UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Ameren Energy Generating Company, AmerenEnergy Resources Generating Company, Ameren Energy Marketing Company, Electric Energy, Inc., Midwest Electric Power, Inc., AmerenEnergy Medina Valley Cogen, L.L.C., Dynegy Inc	Docket No. EC13-93-000

AFFIDAVIT OF MELISSA D. WHITED

ON BEHALF OF THE SIERRA CLUB

Introduction

My name is Melissa D. Whited. My business address is Synapse Energy Economics, Inc., 485 Massachusetts Avenue, Cambridge, Massachusetts 02139. I am an Associate at Synapse Energy Economics ("Synapse") where I provide consulting services on a variety of topics related to energy economics, including utility ratemaking, integrated resource planning, energy efficiency and demand response, and regional economic impacts of energy policy. I hold a Master of Arts in Agricultural and Applied Economics and a Master of Science in Environment and Resources, both from the University of Wisconsin-Madison. Prior to rejoining Synapse, I published in the Journal of Regional Analysis and Policy regarding the economic impacts of water transfers, analyzed state water efficiency policies while at the Wisconsin Public Service Commission, and conducted econometric analyses of energy efficiency cost-effectiveness. I also testified before the Wisconsin Senate Committee on Clean Energy regarding the economic impacts of clean transportation options and presented to the Wisconsin Public Service

Commission regarding the state's electricity demand response programs and potential.

I have been asked by the Sierra Club to summarize concerns related to the Applicants' evaluation of potential competitive impacts on electricity markets related to the transfer of generation resources from Ameren Corporation to Dynegy Inc. Specifically, I analyzed whether the analysis of Julie R. Solomon adequately accounted for the existence of transmission constraints and projected power plant retirements.

Based on the information contained in this affidavit, I conclude that there exists sufficient evidence of transmission constraints within Southern Illinois to warrant concern regarding the potential for exercise of market power on a localized basis. This concern is compounded by the expected retirement of much larger amounts of coal generation capacity than was analyzed by the Applicants.

There are submarkets in MISO that are a legitimate market power concern

The application states that, "For purposes of geographic market definition, Ms. Solomon observes that there are no geographic areas within MISO that, under current regulations, recent guidance, or any evidence, would be considered relevant submarkets for the Transaction."[1] However, the transaction involves large amounts of capacity in Southern Illinois, a part of MISO which has significant local constraints and deserves location-specific analysis.

According to the 2012 State of the Market Report for the MISO Electricity Markets by the MISO Independent Market Monitor, "Locational market power in wholesale markets can be substantial when transmission constraints or reliability requirements limit the effective

[1] Joint Application for Authorization Under Section 203 of the Federal Power Act, FERC Docket No. EC13-93 (filed Apr. 16, 2013) ("Joint Application") at 22.

competition to satisfy the system's needs in an area."[2] The Market Monitor notes that the Herfindahl-Hirschman index (HHI) is "limited as an indicator of overall competitiveness" because this metric does not account for network constraints or the physical characteristics of electricity.[3] Thus the Market Monitor recommends analyzing whether a supplier is pivotal to managing network constraints or satisfy load in order to assess the potential for market power.

