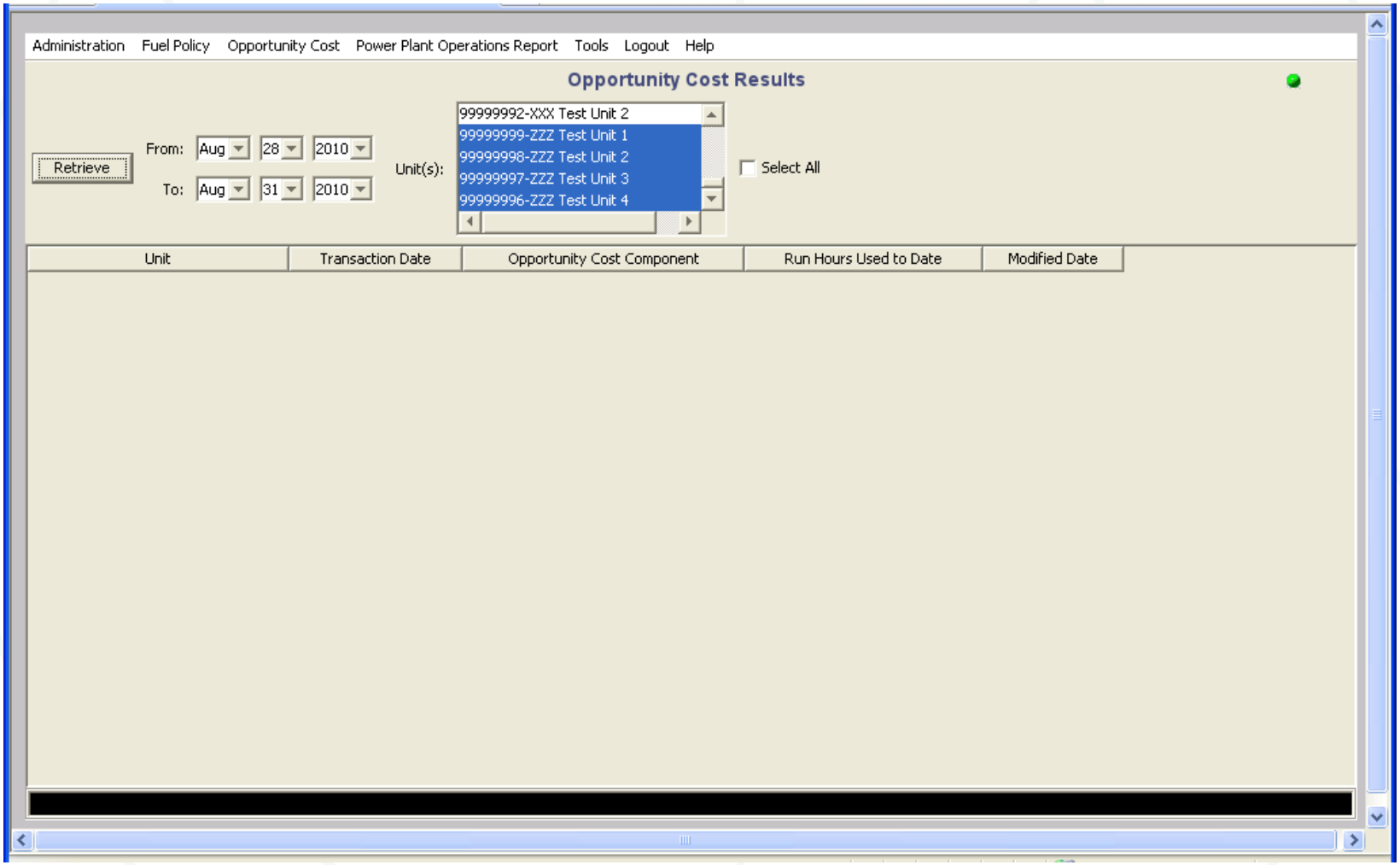
Opportunity Cost Results



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Reference Resources

- **Monitoring Analytics website, “Tools” page:**
  - http://www.monitoringanalytics.com/tools/tools.shtml

- **CODA Users Guide:**

http://www.monitoringanalytics.com/tools/docs/CODA_User_Guide_20100903.pdf

- **Contact:** coda@monitoringanalytics.com

Questions and Answers

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