

**Request for Proposal**  
for  
**Feasibility Study for a Northeastern Regional  
Day-Ahead Wholesale Electric Market**

## **1.0 Introduction**

The advent of FERC Order 888/889 opening access to the Bulk Power Transmission System, the creation of a significant group of Independent Power Producers, and the emerging Retail Access movement have all contributed to the disaggregation of the traditional vertically integrated utilities. This, in turn, has led to the formation of Independent System Operators (ISO's) and Regional Transmission Operators (RTO's).

In the Northeast Power Coordinating Council (NPCC), three ISO's have emerged, two of which (the US ISOs) mirror the geographic construct of the tight Pools that existed prior to this time. On July 1, 1997, the New England Power Pool (NEPOOL) turned over operation of its system to ISO-New England (ISO-NE). On December 1, 1999, the Member Systems of the New York Power Pool turned over operation of the New York State system to the New York Independent System Operator (NYISO). In Ontario, the Independent Electricity Market Operator (IMO) plans to open its markets in 2001.

The three ISO's each operate (or plan to operate) markets in which energy and ancillary services are traded. Each has separate tariffs and charges, and there are significant differences in the way in which each market operates and the products each offers. All three conduct (or will conduct) a real-time energy market. NYISO has had a Day-Ahead market in operation since it started up in December. ISO-NE operates only a real-time market at this time, but has recently had its day-ahead market approved by FERC. The Ontario Market Rules specify a voluntary, financial-only day ahead market.

Certain market participants who wish to conduct business in more than one market or to operate between markets, have expressed concern that the differences in the products offered, the market rules and the market timing in these markets may create trading obstacles. In addition, FERC has indicated on several occasions that it favors larger multi-state ISO's in order to reduce or eliminate these so-called "Seams" issues.

Two ISO's have been in operation for a while and have each overcome various start-up issues that have cropped up from time to time. Each was designed and created independently with little if any attempt to establish commonality between them. Little effort has been expended to introduce changes at this point. Nevertheless, it is clear that a more seamless interface between all the ISO's is desirable.

Accordingly, the purpose of the work addressed in this Request for Proposal (RFP) is to identify and evaluate the impact of forming a single Day-Ahead Market (DAM) as a logical first step in the process of developing more regional markets. This RFP seeks a contractor(s) with the necessary background and resources to study the various options and to formulate a recommendation.

At this time, it is envisioned that the complete program would be comprised of three phases. The first phase, which is the subject of this RFP, is an analysis of the various options and the potential benefits and drawbacks of each. The outcome of this work will be a recommended approach (and possibly alternative approaches) and the impact the recommended approach will have on the markets, market participants and the individual ISOs.

Upon acceptance of the results of the first phase by each of the ISOs, the second phase would be a System Reliability Impact study based upon the premise that the recommended approach would have been implemented. A joint ISO task force would most likely conduct this phase with additional consultant assistance as required. Finally, the third phase would be the production of a Functional Specification based upon the outcome of phases one and two. This effort will be the subject of a separate RFP at a future date.

Section 2 of this RFP presents a more detailed description of the required work in this first phase. Subsequent sections go on to describe the other requirements to be met in the bidder's proposal.

## **2.0 Scope of Work**

The following is a list of the major tasks that this RFP addresses:

1. Description and Review of NYISO, NE ISO, IMO, and adjacent energy markets (HQ, PJM, etc.)
2. Identify similarities/differences between existing (or planned) markets
3. Identify benefits of existing (planned) markets
4. Identify characteristics of a combined market, with emphasis on financial products.
5. Assess the feasibility of incorporating adjacent energy markets (HQ, PJM, and the Maritimes) into a combined market
6. Identify qualitative benefits/deficiencies of combined market
7. Evaluate economic value/penalty of combined market
8. Identify options and make recommendation(s)
9. Assess impact of recommended option on market participants
10. Assess impact of recommended option on NYISO, NE ISO, and IMO

A further description of each task follows:

***Review of NYISO, NE ISO, and IMO Markets*** – The purpose of this task is to review the three ISOs operations as they pertain to the electricity market. A consultant to the NYISO has previously prepared a summary of these markets and this information will be provided to the successful bidder as a basis for the review. The contractor shall develop a succinct assessment of the markets with a focus toward providing an accurate estimate of the impact and critical issues faced in implementing a regional DAM.

***Identify similarities and differences between existing markets*** – Building upon the results of the first task, this task provides a comparative analysis between the three markets as they exist now and the planned Ontario market. The emphasis should be on identifying the similarities and differences between the individual markets. A side-by-side comparison in tabular form would be appropriate.

***Identify strengths and weaknesses of existing markets*** – This task requires the contractor to identify critical metrics for an ISO-operated market and to evaluate each of the systems in terms of those metrics. The contractor should obtain actual results and anecdotal information from each of the ISO's for use in this task.

***Identify characteristics of combined market*** – The contractor is required to hypothesize a set of characteristics for a combined Day-Ahead Market (financial and/or physical) that builds upon the similarities and the strengths of each of the ISOs as identified in the previous tasks. The desired characteristics of this combined market should be clearly identified and justified. The contractor is encouraged to draw upon previous experience in adding characteristics not currently present in any of the individual markets and which would add benefit to a combined market. Consideration should be given to the merits of layering a financial market onto the existing ISO Day-Ahead markets from a cost and schedule perspective. The individual ISOs have or will expend significant funds to establish their Day-Ahead markets. Hence it would be useful to leverage any consultant recommendations off of the as found conditions. Consideration should be given to the question: Is it absolutely necessary to have physical integration to achieve an appropriate result?

