Appendix A
Amended Agenda Item #5E

December 8, 2000

Overview of Emergency Demand Response Program

1. End Use Customers can be accommodated through one of four types of Curtailment Services Providers (CSP):

- through an LSE, either that currently serving the load or another LSE
- through NYISO-approved Curtailment Customer Aggregators
- as a Customer of the NYISO
- as a Curtailment Program End Use Customer (reduced membership requirements for only this program)

These CSPs are referred to as Pilot Participants.

2. The program will be effective beginning May 1, 2001 and will continue through October 31, 2002. At the end of each capability period, the program will be evaluated and changes recommended as necessary.

3. Participation is voluntary – no penalties are incurred if the load does not perform as requested.

4. Any LSE curtailment program participants would be entitled to participate in the program. An individual End Use Customer can not be signed up for the ISO program by more than one entity for the same metered load.

5. CSPs will be required to provide appropriate hourly interval metering to validate performance.

6. Actual load reduction will be verified by the NYISO through data submitted by the CSP within 45 days of the load reduction event.

7. Program is limited to when called by the NYISO as a part of the In-day Peak Hour Forecast response to an Operating Reserve Peak Forecast Shortage ~~(Section 4.4.2 of the System Operating Procedure.)~~ (Section 4.4.1 of the NYISO Emergency Operations Manual) or in response to the major emergency state (defined in Section 3.2 of the Emergency Operations Manual). Program can be called in conjunction with Special Case Resources (except there won't always be 24 hours notice.)

8. Each CSP will designate a contact person responsible for interfacing between the NYISO and the CSP. The NYISO will contact this individual to initiate a curtailment within the program. The CSP will be responsible for establishing procedures to communicate with load reduction customers.

9. Payments will be the greater of the real-time zonal LBMP or $500/MWh for all hours where the emergency exceeds 4 hours. Where the emergency is less than 4 hours, payments will be the greater of the realtime zonal LBMP or $500/MWh for the first two hours of an event and ~~paid for a minimum of 2 additional hours~~ at the zonal LBMP~~, paid directly to the CSPs.~~ for an additional 2 hours. Payments will be paid directly to the CSPs.

10. Every ISO event has a four hour minimum run time, on the customer's clock; the verification process will determine when the customer started to respond to the program.

11. ~~Customers~~ CSPs should be able to provide load reduction of at least 100 kW and be able to respond within two hours of emergency notification.

12. Customers under a contract that prevents them from curtailing energy are prohibited from participating in the program.

13. The program is intended to support the New York State power system during emergency periods. As such, NYISO reserves the right to call upon whatever ECP resources are needed to relieve system emergencies. The costs to administer this program will be allocated on a system-wide basis to purchasers of energy in proportion to their net energy purchases during the hours requested. If this program is activated by the NYISO to respond to a zonal emergency the funds will be charged to all LSEs in the Zone. (See attached Discussion by Jerry Ancona.)

14. Customers participating in the ECP may also participate in the NYISO's Special Case Resources Program.

Detailed Description of Pilot Program

The proposed Pilot Program is similar to the load response programs recently approved by the Commission in California Independent System Operator Corp., Docket No. ER00-2208, 91 FERC ¶ 61,256 (June 14, 2000) ("California") and New England Power Pool, 91 FERC ¶ 61,203 (2000) ("New England") and is modeled after the PJM Interconnection filing Docket No. ER00-3090-000. Moreover, as explained below, the Pilot Program fits within the category of filings the Commission encouraged in the Supplemental Notice. In that notice, the Commission "encourages ISOs to take advantage of on-site generation and load management programs to facilitate reliability." Supplemental Notice, slip op. at 4.

Participant Qualification

- To participate in the Pilot Program, an entity must be one of the following:
  1. An LSE, that currently is serving the curtailable customer's load or another LSE.
  2. A NYISO-approved Curtailment Customer Aggregator
  3. A Direct Customer of the NYISO
  4. A Curtailment Program Customer of the ISO

  These Curtailment Service Providers (CSPs) must be able to completely disconnect from the local distribution system and supply required load via local generators[1] or to reduce a measurable and verifiable portion of the load. Furthermore, the CSP must (1) be capable of reducing at least 100 kW of load; (2) be capable of achieving full reduction within two hours of the LSE, Aggregator or Direct Customer's request to reduce; (3) meet certain metering requirements and; (4) be a member of the NYISO. Additionally, Customers who are qualified as Special Case Resources as defined in the NYISO Installed Capacity Manual will be able to participate in this program.

The NYISO Pilot Program is not intended to interfere with existing contractual obligations under other load management programs. Accordingly, NYISO will confirm with the appropriate LSE and Electric Distribution Company that the load to be reduced is not under any other specific contractual **obligation** that would prevent participation in the Pilot Program.

