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Demand Response in New York
Recommendations for The Next Phase

Price Responsive Load Working Group Meeting
November 2, 2007

Background

NYISO has robust demand response resources at its disposal that have proven their value over the past five years. Heavy program utilization in 2006 has revealed areas to enhance the programs.

- **Phase I - Create the Tool**
  - **2001: NYISO introduces EDRP and DADRP;**
- **Phase II - Use the Tool**
  - **2002-2005: NYISO and third-party providers grow the programs, learn lessons;**
  - **2006: Heavy program usage and strong performance; notification system "hiccups";**
- **Phase III - Refine the Tool**
  - **2007**
    - **Allow better-targeted program activations, system used twice;**

  - **2008**
    - **Implement DSASP;**

    - **Implement IBCS, allow aggregation for performance purposes, adopt baseline that is just and reasonable;**

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Implement an IBCS

- **2007 Events and Test Show Ongoing Problems with Notification System**
  - **During April audit, many parties were not notified**
  - **During the July Targeted event, parties were misinformed about the event type**
  - **During the October audit responses could not be provided, some contacts received no notifications while others received as many as four**

- **Problems:**
  - **Notification system is not tested/stressed until it is really needed**
  - **Unknown response/performance until months after the fact**
  - **Delayed settlements (5-6 months)**
  - **Manually-developed baselines are prone to error and subject to manipulation**

Recommendation #1:

Replace the current manual DR data submission process with an automated, internet-based system that that is used for event/audit notification and confirmation, to collect load data in near real-time, and calculate baselines.

The system could minimize costs by simply expanding the IBCS used in New England and could be ready to use by Summer 2008

ISO-New England's IBCS Training Slides

Internet Based Communication System (IBCS)

- 2-Way Communications between ISO New England and the Customer.
  - Event notification
  - 5-Minute meter readings
  - Web access to meter data, wholesale prices and demand response performance
  - Required for 30-Minute and 2-Hour Demand Programs, Optional for Price Program
- Developing "Open Solution" to allow multiple suppliers of reporting and information services.

Other Metering Options

- **Low Tech Option:**
  - Meter data reported to ISO New England by Enrolling Participant within 36 hours for every day.
  - May be able to use existing meter and communication system.
- ***Super* Low Tech Option:**
  - Meter data reported to ISO New England by Enrolling Participant within 3 months of an event day.
- **Customized Monitoring & Verification (M&V):**
  - Enrolling Participants can propose a M&V plan specific to their customers and projects.

