# CODA<sup>™</sup>: Cost Offer Data Application: Fuel Policy & Fuel Data Entry

Cost Development Task Force July 26, 2010 Joseph Bowring



## **CODA New Screens**

- Fuel Policy
  - Save and manage fuel policy documents for all your units.
- Fuel Data
  - 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.
- Each company can have different users with access to each of the data screens
  - Accounts can be set up to give access to one function, but restrict access to other functions.



# **Required to Participate**

- Fuel Policy
  - Any PJM member with generating units that may be offer capped or that chooses to offer on a cost basis must submit a fuel cost policy to the PJM MMU for approval. (PJM Manual 15)
  - All Fuel Policies will be required to be submitted through the eFuel CODA Fuel Policy screen.
- Fuel Data
  - Each company must review and document their fuel costs at minimum once per month (12 times per year). Additionally, each review must occur within forty (40) days of the preceding review. The results of this review will be used to determine whether or not a fuel cost update is necessary. The documentation of fuel costs must be filed via eFuel CODA . (PJM Manual 15)
  - Contact <u>coda@monitoringanalytics.com</u> with questions.



## Account Set Up

- All PJM Generators should have their PJM CAM fill out the new CODA Registration Form, and designate users for the Fuel Policy and Fuel Data Reporting functions.
  - A single user could perform both roles, or the roles and access to the screens can be split/restricted among different users.
  - All previously existing eFuel accounts will be deleted and replaced with new CODA account credentials.
- The registration form can be found on the Monitoring Analytics website:

http://www.monitoringanalytics.com/tools/tools.shtml



## **Implementation Schedule**

Date:	Milestone:
Tuesday, July 27 through Monday, August 2	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.
Monday, August 23	Updated CODA System implemented in MA Production Environment. Old "Card 98" and "Card 99" screens disabled, and Card 98 and Card 99 data no longer reported.
Monday, August 30 Wednesday, September 1	Training Presentation (Details TBD) All generators accounts set up, data reporting requirement / audits begin (Monthly data for July and August, 2010 required.)



## **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.



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### **MMU Use of Fuel Policy Information**

- The MMU will use a unit's fuel policy to verify that costs are consistent with company/unit policy.
- Fuel policies assigned to units can only be changed after one year. Exceptions made by petition to the MMU.

## **Fuel Policy Template**

 A fuel policy document template will be available on the Monitoring Analytics website: <a href="http://www.monitoringanalytics.com/tools/tools.shtml">http://www.monitoringanalytics.com/tools/tools.shtml</a>



# Fuel Data

- Participants will report Monthly fuel delivery and consumption data into CODA by the end of the month following the data month.
  - Example: July data must be reported by the end of August.
- Monitoring Analytics will audit and enforce participation requirements.
- Monitoring Analytics will use the data for verification and analysis of generator costs.
- Monitoring Analytics treats all submitted data as confidential in accordance with the PJM Tariff.



# **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.



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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).

# 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".

# **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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#### **Fuel Data 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.



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	Fuel Policy	Opportunity Cost	923 Power Plant Operations Report	Operation Data V	alidation Card	Data Reports	Tools Logo	ut Help		
				:	923 Schedu	les				•
	🖲 Edit	Schedules Yea	r: 2010 - Month: Jun - Com	pany: 98765432-Z	ZZTestCo 🔽 🛛	Jnit: 999999991	-TestUnit 1 💌	Plant to which the Un	it belongs:	
				,				2397-Bayonne		
				1						
			~							

- Under "923 Power Plant Operations Report" (1), select "923 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 923 Schedules are reported monthly, except Schedules 6, 7, and 8, which are reported annually.
- Different EIA schedules are required for different MW level plants
- Non-EIA923 Unit data is reported monthly for each "Unit".
- Right click on the screen to add a row of data into each screen.

