

# Renewable Portfolio Standard Presentation of NM Renewable Energy Program

---

*Overview by Wes Yeomans*

*April 7, 2003*

**Niagara Mohawk**

A **National Grid** Company



# Wholesale Reporting by PSC

---

- ◆ **NY PSC reviews the fuel type of each Load Serving Entities (LSEs) wholesale energy portfolio. They review the NYISO bilateral data, spot market purchase data, and load modifier data. First iteration based title.**
- ◆ **LSEs have the opportunity to purchase and sell green power amounts to each other and with suppliers. They report these “deals” to the PSC as “conversion transitions”.**
- ◆ **The PSC reports final results to suppliers for retail bill inserts. NM reports for one bill option.**



# Environmental disclosure

---

- ◆ All retail customers get an Environmental Disclosure Label (EDL) from their energy supplier at least twice a year.
- ◆ EDL shows fuel source for energy provided, and emissions of  $\text{SO}_2$ ,  $\text{NO}_x$ , and  $\text{CO}_2$  associated with this energy mix relative to statewide average.
- ◆ Allows comparison of characteristics between competing suppliers.
- ◆ Theory: Inform retail customers and create opportunity for LSE's to leverage clean power.



New York State Department of Public Service  
 3 Empire State Plaza  
 Albany, New York 12223-1350

Fuel Sources and Air Emissions to Generate Your Electricity  
 Period Shown: July 2000 - June 2001 for  
 Niagara Mohawk Power Corp.

<u>Fuel Sources</u>	
Biomass	Less Than 1%
Coal	12%
Gas	17%
Hydro	32%
Nuclear	32%
Oil	5%
Solar	0%
Solid Waste	2%
Wind	Less Than 1%
<b>Total</b>	<b>100%</b>

(Actual total may vary slightly from 100% due to rounding)

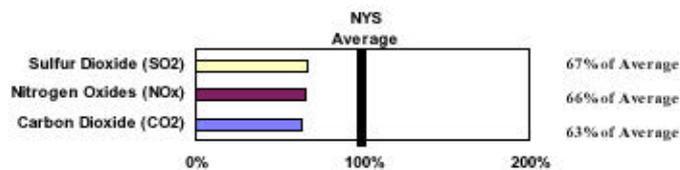
New York State Department of Public Service  
 3 Empire State Plaza  
 Albany, New York 12223-1350

Fuel Sources and Air Emissions to Generate Your Electricity  
 Period Shown: July 2000 - June 2001 for  
 Agway

<u>Fuel Sources</u>	
Biomass	Less Than 1%
Coal	32%
Gas	31%
Hydro	9%
Nuclear	13%
Oil	14%
Solar	0%
Solid Waste	Less Than 1%
Wind	Less Than 1%
<b>Total</b>	<b>100%</b>

(Actual total may vary slightly from 100% due to rounding)

Air Emissions Relative to The New York State Average



**Note:** Sulfur dioxide and nitrogen oxides are key pollutants that contribute to acid rain and smog, and carbon dioxide, contributes to global climate change. Depending on fuel source, size, and location, the generation of electricity may also result in other public health, environmental and socio-economic impacts not disclosed above.

