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2007 APR 26 AM 10:25

PUCO

April 25, 2007

Public Utilities Commission of Ohio  
Attn: Docketing Division  
13<sup>th</sup> Floor  
180 East Broad Street  
Columbus, OH 43215-3793

RE:	In the Matter of the Transmission Rates	)	
	Contained in the Rate Schedules of Duke	)	Case No. 05-727-EL-UNC
	Energy Ohio and Related Matters	)	
	In the Matter of the Application of Duke	)	
	Energy Ohio for Authority to Modify	)	
	Current Accounting Procedures for Certain	)	Case No. 05-728-EL-AAM
	Transmission Costs	)	

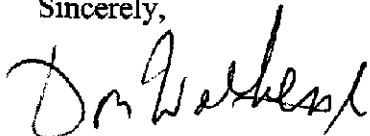
Docketing Division:

On Wednesday, April 25, 2007, Duke Energy Ohio submitted additional material on its Rider TCR which was filed for rates effective June 1, 2007.

In that filing, the pages that should have been part of Attachment 1, entitled, "Overview – Day-Ahead & Real-Time Revenue Sufficiency Guarantee" were inadvertently omitted.

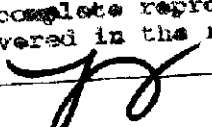
Attached are four copies of complete sets of Attachment 1. I apologize for any inconvenience this may have caused.

Sincerely,



Don Wathen, Jr.  
Director, Revenue Requirements

Enclosures

This is to certify that the images appearing are an accurate and complete reproduction of a case file document delivered in the regular course of business  
technician  Date Processed 4-26-07

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## Midwest Market

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# Overview - Day-Ahead & Real-Time Revenue Sufficiency Guarantee (RSG)

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# Midwest Market

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## Overview

- This presentation summarizes the following Market Settlement charge calculations:
  - Day-Ahead RSG Make Whole Payment
  - Day-Ahead RSG Distribution
  - Real-Time RSG Make Whole Payment
  - Real-Time RSG First Pass Distribution
  - Real-Time RSG Second Pass Distribution

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## Day-Ahead RSG Make Whole Payment

- Generation Assets cleared to run in the Day-Ahead Market are guaranteed their Production Costs (Start-up, No-load, and offer).
- The DART System will determine a Generation Asset's hourly eligibility along with its Production Costs as determined by the Asset Owner's Generation Asset Offer.

- For the eligible hours, the daily "Make Whole Payment" is calculated for the Generation Asset as follows:

$$\begin{aligned} &= \text{Minimum } \{ 0, \\ &\quad [ \sum_{\text{Hours}} ( \text{Production Costs} ) \times ( -1 ) ] - \\ &\quad \sum_{\text{Hours}} [ ( \text{Day-Ahead LMP} ) \times ( \text{Cleared Asset Schedule} ) ] \} \end{aligned}$$

- The Make Whole Payment is evenly spread across all eligible hours.

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## Day-Ahead RSG Make Whole Payment (Mitigated)

- The hourly generation asset Make Whole Payment is added up for the calendar day and compared to an IMM calculated “Mitigated Make Whole Payment”.
- If the daily Make Whole Payments exceeds the daily Mitigated Make Whole payment value by \$1000 and is 200% greater than the mitigated value, then the Make Whole Payment is reduced to the mitigated value.

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## Day-Ahead RSG Distribution

- Day-Ahead RSG Make Whole Payments are collected from Asset Owners with Day-Ahead withdrawal volume.
- Day-Ahead Withdrawal Volume consists of:
  - Cleared Day-Ahead Asset Load
  - Day-Ahead Cleared Net Virtual Schedules acting as load.
  - Day-Ahead Physical Bilateral Transaction MISO Exports
- Each Asset Owner is responsible for their hourly ratio share of the funding as follows:
$$= \Sigma ( \text{Hourly Day-Ahead Make Whole Payments} ) \times ( -1 ) \times [ ( \text{Asset Owner Total Day-Ahead Withdrawals} ) / ( \text{MISO Total Day-Ahead Withdrawals} ) ]$$

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## Real-Time RSG Make Whole Payment

- Generation Assets committed to run per the Reliability Assessment and Commitment (RAC) process are guaranteed their Production Costs (Start-up, No-load, and offer).
- The RAC process begins after the close of the Day-Ahead Market and continues through to the start of each Real-Time hour.
- The DART System will determine a Generation Asset's hourly eligibility along with its Production Costs as determined by the Asset Owner's Generation Asset Offer.

