

# Forward Capacity Market (“FCM”) Qualification Cost Reimbursement Proposal

Generator Interconnection Working Group Teleconference  
October 10, 2006

# Purpose of Today's Presentation

1. Will not be discussing “how” the new FCM “works”
  - A FCM Overview presentations have occurred or are to occur on: 8/30 (RC), 9/13 (MC), 9/19 (TC), and joint RC/MC meetings of 9/22, 10/6 & 10/11
  - Details of FCM Qualification was discussed at a Forum on 9/27 at the Long Wharf Hotel, Boston
  - Additional Information website: [http://www.iso-ne.com/markets/othrmkts\\_data/fcm/index.html](http://www.iso-ne.com/markets/othrmkts_data/fcm/index.html)
2. Instead, will review the proposal, at the request of the Budget & Finance Sub-committee, for the FCM Qualification Process Cost Reimbursement into the ISO ACT, under Section 6 of Schedule IV of the Tariff

# Background

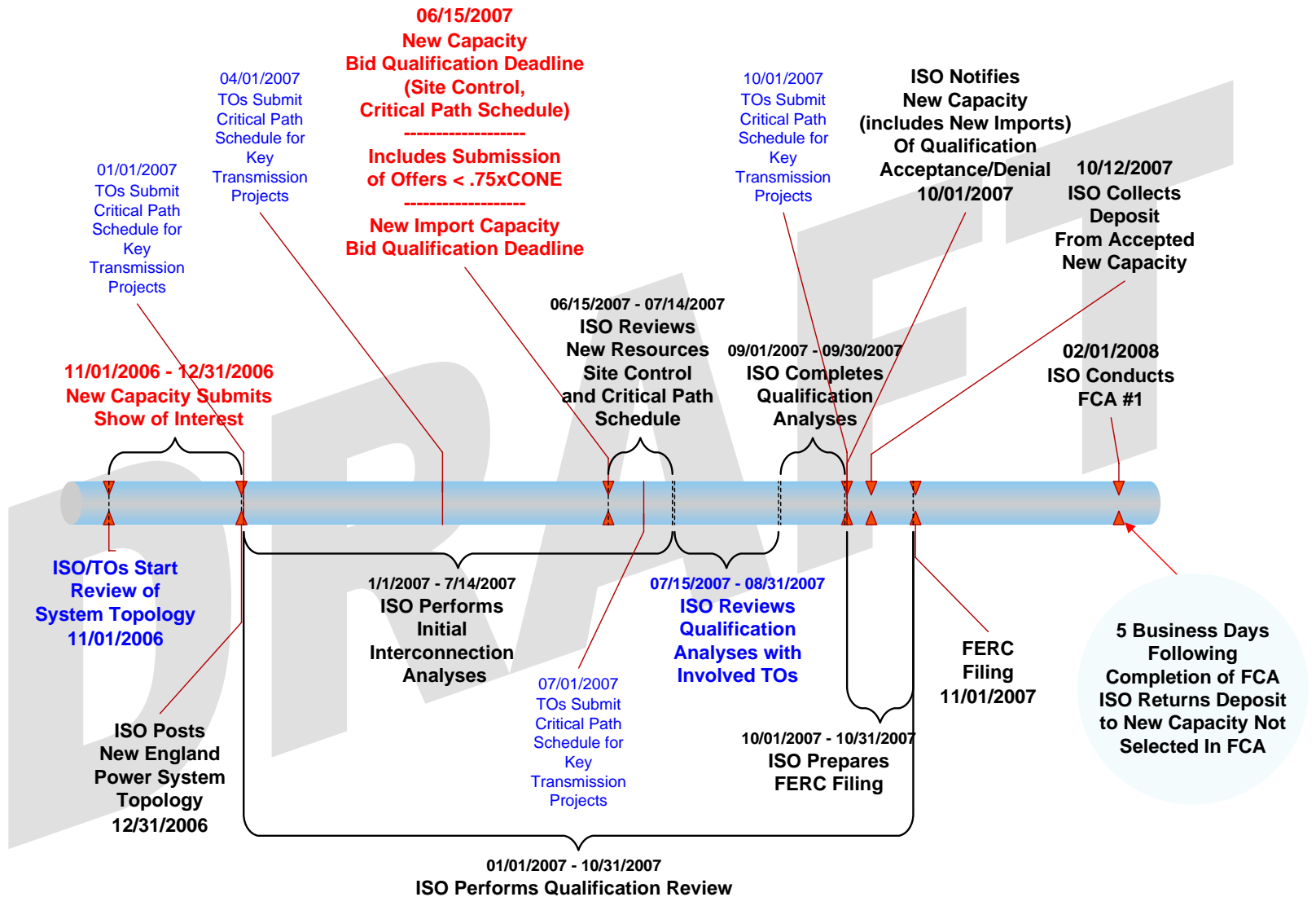
The Forward Capacity Market (FCM) Settlement Agreement (SA) requires Qualification of the following Resources prior to participation in a Forward Capacity Auction (FCA):