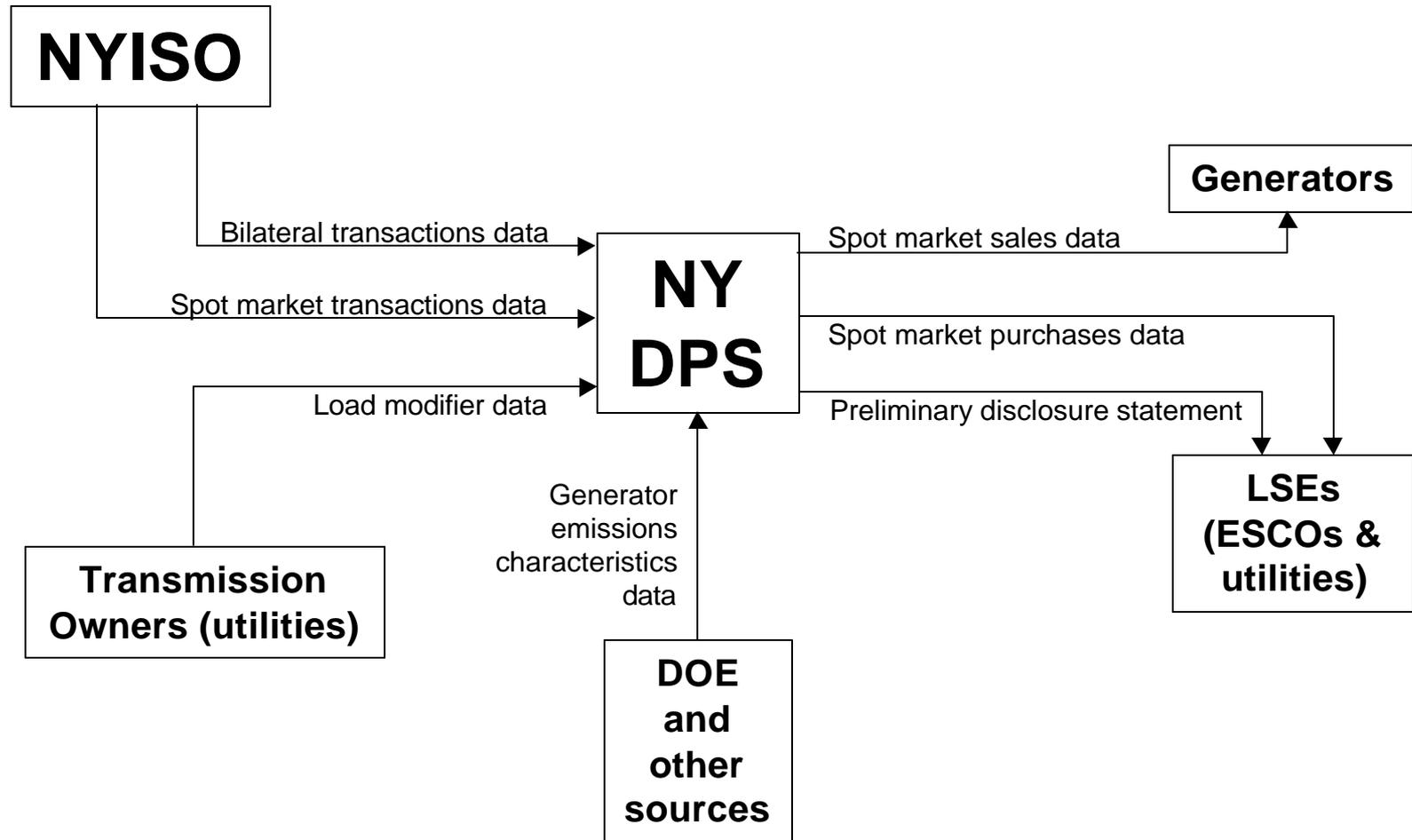
Air Emissions Relative to The New York State Average