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## Real-Time RSG Make Whole Payment

- Settlement process calculates the Real-Time RSG Make Whole Payment for each commitment period. A commitment period is defined as the collective, contiguous hours where the generation asset has been committed in the Real-Time Market.
- The DART System will determine a Generation Asset's hourly eligibility along with its Production Costs as determined by the Asset Owner's Generation Asset Offer.

- For the eligible hours, the "Make Whole Payment" is calculated for each commitment period for each Generation Asset:  
= Minimum { 0 ,

$$\left[ \sum_{\text{Commitment-Period-Hours}} (\text{Production Costs}) \times (-1) \right] - \sum_{\text{Commitment-Period-Hours}} \left[ (\text{Real-Time LMP}) \times (\text{Cleared Asset Schedule}) \right] \}$$

- The Make Whole Payment is evenly spread across each commitment period's eligible hours.



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## Real-Time RSG Make Whole Payment (Mitigated)

- The hourly generation asset Make Whole Payment is added up for the calendar day and compared to an IMM calculated “Mitigated Make Whole Payment”.
- If the daily Make Whole Payments exceeds the daily Mitigated Make Whole payment value by \$1000 and is 200% greater than the mitigated value, then the Make Whole Payment is reduced to the mitigated value.

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## Real-Time RSG First Pass Distribution

- The Real-Time RAC process commits generation based on the anticipated capacity and generation that is expected to show up in the Real-Time Market that didn't show up in the Day-Ahead Market.
- The Real-Time RSG Make Whole Payments are collected from Asset Owners with Real-Time Contributing Market Activity.
- Real-Time Contributing Market Activity that is used to fund Real-Time RSG Make Whole Payments are:
  - Real-Time Load deviation from the cleared Day-Ahead Asset Schedule.
  - Day-Ahead generation resources not showing as anticipated in the Real-Time Market. (Setting Min or Max constraints to exclude the DA Schedule)
  - Changes in Real-Time Physical Bilateral Transactions from the Day-Ahead Market.

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## Real-Time RSG First Pass Distribution

- A safety net has been built into the Real-Time RSG First Pass Distribution charge type to prevent the rare instance where generation is committed, but there limited market activity.
- The safety net looks at whether there has been more hourly committed volume than there is Contributing Market Activity. When this occurs, an Asset Owner in this charge type is only assessed their ratio share of Contributing Market Activity compared to the total committed volume, and the Real-Time RSG Second Pass Distribution is triggered to occur.

- Each Asset Owner is responsible for their hourly ratio share of the funding as follows:

$$\begin{aligned} &= \Sigma (\text{Hourly Real-Time Make Whole Payments}) \times \\ &\quad \{ (\text{Asset Owner Contributing Market Activity}) / \\ &\quad \text{Maximum} [ (\text{Total MISO Commitment Volume}), (\text{All Asset Owner Contributing Market Activity}) ] \} \end{aligned}$$

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## Real-Time RSG Second Pass Distribution

- This charge type is only used when there is Real-Time RSG Make Whole Payments and the Total MISO Commitment Volume exceeds the total Real-Time RSG First Pass Distribution Asset Owner Contributing Volume.
- The safety net looks at whether there has been more hourly committed volume than there is Contributing Market Activity. When this occurs, an Asset Owner in this charge type is only assessed there ratio share of Contributing Market Activity compared to the total committed volume. This type of event also triggers this charge type to occur.

- Any unfunded Real-Time RSG Make Whole Payments are collected from Asset Owners based on their Real-Time Load Ration Share.

- Each Asset Owner is responsible for their hourly ratio share of the funding as follows:

$$= [ \Sigma ( \text{Hourly Real-Time Make Whole Payments} ) + \Sigma ( \text{Hourly Real-Time RSG First Pass Distribution} ) ] \times (-1) \times \{ ( \text{Asset Owner Load} ) / ( \text{All Asset Owner Load} ) \}$$

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## Supporting Documentation on the Market Settlements Web Page

### “DA & RT RSG Eligibility Guide”

[http://www.midwestmarket.org/publish/Folder/10b1ff\\_101f945f78e\\_75ea0a48324a](http://www.midwestmarket.org/publish/Folder/10b1ff_101f945f78e_75ea0a48324a)

### “FAQ 1 RSG Imports and Exports”

### “FAQ 2 DA Revenue Sufficiency Guarantee”

[http://www.midwestmarket.org/publish/Folder/10b1ff\\_101f945f78e\\_74440a48324a?rev=1](http://www.midwestmarket.org/publish/Folder/10b1ff_101f945f78e_74440a48324a?rev=1)