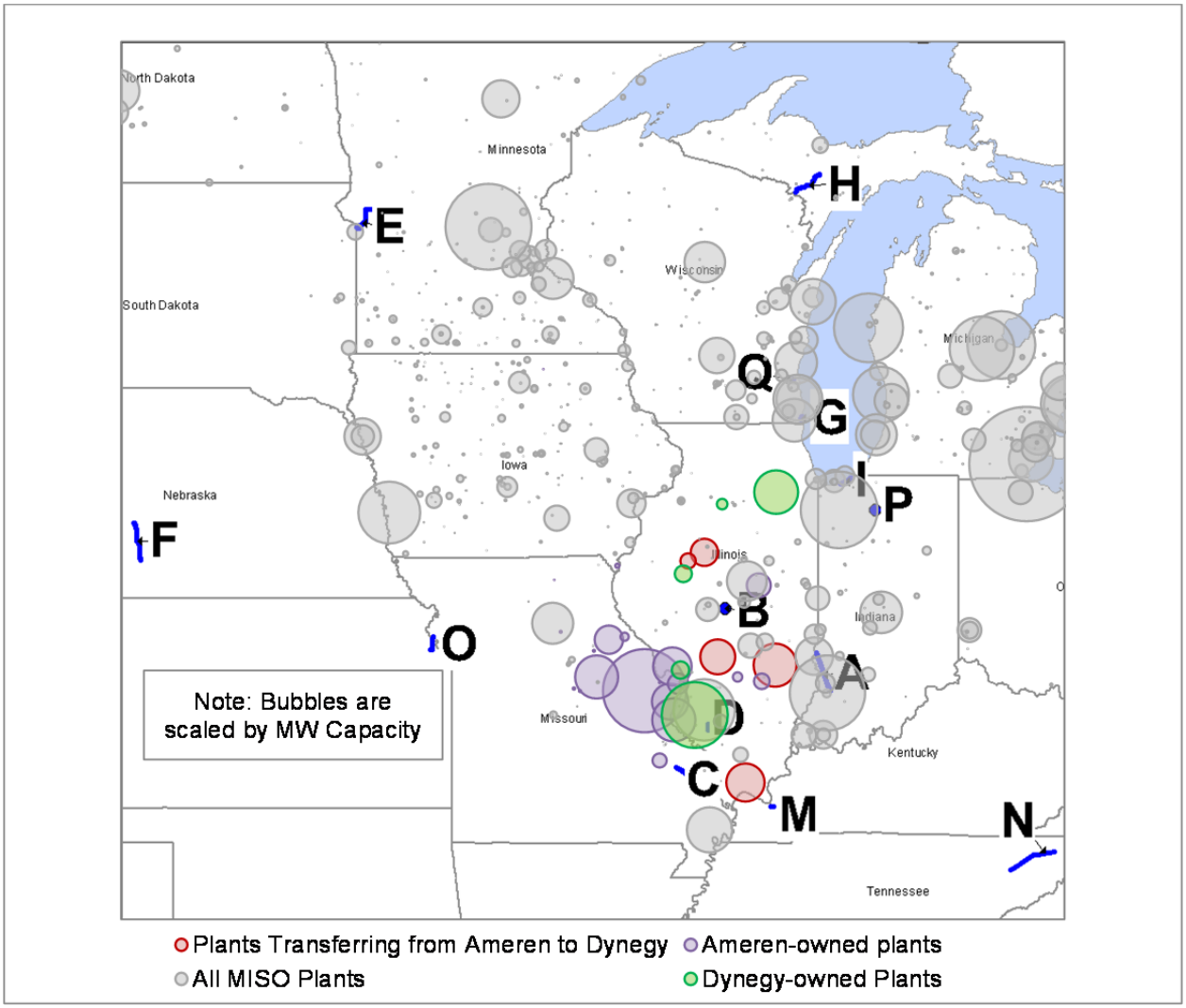
Network constraints are currently present in MISO and may become more acute in the future as load grows or power plants retire. Flowgates represent boundaries between parts of a transmission system that frequently experience congestion. Many of the top congested flowgates in MISO are located in the Southern Illinois region where Dynegy will be significantly expanding its share of the local generation capacity. The map below overlays the results of MISO's Top Congested Flowgate Study[4] with the location and capacity of MISO power plants. The power plants in red are those that are proposed to be transferred from Ameren to Dynegy, while the power plants in green are those already owned by Dynegy.

[2] Independent Market Monitor for MISO, *2012 State of the Market Report for the MISO Electricity Markets*, June 2013, ("Market Monitor") at 61, available at http://www.potomaceconomics.com/uploads/midwest_reports/2012_SOM_Report_final_6-10-13.pdf

[3] Market Monitor at 61.