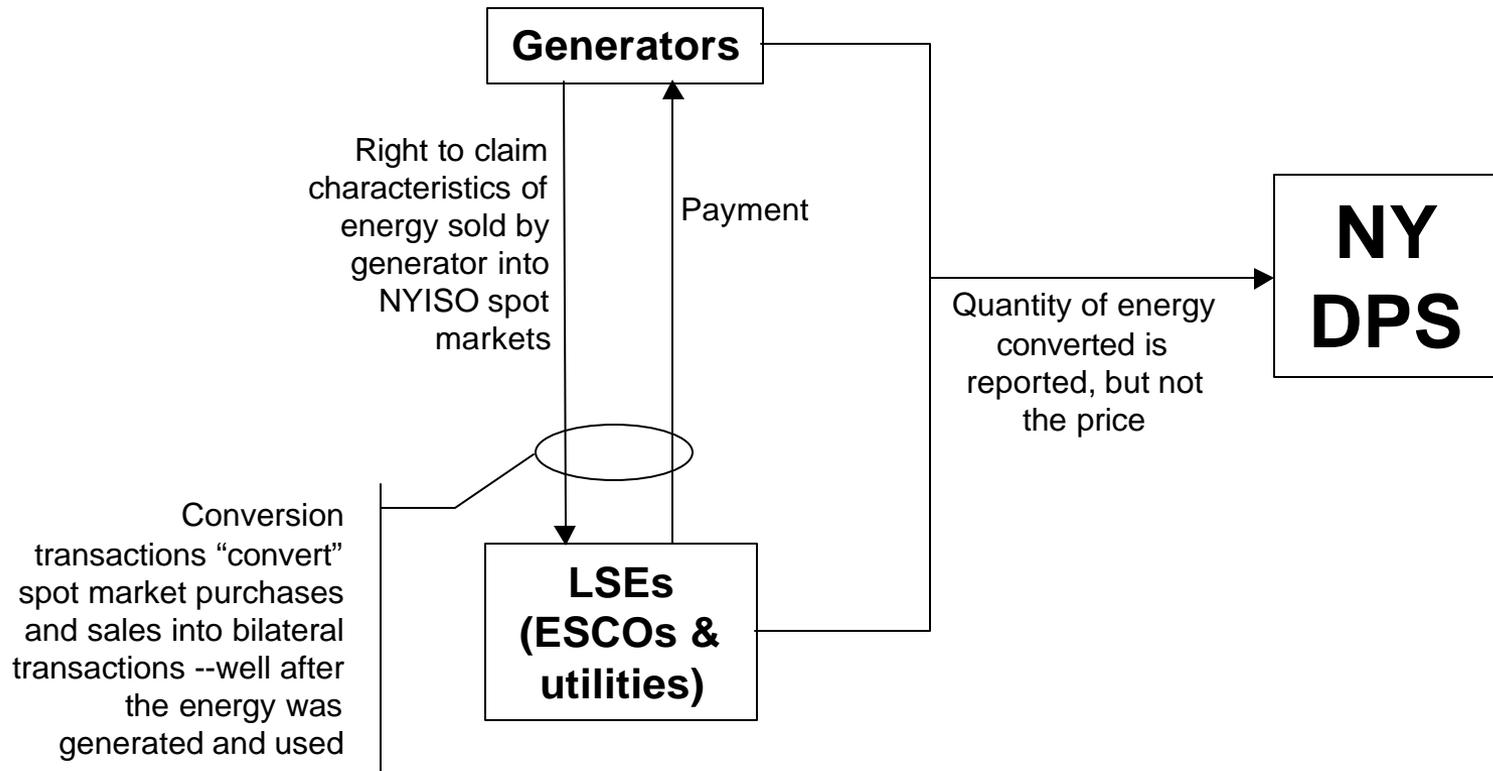
**Note:** Sulfur dioxide and nitrogen oxides are key pollutants that contribute to acid rain and smog, and carbon dioxide, contributes to global climate change. Depending on fuel source, size, and location, the generation of electricity may also result in other public health, environmental and socio-economic impacts not disclosed above.