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

SCHED	ULE 2. PAGE 1. COST Fo (Instructions for	F AND QUALITY OF or fossil-fueled pla SCHEDULE 2. Page	FUEL RECEIPTS ants 50 megawa 1. are on page 3 o	- PLAN Itts and f the EI	<b>IT LEVEL CO d above</b> (A Form 923 )	INTRACT I	INFORM/ s.)	ATION, RECEIPTS A	<b>ND COSTS</b> Scroll Rig	pht for Page 2 >>	
No Receipts (If applicable, please check)				🔲 Is the	re a fuel to	lling agre	ement in place for this	s plant? (If applicable, p	lease check.)		
	Contract Inform	ation					Receipts		Cost per Unit		
	Complete for All I	Fuels					All Fuels		All F	uels	
Fuel Supplier Name	Conti	ract Type	Contract Exp Date (mmyy)	iration	Ene	rgy Source	9	Quantity Received	Total Delivered Cost	Commodity Cost (coal, natural gas)	
							•				
SCHEDULE 2. PAGE 2 (Instructio	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 >>										
All	Coal, Pet Coke,	Coal	Coal	Nat	ural Gas Coal, Pet Coke and Oil			oke and Oil			
Fuels Heat Content	and Oil Sulfur Content	Only Ash Content	Only Mercury Content	Firm Inte	n or erruptible	Predom Mode	hinant	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.)											
	If you have provided the MSHA ID number, leave these items blank.						Requir	ed by MMU			
MSHA ID Number	Name of Mine or Tipple	Mine Type	State or Cou of Origin	intry	Cour	nty	Fue	el Index			

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## Fuel Data 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. F (Instructions for SCHEDU	UEL CONSUMPTION - PRIME MOVE LE 3. Part B. are on page 9 of the EIA	R LEVEL Form 923 Instructions.)	
Click here for instructions	•	· -		
Was steam produced for purpose (If applicable, please check.)	ses other than electric power generation durin	ng this reporting period?		
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	I, OBS, OBG, OBL, or OG, please specify:			
		Save		
				Manitaring Ang
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### **Fuel Data Schedule 4: Fossil Fuel Stocks**

	SCHEDULE 4. FOSSI	L FUEL STOCKS AT	THE END OF THE REF	PORTING PERIOD A	ND DATA BALANCE					
<b>For Coal, Oil, and Natural Gas Plants</b> (Instructions for SCHEDULE 4, are on page 10 of the EIA Form 923 Instructions.)										
Click here for instructions	(Instructions re			onn 925 Inscredents.	/					
Energy Source (See Table 8 on pages 22 through 23 in the Instructions.)	nergy Source (See Table 8 on ages 22 through 23 in the Instructions.) Type of Physical Units (tons or barrels) Previous Month's Ending Stocks (1) Receipts (2) Current Month's Consumption (3) Ending Stocks (4)									
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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### **Fuel Data 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.)											
his 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	Prime Mover Code   Generator ID   Generator Status   Gross Generation   Net Generation     MWh   (MWh)   (M										
	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. F	Part C, are on page 12 of the EIA Form 9	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	Prime Mover Code Energy Source Unit Code Gross Generation Net Generation (nuclear) (MWh) (MWh)									



# Fuel Data Schedule 6: Source and Disposition of Electricity

U.S.Department of Energy Energy Information Administration Form EIA-923 (2008)	POWER PLAN REPOR	T OPERATIONS RT	Form Approval OMB No. 1905-0129 Approval Expires: 12/31/2010					
Plant Name: Bayonne								
Plant ID: 2397 State:	Reporting Year: 2010							
SCHEDULE 6. NO (Instructions fo	NUTILITY ANNUAL SOURCE or SCHEDULE 6. are on page	AND DISPOSITION OF ELECT 13 of the EIA Form 923 Ins	RICITY structions.)					
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 n	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 Custo	omers					
	(	(8) Sales for Resale						
	(	(9) Other Outgoing Electricity						
(3) Total Sources (1 + 2)	(	(10) Total Disposition (6 + 7 + 8	+ 9)					
т	otal Sources must equal To	otal Disposition (3 = 10)						