- Existing Capacity
- Self-Supplied Resources
- De-list bids (Permanent, Static, etc...)
- Exports and associated De-list bids
- New Resources

# FCM Qualification Overview

1. Show of Interest Application (Proposed New Resource)
  - Submit Qualification Cost Reimbursement Deposit
2. Qualification Review (ISO/TO)
  - Review of Show of Interest Applications – Step 1
  - Perform Initial Interconnection Analyses – Step 2
  - Review Completed Analyses with affected TO – Step 3
3. Qualification Packages Submittal (Proposed New Resource)
4. Review of Qualification Package (ISO)
  - Review Site Control, Critical Path Schedule (CPS) & Other Information
5. Prepare Qualification Determination Letter and FERC filing (ISO)
6. Submittal of Financial Assurance (Proposed New Resource)

# FCM Qualification Overview – 1<sup>st</sup> FCA



# FCM Qualification Details

## 1. Show of Interest (Nov '06 – Dec '06)

- New Capacity Resource submits the **Show of Interest Application**
  - Confidential
- Still required if an Interconnection Request, as defined in Schedules 22 and 23 of the OATT (LGIP/SGIP), has already been submitted
- **Qualification Cost Reimbursement Deposit** submitted as per Proposed in the ISO ACT, under Section 6 of Section IV.A. of the Tariff
  - For 1<sup>st</sup> FCA this will be submitted in late January '07
- Begin discussions with Transmission Owners (TO) on “key” projects in Regional System Plan (RSP) that affect System Topology for the relevant Commitment Period

# Qualification Process Details

## 2. Qualification Review – Step 1 (Jan '07)

- ISO records Show of Interest application information in Qualification Process tracking system
- Meetings and discussions with Project Sponsors may be required to clarify project details

# From the Settlement Agreement...

“While a full and completed System Impact Study (SIS) is not a requirement to participate in the FCA, at a minimum, initial interconnection analysis is required. The ISO and the Reliability Committee shall work out specifics with respect to the performance of such initial interconnection analysis and selection criteria (including auction details) for multiple projects when only a subset of such projects can be selected in the FCA due to overlapping interconnections impacts”. SA II.B.3.c

# Qualification Process Details

## 2. Qualification Review – Step 2 (Jan '07 – June '07)

- Perform Initial Interconnection Analyses to verify eligibility to participate in the upcoming FCA
  - Perform power flow and short-circuit analyses and other studies if deemed appropriate, to identify potential system violations and upgrades
  - Overlapping Impacts identified and addressed
  - Less or no analysis may be required if the proposed project already has an active Interconnection Request and completed Feasibility Study or System Impact Study (lower deposit required, as well)
  - Provide non-binding good faith estimates of required transmission facilities (both Direct Assignment Facilities and Network Upgrades) and estimated costs for the required transmission facilities

# Initial Interconnection Analysis

- System Topology will be based on the Installed Capacity Working Group Design Basis Document, as approved by the NEPOOL Participants Committee
  - Will include quarterly monitoring of key RSP Transmission Projects
- Analysis of New Capacity under FCM differs from the Interconnection Request process and does not bypass the LGIP/SGIP
- LGIP/SGIP is more thorough & time-consuming than Initial Interconnection Analysis and may identify problems/costs not revealed by Initial Interconnection Analysis
- All New Capacity must complete the LGIP/SGIP before becoming interconnected
- An LGIP/SGIP IR may be submitted at anytime before, during or after the FCM Qualification process
  - Submitting an IR earlier in the process will provide more detailed information to the Project Sponsor regarding necessary interconnection and network transmission upgrades and their cost

# A Comparison of FCM Initial Interconnection Analyses and LGIP/SGIP Analyses

<b>FCM Market Element</b>	<b>Initial Interconnection Analysis under FCM</b>	<b>Potential System Impact and Scope of Analysis Required before the project can Interconnect</b>
<b>New Capacity</b> (including Intermittent Resources, excluding changes to Existing Capacity)	<ul style="list-style-type: none"> <li>• Thermal</li> <li>• Short-Circuit</li> </ul>	<ul style="list-style-type: none"> <li>• Thermal</li> <li>• Short-Circuit</li> <li>• Voltage</li> <li>• Stability</li> <li>• Interconnection Queue Position Represented</li> </ul>
<b>Capacity Addition</b> Change to Existing Capacity	<ul style="list-style-type: none"> <li>• Thermal</li> <li>• Short-Circuit</li> </ul>	<ul style="list-style-type: none"> <li>• Thermal,</li> <li>• Short-Circuit</li> <li>• Voltage</li> <li>• Stability</li> <li>• Interconnection Queue Position Represented</li> </ul>
<b>Re-powering</b> Change to Existing Capacity	<ul style="list-style-type: none"> <li>• Thermal</li> <li>• Short-Circuit</li> </ul>	<ul style="list-style-type: none"> <li>• Thermal (if greater MW)</li> <li>• Short-Circuit</li> <li>• Voltage</li> <li>• Stability</li> <li>• Interconnection Queue Position Represented</li> </ul>
<b>Environmental Regulation</b> Change to Existing Capacity	None	None (provided no change in capacity or major electrical equipment)