# Sorting it all out - step 1



# Sorting it all out - step 2



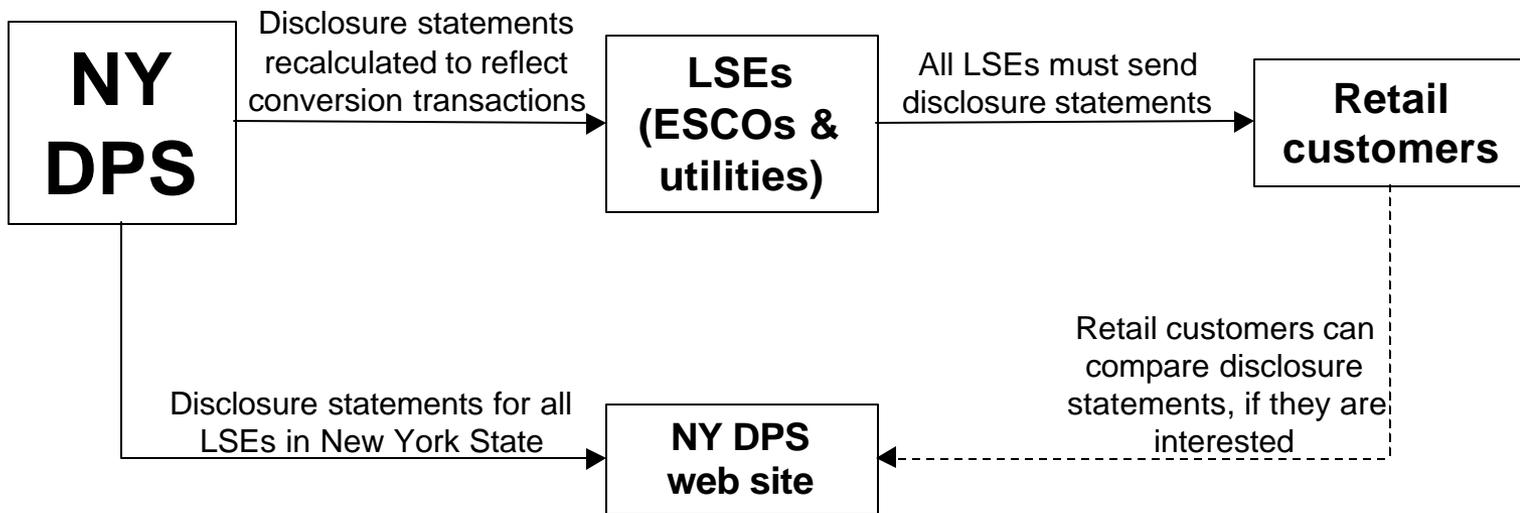
# Conversion transactions

---

- ◆ **Energy is removed from the spot market data and treated as if sold bilaterally.**
- ◆ **Residual energy left in the spot market will be “dirtier” due to skimming of clean energy through conversion transactions.**
- ◆ **However, in total, no change.**
- ◆ **NM reports conversion transactions of physical PPA’s from the spot market.**



# Sorting it all out - step 3



# ESCOs and green products

---

- ◆ **Environmental disclosure provides ESCOs with credible basis for making marketing claims.**
- ◆ **Retail customers have been slow to embrace ESCOs as suppliers, making any energy product, green or otherwise, difficult to market.**
- ◆ **New NM Renewable Energy program is one approach to address this.**



# NM Renewable Energy Program

---

- ◆ **NM agreed to allow “Green Marketers” approach & sell green power to our commodity customers without requiring our retail customer to leave for retail access and NM agreed to the retail “green” labeling.**
- ◆ **Provides a way for NM retail customers who stay with NM as their energy supplier to improve environmental characteristics of their purchases.**



# NM Renewable Energy Program

---

- ◆ **Intended as a transitional program until the retail market more fully supports green offerings by ESCOs.**
- ◆ **Green Marketers sell NM retail customers green power--certifying that a specific portion of their energy comes from renewable sources instead of the mix applicable to other NM customers.**
- ◆ **These Green Marketers are not ESCOs.**