## Fuel Data Schedule 7: Annual Revenues from Sales for Resale

Plant Name: Bayonne		
Plant ID: 2397	State: Reporting	) Year: 2010
	SCHEDULE 7. ANNUA (Instructions for SCHED	<b>L REVENUES FROM SALES FOR RESALE</b> DULE 7. are on page 14 of the EIA Form 923 Instructions.)
SCHEDULE 7 is to be comp Sales for Resale. Annual o Sales for Resale is energy	pleted by respondents who entered a positive amount or data are due by March 30 following the reporting year. supplied to other electric utilities, cooperatives, municip	n SCHEDULE 6, Disposition of Electricity, Item 8, palities, Federal and State electric agencies, or other entities for resale to end-use consumers.
Annual Revenues from Sa	les for Resale (in thousand dollars):	
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# Fuel Data 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

		Disposal		Sale or Beneficial Use			Stored	Stored	
Byproduct	On-Site Landfill	On-Site Ponds	Disposal Off-site	Sold	Used On-site	Used Off-site	On-site	Off-site	Total
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)									



# Fuel Data 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)										
Туре	(1) Fly Ash	(2) Bottom Ash	(3) Flue G Desult	ias furization	(4) Water Pollution Abatement	(5) Other Pollution Abatement		(6) Total (1+2+3+4+5)		
Collection										
Disposal										
Other										
	Capital	Expenditures for New Str	uctures and Equij (Thousand	oment During Y Dollars)	ear, Excluding Land and	Interest Exper	ise			
() Type A		(7) Air Pollution Abatement	(8) Water Abate	(8) (9) Water Pollution Solid/Col Abatement Solid/Col		d/Contained Waste Ot		i) her Pollution Abatement		
Amount										
Byproduct Sales Revenue During Year (Thousand Dollars)										
Туре	Type (11) (12) Fly Ash Bottom Ash		(13) Fly and Bo Intermingle	ttom Ash Sold ed	(14) Flue Gas Desulfurization Byproducts	(15) Other Byproduct Revenue		(16) Total (11+12+13+14+15)		

Amount



# Fuel Data 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

Dailay ID	NOx Control In-Service	NOx Emission Rate (lbs/MMBtu)				
Boller 1D	(hours)	Entire Year	May through September			



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





## Fuel Data 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.

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





# Fuel Data 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									
Elue Geo	ECD Upit	Hours	Quantity of FGD Sorbent Used (0.1 thousand tons)	Electrical Energy	Removal Efficiency of Sulfur Dioxide (nearest 0.1% by wt)				
Desulfurization Unit ID	Status	In-Service		Consumption (MWh)	At Annual Operating Factor	At 100% Load or Tested Efficiency	Date of Most Recent Efficiency Test (e.g.,12-2005)		
	OPERATI	ON AND MAINTENAN	CE EXPENDITURES DUI	RING YEAR, EXCLUDI	NG ELECTRICITY (TH	OUSAND DOLLARS)			
Flue Gas	Feed	d Materials	Labor and	Waste Di	spocal Mai	intenance, Materials,	Total		
Desulfurization Ur	nit ID and	Chemicals	Supervision		and and	d All Other Costs	rotar		
n									



### **Fuel Data Schedule 9: Comments**

		(Instructions	SCHEDULE 9. COMMEN for SCHEDULE 9, are on page 2	<b>TS</b> 20 of the EIA Form 923 In:	structions.)	
		Comment Section	on: Explain any unusual values	occurences, or changes i	in ownership.	
Schedule	Part	Item			Comment	
		Changes (Provide name of	s in Ownership purchaser and date sold.)	<u>[</u>		
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## **Additional Unit Data**

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Adminis	tration Fuel Policy	Opportu	nity Cost 923 Pow	er Plant Ope	rations Report C	peration Dat	a Validation Card Data	Reports Tool	ls Logout Help		
		- , , , , , , , , , , , , , , , , , , ,			No	n-EIA923	Unit Data				٠
	Retrieve Year:	2010 💌	Month: Jul 💌	Company:	98765432-ZZZTe	stCo 💌	Unit: 99999991-TestUnit1	Plant to v 2397-Ba	which the Unit belo I <b>yonne</b>	ings:	
	Unit		Month		Year		Average full load heat rate (Mmbtu/MWh)	Avera heat r	ige mimimum load rate (Mmbtu/MWh)	) vor	1 in \$/MWh
	99999991-Testl	Jnit1		7		2010					
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