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[1] These generators either can be non-synchronized to the grid or synchronized to the grid with no net export to the grid while serving load.

However, where such other obligation is not inconsistent with participation herein, such participation will be permitted.

The entities participating in the Pilot Program will contribute to the reliable and efficient operation of the NYISO energy market during emergency Operating Reserve shortage conditions. Nothing in the Pilot expands or reduces the rights of a Customer to sell generation into the wholesale market. Pilot Participants with on-site generation can sell their generation at wholesale into the market, but only if they can readily synchronize with the grid. Alternatively, under the Pilot Program, such entities will now be able to reduce load and use their on-site generation to serve what otherwise would be NYISO load, thereby reducing the total NYISO load in emergencies. This has the same reliability impact as selling the generation into the NYISO energy market. Similarly, the Pilot Program enables other entities that do not have generation, as well as load serving entities, to manage their load and assist both the reliability and efficiency of the energy market. During an emergency, such entities will be able to reduce their loads and be compensated rationally for such reduction at real-time, locational prices.

This program promotes the reliable and efficient working of the NYISO energy market that the Commission has approved. As the Commission has recently recognized on several occasions, "[t]he ability to rely on demand side responses better allows the market to resolve

New England, 91 FERC at 61,713; see also California, 91 FERC slip op. at 6; ISO New England, Inc., Docket Nos. EL00-62 et al., 91 FERC ¶ 61,311, slip op. at 15 (June 28, 2000) ("The proposals by ISO New England and the California ISO that we recently approved to pay customers for curtailing load are examples of how demand side of the market can be given an increased role . . . markets would benefit by more participation by the demand side.")

Because the Commission regulates the NYISO energy market under its jurisdiction over wholesale energy markets and its jurisdiction over the ISOs that operate them, the Commission has jurisdiction over all rules that affect or relate to the market. See 16 U.S.C. § 824d(c) ("[E]very public utility shall file with the Commission . . . all rates and charges for any transmission or sale subject to the jurisdiction of the Commission, and the classifications, practices, and regulations affecting such rates and charges together with all contracts which in any manner affect or relate to such rates, charges, classifications, and services.") (emphasis added). Because the Pilot Program "affects" and "relates to" the already approved wholesale rates, terms, and conditions in the energy market, the Pilot Program is also subject to the Commission's jurisdiction. 16 U.S.C. § 824c. Particularly given the limited scope (emergencies only) and duration (through October 31, 2002) of the Pilot Program, the Commission can and should accept the Pilot Program as an amendment to the appropriate NYISO agreements, just as it accepted the similar program in the case of the California ISO. See California Independent System Operator Corp., 91 FERC ¶ 61,256 (2000) (approving a trial demand relief program for individuals or groups willing to reduce their load in order to support the reliability of the system this summer); see also Transmission Access Policy Study Group v. FERC, 2000 U.S. App. LEXIS 15362 (D.C. Cir. June 30, 2000) (holding that the Commission may address retail stranded costs because it "is the byproduct of a legitimate exercise of FERC's power" to regulate interstate transmission).

Metering Requirements

Pilot Program participants must have metering equipment that provides integrated hourly kWh values for market settlement purposes. These requirements can be met by using either: (1) metering capable of recording integrated hourly values for the actual net generation; or (2)

metering that provides actual load change by measuring actual load before and after the reduction request, such that there is a valid integrated hourly value for the hour prior to the event and each hour during the event.

Implementation

The NYISO will implement the Pilot program as part of its emergency procedures either coincident with the activation of special case resources, if the emergency is foreseeable on a day ahead basis, or on a real time basis with a two hour advanced notice. Each event will be called upon for a minimum of a four hour duration.

It is generally intended that NYISO will rely on the Pilot Program load reductions before purchasing emergency energy from market participants and neighboring control areas. See California, slip op. at 2. By paying the prevailing LBMP for load reductions as proposed (see below), NYISO will avoid potentially higher cost purchases of emergency energy, to the benefit of the efficient, market-based operation of the energy market during emergencies.[2]

Verification

All load reduction metering data must be submitted by the Pilot Participant to the NYISO within 45 days of the load reduction event. Failure to so provide such data will result in a Pilot Participant not receiving payment for its participation in the Pilot Program. The Pilot Participant will communicate the meter readings directly to the NYISO. The NYISO will forward the file to the appropriate Electric Distribution Company for optional review. In addition, all load reduction data are subject to NYISO market monitoring unit audit.

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[2] Similar to California, the Pilot Program load reductions may be implemented prior to any other load reduction programs. See California, slip op. at 2-3.

Market Settlements

Under the Pilot Program, reimbursement for reducing load is based on the kWh of relief provided. NYISO will pay the higher of the appropriate real-time zonal locational marginal price ("LMBP")[3] or $500/MWh to the Pilot Participant that nominates the load for the first 2 hours of an event. NYISO's proposed payments for reducing load are in line with those approved in New England, 91 FERC at 61,711. In that order, the Commission approved payments of $500, $750, and $1,000 per MWh interrupted for load curtailments to fill blocks of interruptible load. Id.

