

UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Assessment of Demand Response Resources	Docket Nos.	AD06-2-000
PJM Interconnection, L.L.C.		ER06-406-000
ISO New England Inc .		ER02-2330-040
ISO New England Inc.		ER03-345-006
New York Independent Transmission System Operator, Inc.		ER01-3001-014

**TECHNICAL CONFERENCE ON DEMAND RESPONSE  
AND ADVANCED METERING**

**PRESENTATION OF  
THE STEEL MANUFACTURERS ASSOCIATION**

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January 25, 2006

## I. About SMA

- SMA is the primary trade association for scrap-based electric arc furnace steelmakers in North America. Its members:
  - Include 38 North American companies employing more than 40,000 people
  - Operate more than 130 facilities in 37 states



- SMA Facilities Accounted For Over 50% of U.S. Steel Production In 2004
  - They create new steel products forged from melting a feedstock of almost 100% steel scrap
  - Over 50 million tons of steel scrap recycled, melted and re-cast in 2004
  - Highly efficient steel-making method
  - Typically operated as batch process that runs round the clock
  - Energy intensive process
  - Facilities require reliable, adequate and reasonably priced electric power

## II. Electric Arc Furnace Operations as Demand Responsive Loads

- An EAF often is the largest single load on a utility system
- Frequently the largest curtailable loads on a system
- Operations typically provide 50-150 MW of load curtailable on notice as short as 5 minutes
- Curtailment loads of this size provide significant system reliability benefits and system price benefits
- Members routinely take service under RTP, time of day, or comparable retail tariffs or negotiated rates. Many participate in RTO implemented demand response programs, where permitted.

### III. Lessons Learned From Existing Demand Response and Time-Based Rate Programs

- Customer participation in traditional retail demand response programs has been on the decline
- Time-based rate programs do not attract participation unless they allow customers to benefit from adjusting consumption in response to power prices
- Disparity between use of EAF loads as a resource historically and in programs operated by organized markets (capacity, energy and operating reserves)

### IV. Basic Principles for Enhanced Demand Response Participation

- **Align Demand Response Objectives with Customer Financial Interests**
  - Reasons for RTP tariff offerings with zero customer participation
  - Factors affecting declining customer participation
  - Characteristics of successful programs
- **Open All Power Markets to Demand Response Participation**
  - Capacity-related programs: Relative success
  - Economic bidding programs: Implementation delays
  - Ancillary Services: Slow progress
- **Remove All Unnecessary Barriers to Participation**
  - Compare historic treatment of batch loads for operating reserves and RTO programs
- **Establish Consistent and Supportive State and Federal Treatment**
  - NYPSC/ NYISO
  - PJM/ AEP and State rules

### V. The Commission's Role in Demand Response

- Program implementation in organized markets
- Regional Coordination (EPAct sec. 1252 (e))
- Identify and eliminate barriers to participation (EPAct sec. 1252 (e) and (f))
- Establishing consistent and supportive state and federal programs

### Demand Response Benefits Comparison