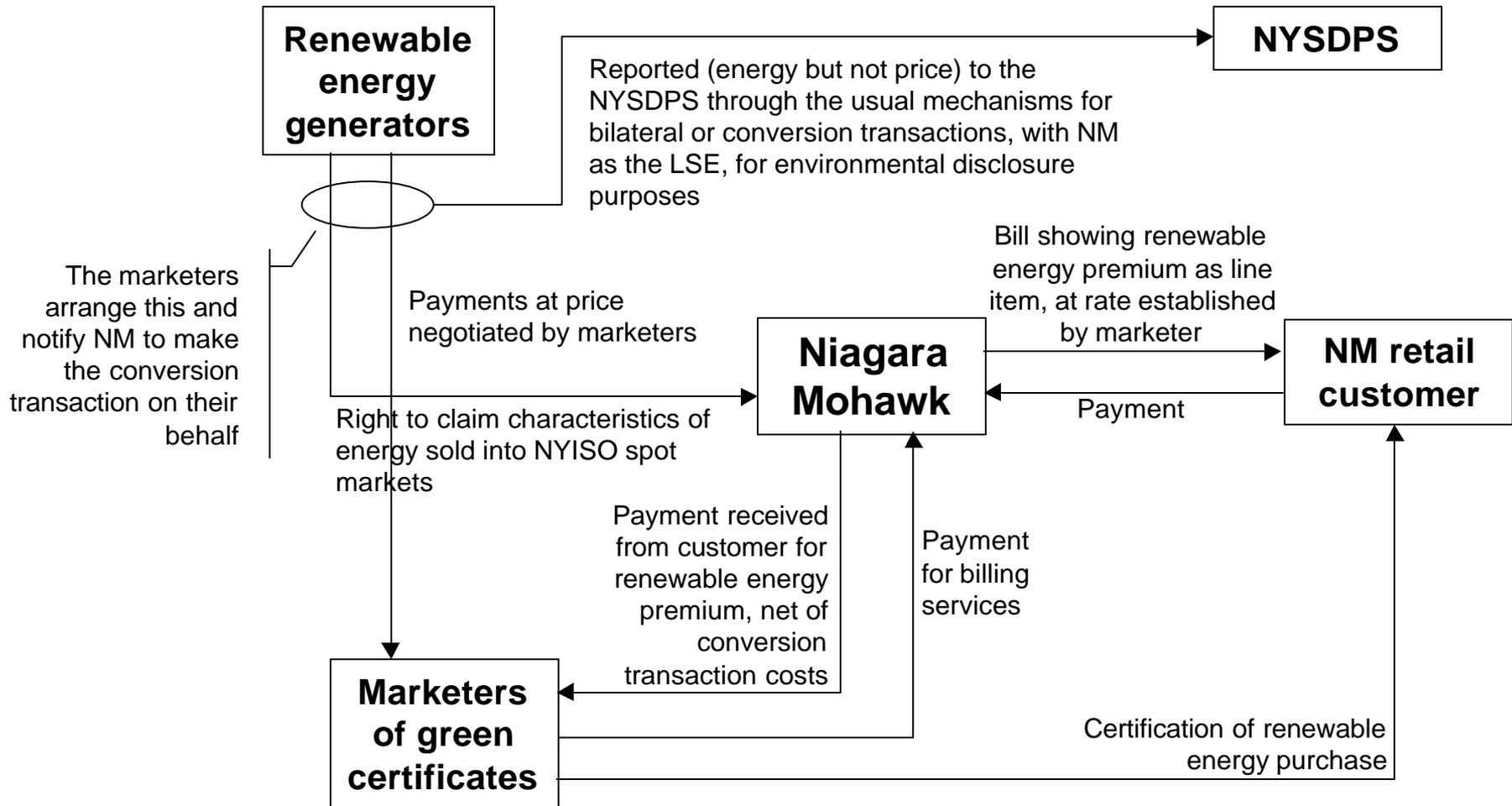
# NM Renewable Energy Program

---

- ◆ **Upon a Green Marketer selling green power to retail customer, that Green Marketer needs to pay a green generator to agree to a conversion transaction with the NM LSE.**
  - ◆ **NM to stream directly to the retail customer label.**
  - ◆ **Because NM has streamed directly to retail customer, PSC pull conversion transaction back out of total wholesale label.**



# How does that happen?



# NM Renewable Energy Program

---

- ◆ **NM has sent (9-2002) enrollment cards to retail customers with options for green marketers, quantities, rates.**
- ◆ **6000 retail customers have enrolled to buy quantities from green marketers.**
- ◆ **Green providers transmit the enrollment information to NM CSS.**
- ◆ **NM and PSC enforce and control the associated conversion transactions.**



# NM Renewable Energy Program

---

- ◆ **NM CSS has begun to bill the 6000 retail customers for quantities and at specified rates.**
- ◆ **NM will purchase Green Marketers Receivables from the Green Marketers, then bill appropriate retail customers.**
- ◆ **Started enrollment process in October 2002. At a later date this this will be reflected in retail labels.**