Where the cause of emergency is a statewide event all costs incurred under the Pilot Program will be allocated to purchasers of energy from the NYISO energy market, in an identifiable charge in proportion to their net purchases from the energy market during the hour. This pricing methodology is consistent with NYISO's current method for allocating costs during emergency conditions under the NYISO Tariff. Under emergency conditions, costs for emergency purchases in excess of LBMP are allocated among NYISO members in proportion to their net purchases from the NYISO energy market during the hour. Similarly, the costs of the Pilot Program are allocated to NYISO members in proportion to their net purchases from the NYISO energy market during the hour. This is appropriate in that the load reductions under the Pilot Program are in lieu of making more expensive emergency purchases. As in California, 91 FERC slip op. at 8, the allocation methodology for the Pilot Program "simply tracks" the existing method for allocating costs relating to emergency conditions already established under the Operating Agreement. Similarly, if this program is activated by the NYISO to respond to a zonal emergency the funds will be charged to all LSEs in the Zone(s) in proportion to their net

purchases from the NYISO energy market during the hour. The ISO, working with market participants, will develop standards to quantify the response of Pilot Participants.

Effective Date

The start date of the program is proposed to be May 1, 2001 and the termination of the program on October 31, 2002. Additionally, the program will be evaluated at the end of each Capability Period in order to find ways to improve its effectiveness and efficiency.

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[3] Because individual loads are not currently mapped to individual NYISO buses, the load-weighted average LBMP for a transmission zone will be applied.

ATTACHMENT 1: Discussion of Cost Allocation by Jerry J. Ancona:

Cost Allocation of Emergency Demand Reduction

Objectives of Cost Allocations

In general, cost allocations should be designed with fairness and market efficiency (i.e., sending the correct price signals) in mind. If it can be determined that some locations provoke the need for a service and/or benefit from that service, then it is proper (from both a fairness and market efficiency perspective) to charge loads in those locations for the service specifically.

In the case of Emergency Demand Reduction (EDR), the cost allocation method should be done on a Zonal rather than statewide (i.e., "all loads - everytime") basis so that price signals will be produced that help encourage reliability improvements ***where*** reliability needs to be improved.

Causes for EDR Being Invoked

EDR will be invoked during NYISO Major Emergencies. Essentially all Major Emergencies (in which EDR would be able to provide relief) can be converted to situations in which one or both of the following actually occur or are predicted to occur *within a specific Zone or set of Zones*:

EDR Condition 1
Internal Load **exceeds** Available (Internal) Generation *plus* Import Capability

> *Where* Import Capability equals the lesser of Transmission Import Capability for that Zone (or set of Zones) **OR**
> Supply Available for Import via that Transmission

EDR Condition 2
Locational Operating Reserve Requirements **exceed** Available Operating Reserves.

EDR Cost Allocation

Based upon the objectives for cost allocation and the causes for initiating EDR (i.e., Conditions 1 and 2 as defined above), the following cost allocation method is proposed:

Costs associated with EDR will be allocated to all Loads in Zones for which EDR will directly help to alleviate Conditions 1 and or 2.

The above rule translates into the following table:

Emergency Demand Reduction Cost Allocation	
Location of Condition 1 and/or 2	**EDR Cost Allocation**
All or Part of One NYCA Zone (including relief for Local Reliability Rule problems within a Zone as requested by a TO)	All Loads in that Zone
Two or More NYCA Zones	All Loads in those Zones
All Zones in NYCA	All Loads in NYCA
An External Control Area	The External Control Area (this may require a modification in inter-ISO agreements)

Justification for Zonal Cost Allocation of EDR

In comparison to a statewide ("all loads everytime") allocation of EDR costs, the Zonal cost allocation of EDR described above is fairer and more economically efficient as follows:

1) It's fairer - lower reliability locations that provoke the need for EDR and benefit more from relief provided by EDR directly pay for that service.

2) It promotes market efficiency more by sending a more correct price signal, thereby...

   a. Discouraging load growth more in the lower reliability areas, and discouraging load growth less in higher reliability areas. Otherwise, if loads in inherently higher reliability areas are required to share equally in the cost of EDR that is precipitated by problems occurring in lower reliability areas, it wrongly discourages load growth in locations that can handle more growth, and subsidizes load growth in locations that are less able to handle growth.

b. Encouraging additional ICAP more within locations that have lower reliability thereby providing an economic incentive to improve overall reliability more.

c. Encouraging additional transmission import capacity more to locations that have lower reliability thereby also providing an economic incentive to improve overall reliability more.

In short, Zonal allocation of EDR costs will provide better economic incentives to alleviate reliability problems.