

Demand Response Compensation, Net Benefits and Cost Allocation: Comments[☆]

FERC's Supplemental Notice of Public Rulemaking addresses the question of proper compensation for demand response in organized wholesale electricity markets. Assuming that the Commission would proceed with the proposal "to require tariff provisions allowing demand response resources to participate in wholesale energy markets by reducing consumption of electricity from expected levels in response to price signals, to pay those demand response resources, in all hours, the market price of energy for such reductions," the Commission posed questions about applying a net benefits test and rules for cost allocation. This article summarizes critical points and poses implications for the issues of net benefit tests and cost allocation.

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[☆] *Editors' Note: Prof. Hogan chose not to respond specifically to the assertions contained in the article in this issue by Jonathan Falk, Paying for Demand-Side Response at the Wholesale Level. Instead, he preferred to offer the following essay as a fair proxy for his thinking on the issues discussed in Mr. Falk's piece. This article is adapted from his remarks prepared for FERC's Technical Conference on Demand Response Compensation in Organized Wholesale Energy Markets (Docket No. RM10-17-000) on Sept. 13, 2010.*

I. Introduction

The Federal Energy Regulatory Commission's Supplemental Notice of Proposed Rulemaking (NOPR) addresses the question of proper compensation for demand response in organized wholesale electricity markets.¹ Assuming that the Commission would proceed with the proposal "to require tariff provisions allowing demand response resources to participate in wholesale energy markets by reducing consumption of electricity from expected levels in response to price signals, to pay those demand response resources, in all hours, the market price of energy (also referred to as the "locational marginal price" or LMP) for such reductions,"² the Commission posed questions about applying a net benefits test and rules for cost allocation.

There is now an extensive record in this matter, and I have written on the various issues.³ The purpose of the present article is to summarize critical points and pose implications for the issues of net benefit tests and cost allocation. These comments highlight several questions: Why are we here? Why is this subject so confusing? Why are retail rates relevant? How can we match ends and means? Do we need a net benefits test? How should we allocate costs? Where should we go from here?

The Commission's Supplemental NOPR did not address the underlying

arguments presented in response to the original NOPR in this matter. But many of the basic issues in considering net benefits tests and cost allocation arise from the fundamentals that the Commission should address. Despite the important role that LMP plays in successful market design, the Commission should not assume that paying LMP is always appropriate.

The proposal as it stands is inconsistent with the framework and is asymmetric in its treatment of other resources for providing capacity and energy.

II. Why Are We Here?

Success of electricity restructuring depends to a large extent on the success of electricity market design in organized wholesale electricity markets. Good electricity market design requires consideration of how the many pieces fit together, and how well they all follow from a coherent set of principles that provide an organizing framework guiding the complicated orchestration of details.

The basic framework I have in mind is an efficient market emulating the competitive ideal of welfare maximization through

the short-term structure of bid-based-security-constrained economic dispatch with financial transmission rights and the associated long-term incentives created by the anticipation of this sequence of short-term markets going forward.

An important part of that framework is participation of demand responding to incentives to manage short-term load and invest for greater long-term savings. It is widely recognized that there is more potential for better demand response.⁴

The Commission's demand response compensation proposal inevitably interacts with this larger framework. However, the proposal as it stands is inconsistent with the framework and is asymmetric in its treatment of other resources for providing capacity and energy.⁵

III. Why Is This Subject So Confusing?

In his NOPR reply comments, Alfred Kahn refers "... to the proposition—in principle indisputable—that demand response is in all essential respects economically equivalent to supply response; and that economic efficiency requires, as the NOPR recognizes, that it should be rewarded with the same LMP that clears the market. Since DR is actually—and not merely metaphorically—equivalent to supply response, economic efficiency requires that it be regarded and rewarded,

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