# Qualification Process Details

## 2. Qualification Package Review – Step 3 (7/15 – 8/31/07)

- Consultation with Transmission Owner (TO) regarding required transmission facilities (both Direct Assignment Facilities and Network Upgrades) needed for the New Resource, not in the LGIP/SGIP Queue with a completed/near complete System Impact Study, to interconnect
  - TO to provide input to the ISO-NE on the ability to get the necessary transmission facilities built to support commercial operation of the New Resource by the first day of the Commitment Period
  - TO to review and affirm FCM Initial Interconnection Analyses performed by ISO-NE (or their consultant)
  - TO costs to be reimbursed under the proposed Qualification Cost Reimbursement Proposal (ISO ACT, under Section 6 of Schedule IV of the Tariff)
  - Non-binding
  - Consistent with Transmission Operating Agreement (TOA)

# Qualification Process Details

## 3. Qualification Package Submittal (6/15/07)

- Proposed New Resource Project Sponsor to submit:
  - Proof of Site Control
  - Critical Path Schedule
- Existing Resources requesting treatment as “new” must supply:
  - The Up-rates, Re-powers or Environmental Compliance Plan
  - Proof of Investment
  - Critical Path Schedule
- The Project Sponsor must also submit additional information in some circumstances:
  - Offers in the FCA below  $0.75 * CONE$
  - Willingness to be rationed in the Auction
  - Designation of a 1 – 5 year commitment period
  - Self-Supply Resource designation
  - Additional Demand Resource & Intermittent Resource information

# Critical Path Schedule Contents

The New Resource Critical Path Schedule [for Generators] shall include, at a minimum, the expected dates of occurrence of the following milestones:

1. Site Control Achieved
2. Major Permits Applied For
3. Major Permits Obtained
4. Construction Financing Closing
5. Interconnection Request Submittal
6. Major Equipment Ordered
7. Substantial Site Construction Completed
8. Major Equipment Delivered to the Site
9. Major Equipment Testing Completed
10. Overall Commissioning Date Obtained
11. Commercial Operation Date with ISO & TO Certification Completed

# Qualification Process Details

## 4. Qualification Package Review (6/15 – 7/15/07)

- ISO to Review of Qualification Package
  - Site Control verification
  - Critical Path Schedule evaluation and verification to confirm New Resource will be declared available for commercial operation no later than the first day of the relevant Commitment Period.
  - Transmission Owners will provide input on transmission-related elements of Critical Path.
- Submitted Project information must be consistent with earlier Show of Interest Application

# Qualification Process Details

## 5. Preparation of Qualification Determination

- ISO Completes/reviews Qualification Interconnection Analyses (9/1 – 9/30/07)
  - Based on conversations with affected TO's
- Prepare Qualification Determination Letter and send to the Project Sponsor (10/1/07)
  - Will indicate whether participation in the FCA, in which Qualification has been requested, is accepted or denied
- Prepare FERC filing (10/1 – 10/31/07)
  - FERC filing to be submitted 11/1/07

# Qualification Process Details

## 6. Submittal of Financial Assurance (10/12/07)

- Due 10 business days after release of the Qualification Determination Letter
- Proof of financial viability includes a Deposit to the ISO of \$2/kW per kW to be offered in the FCA
- Deposit shall be provided in a form acceptable under the terms of the Financial Assurance Policy

# Qualification Cost Reimbursement Deposit

*A mechanism for ISO to obtain reimbursement for the costs incurred by the ISO to study and qualify new capacity resources for participation in the Forward Capacity Market. The qualification process does not substitute for the interconnection study process, or modify LGIP and SGIP queue and study procedures, specified in Schedules 22 and 23 of the Tariff.*

# FCM Qualification Cost Uncertainty

- Approximately 4 months for FERC filing
- Approximately 7.5 months to perform Initial Interconnection Analysis
  - Power Flow & Short Circuit studies required for each Resource
  - Assessing impacts of New Resources individually & cumulatively
  - Anticipated only for New Resources without a completed System Impact Study but will still need to review the study results
  - Potential large number (>50 Show of Interest applications requiring Initial Interconnection Analyses - received simultaneously)
  - Timelines based on LGIP/SGIP process
  - May need to perform analyses for up-rates/repowering of Existing Resources
  - Will be performing Delist bid evaluation simultaneously
  - Simultaneous review of Critical Path Schedule
- Timeline includes 6 weeks for consultation with Transmission Owners
- One month for ISO to react to any issues
- We will be discussing this component more with stakeholders in the near future

# Qualification Cost Reimbursement Benefits

1. Similar reimbursement concept, but distinct from the LGIP/SGIP FERC approved processes as defined in OATT Schedules 22 and 23
2. Addresses uncertainty in ISO budgeting for Qualification Process related tasks due to uncertainty about how many Developers will submit a Show of Interest Application
3. Reduces the number of speculative projects
4. Reduces the number of purely speculative projects; modest level of deposit will not discourage “real” projects