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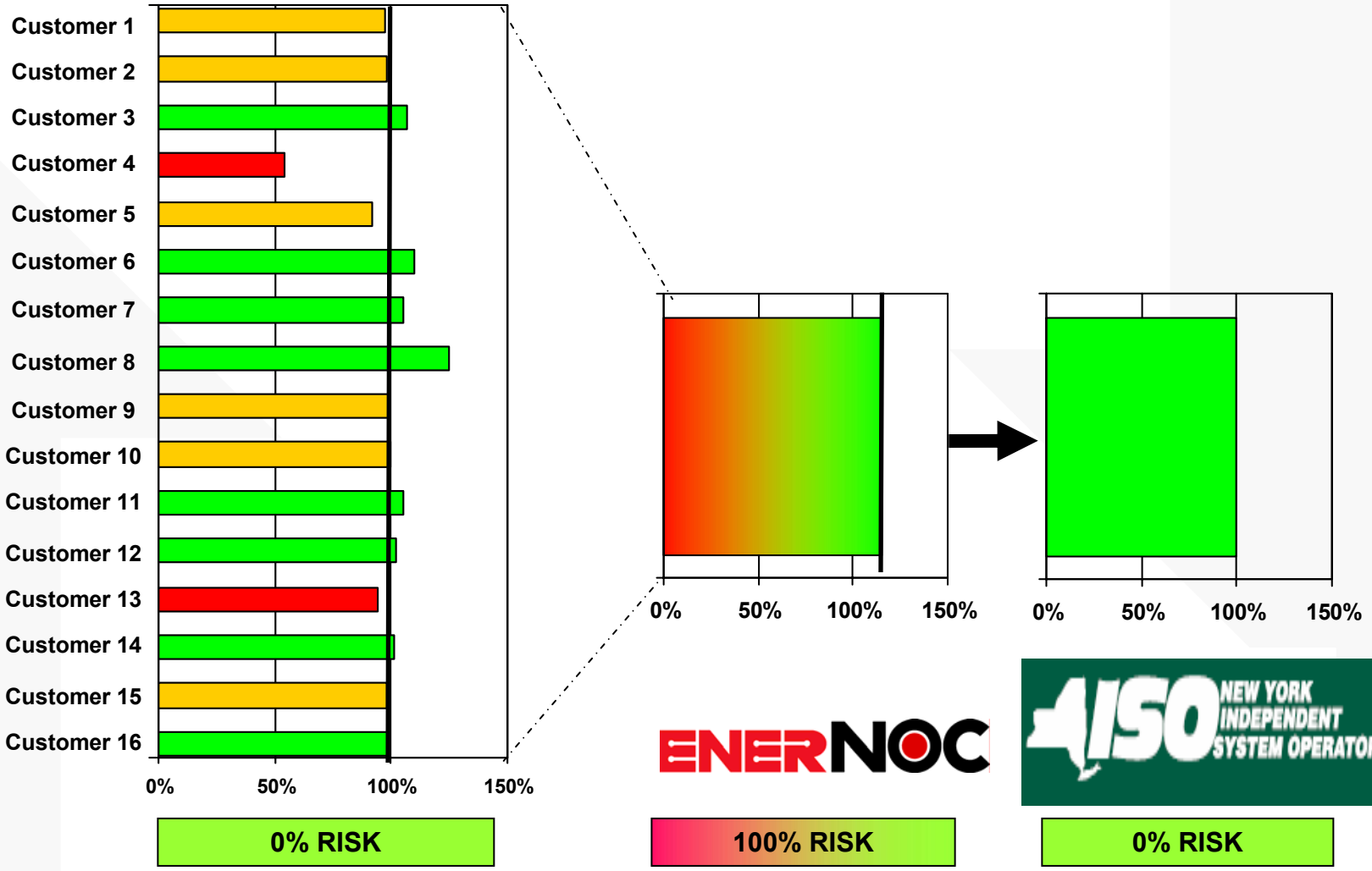
Aggregators: The Value of Spreading the Risk

By aggregating load, RIPs can manage 100% of the risk associated with delivering a contracted number of MW to its ISO or utility customers.



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NYISO should allow RIPs to manage their own portfolios

- **Asset/Provider ability to perform can vary significantly from day to day**
- **The current derating formula is calculated on an asset by asset basis and is capped at 100% within and across events, as a result, resources have been derated for summer 2007 *regardless of over performance by the RIP's portfolio in 2006***
- **The result: RIPs' revenue stream from that portfolio of assets decreased in 2007 *regardless of portfolio over performance***
- **This effect is mathematically certain for any aggregation and is magnified for portfolios that are made up of larger numbers of smaller providers**
- **This result is contrary to the intent of aggregation, which is to incentivize RIP's to create a portfolio of assets with stable performance**
- **Because it discriminates against small providers the current approach for calculating performance for aggregations is unjust and unreasonable**

Recommendation #2:

Apply a portfolio-wide ICAP to UCAP Performance Factor (PF) for each RIPs' existing assets OR eliminate the hourly caps on asset performance when calculating PFs.

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Align capacity value with real-time performance

- **Detailed performance data is not yet available, BUT…**
- **The APMD approach is inherently flawed:**
  - **It rewards providers for doing nothing or even INCREASING their load in real time**
  - **It can under-reward others for providing real reductions in actual load**
  - **It is inconsistent with standard industry practice**
    - **NO other ISO or utility uses this flawed approach**
- **Despite rigorously adhering to program rules, RIP are presented with strong incentive to enroll participants that do not benefit the system during emergencies**
- **EnerNOC urges the adoption of an alternative approach that better aligns the interests of RIPs and system operators:**

Recommendation #3:

Use the EDRP CBL approach to determine ICAP/UCAP Translation Factors and eliminate APMD from the SCR program altogether

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