[4] MISO, MTEP11 Top Congested Flowgate Study, Presentation at the 7th TRG Meeting, Feb. 21, 2012, available at https://www.misoenergy.org/Library/Repository/Meeting%20Material/Stakeholder/PAC/2011/20110928/20110928%20PAC%20Item%2002%20MTEP11%20Top%20Congested%20Flowgates%20Study.pdf

Figure 1. Map of Top Congested Flowgates and MISO Power Plants



A thorough assessment of the proposed transaction would look not just at HHIs for the entire MISO region, but rather would examine local market power issues related to both energy and unit commitments made for local reliability purposes. The MISO Market Monitor notes that there have been "excess payments made to units committed for capacity."[5] With regard to these issues, the Market Monitor urges caution:

> Despite infrequent mitigation in 2012, the pivotal supplier analyses discussed earlier in this section continue to indicate that local market

[5] Market Monitor at 65.

> power is a significant concern. If exercised, local market power could have substantial economic and reliability consequences within MISO.[6]

Hence, market power mitigation measures remain essential. MISO has experienced excess payments made to units committed for capacity purposes. All of the units involved in the proposed transaction are located in an area of MISO already experiencing floodgate congestion, raising the possibility that the transaction could increase instances where local market power could be exercised. This should be examined as part of a comprehensive review of market power and the transaction.

The treatment of power plant retirements in MISO is inadequate

Ms. Solomon analyzes two cases with substantial coal plant retirements: one with approximately 4,000 MW (and retiring specific plants) and another case with 5,000 MW (but no specific plants identified). However, in testimony before the House Committee on Energy and Commerce Subcommittee on Energy and Power in March 2013, Clair Moeller of MISO testified that MISO had an "expected 12,000 MW retirement level."[7] A March 2013 presentation of MISO's survey results indicates that approximately 6,000 MW of coal capacity in MISO will be replaced, with another 6,000 MW yet to be determined. For forecasting purposes, the presentation lists 10,000 MW of expected retirements.[8]

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[6] *Id* at 66.

[7] Testimony of Clair J. Moeller, Executive Vice President of Transmission & Technology of the Midwest Independent Transmission System Operator, Inc. (MISO) Before the House Committee on Energy and Commerce Subcommittee on Energy and Power at 1 (March 19,2013) ("Moeller Congressional Testimony") available at http://docs.house.gov/meetings/IF/IF03/20130319/100527/HHRG-113-IF03-Wstate-MoellerC-20130319.pdf.

[8] Updated Resource Adequacy Impacts of EPA Implementation (March 21,2013) ("MISO Survey"), available at https://www.misoenergy.org/Library/Repository/Communication%20Material/Power%20Up/EPA%20Compliance%20Update.pdf.

Ms. Solomon's scenarios of coal retirements analyze far fewer retirements than are generally expected and that MISO assumes for planning purposes. The HHI analyses in Ms. Solomon's Affidavit should be performed with a more reasonable range of retirement scenarios, ranging from a minimum of 5,000 MW to at least 15,000 MW. We would expect that additional coal retirements could, and will, influence the operation of the grid in this region. For example, congestion in broad constrained areas ("BCAs") and local reliability commitment needs may increase in a coal retirement scenario. As described above, this could create a situation where market power mitigation should be implemented.

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AFFIDAVIT

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MELISSA D. WHITED being duly sworn, deposes and states: that she prepared the Affidavit of Melissa D. Whited and that the statements contained therein are true and correct to the best of her knowledge and belief.

M. Whited
Melissa D. Whited

SUBSCRIBED AND SWORN TO BEFORE ME, this 16 day of August, 2013.

Notary Public, Massachusetts

Printed Name: JANICE CONYERS

My Commission Expires: 7/27/18

JANICE CONYERS
Notary Public
Commonwealth of Massachusetts
My Commission Expires
July 27, 2018