***Identify qualitative benefits/deficiencies of combined market*** – This task requires the contractor to qualitatively identify the benefits and the deficiencies of a combined Day-Ahead Market based upon the hypothetical market synthesized in the previous task.

***Evaluate economic value/penalty of combined market*** – Continuing with the analysis of this hypothetical market, the contractor should now identify any economic benefits of combined operation of a Day-Ahead Market. Economic penalties, if any, should be identified as well.

***Identify options and make recommendation*** – The analysis to this point may well suggest several options for a potential combined system (including the option NOT to combine at all). The contractor will be required to identify each of the potential options, evaluate each, and make a recommendation of the best option based upon this evaluation.

*Assess impact of recommended option on market participants* – Once a recommended approach is chosen, the contractor should evaluate this option from the viewpoint of the Market Participants. In particular, how does it affect Energy Suppliers? Load-Serving Entities? Marketers? Transmission Owners?

*Assess impact of recommended option on NYISO, NE ISO, and IMO* – The recommended approach will require adjustments in Tariffs, Operating Procedures, ISO Rules and Agreements, and Software/Systems for each of the ISO's. The contractor must identify and quantify the effects of the recommended approach on each of the ISO's in turn.

**General Comments** – The purpose of this study is to evaluate the feasibility of a combined Day-Ahead Market for the three ISO's. Accordingly, the analysis will, for the most part, be at a conceptual level. It is not necessary to work out all of the detailed design issues at this point unless one or more of them have the potential to render the system impractical or infeasible (algorithm solution time requirements, for instance). The emphasis of this study should be to arrive at a consistent and compatible set of market rules for operation of such a combined market. The contractor must provide for Market Participant input within the three ISO markets relative to identification of barriers to seamless trading and the means by which these barriers can be eliminated in the recommendations that emanate from the work.

### **3.0 Deliverables**

The results of this study will be compiled by the contractor into a series of two reports. It is envisioned that the study would be approximately 6 months in total duration. Accordingly, the first deliverable will be an interim report due at the end of the first three months. This report will be comprised of preliminary results to date as well as a projection of work yet to be performed. The purpose of this report is to allow the ISO's to comment on the direction being taken and to offer any suggestions for changes or additions to the remaining work.

The final report will be due at the completion of the contract and will contain the entire compilation of findings and results obtained. A draft of the final report shall be submitted for review prior to the final delivery with sufficient time to review and assemble comments.

### **4.0 Reporting Requirements**

This study will, of necessity, be interactive. Therefore, monthly status meetings will be required at which the contractor will submit a written status report highlighting work performed to date, work to be performed in the next period, and outstanding issues that need to be resolved. Those issues will be addressed at the status meetings.

As indicated in section 3, an Interim Report will be required at the halfway point in the contract period and should include items a thru f of the Scope of Work in section 2. A draft final report is due shortly before the end of the contract and the final deliverable will be a report containing all of the findings and results obtained. Reports should contain an introduction, an executive summary, the body of the report, and appropriate appendices as needed. The delivery of both the Interim and Final Reports should be accompanied by a summary presentation by the contractor at the appropriate status meeting.

All reports shall be delivered in electronic form (MS Word or Adobe Acrobat is the preferred format). In addition, a reproducible hard copy and 10 bound copies shall be delivered.

## **5.0 Vendor Qualifications**

Respondents to this RFP should include a section in their proposal that cites relevant experience in the area of market design and in particular with the two-settlement process. Familiarity with the northeastern ISO's should be particularly noted. Relevant experience with security-constrained unit commitment software and processes should be noted.

In addition to relevant experience, respondents should include identification of various personnel who will be assigned to this effort. For each potential contributor, information shall be provided outlining relevant experience in this area as well as an estimate of the percentage of time they might be expected to spend on this effort. Additionally, the bidder must identify the project manager for the effort who will have day-to-day responsibility for the execution of the project.

## **6.0 Selection Criteria and Procedures**

Bids received in response to this RFP will be evaluated upon the following list of selection criteria (list provided for information purposes and is not necessarily reflective of evaluation weighting):

1. Proposed consultant process/methodology to be employed in providing the requested service including unique consultant tools and approaches
2. Consultant experience and individual personnel assigned to the project
3. Project communication/feedback milestones
4. Estimated time obligations of NYISO personnel in directing and assisting the project
5. Estimated time obligations of the three (3) ISO's in supporting the activities necessary to produce the required deliverables
6. Price and availability of a fixed price contract versus a time and material contract with a not-to-exceed limit.
7. Consultant references, similar engagements, industry perspective
8. Vendor Packet compliance – All four requirements apply and are more fully described in the Vendor Packet. Note: Separate and specific Confidentiality Agreements may be required by each individual ISO.

The final selection will be made jointly by key members of executive management of the three ISOs. The NYISO will serve as Project Manager for this effort and thus a final contract will be executed with NYISO.

## **7.0 Schedule**

NYISO expects to award this contract by September 15, 2000. An optional pre-bid meeting to answer any bidder questions will be held at the NYISO offices, tentatively on August 17, 2000. Bidders are requested to indicate in their proposal if they desire to participate in this meeting.

Bids are due in the offices of NYISO by September 1, 2000. Upon award of the contract, the successful bidder shall start the work with final completion of the project deliverables due on or before March 30, 2001.

## **8.0 Price**

Bidders may submit either a fixed dollar price or a time and materials estimated price with a not-to-exceed limit. Regardless of the pricing approach, all proposals must include a project budget, which identifies the following:

1. Expected hours by assigned personnel
2. Level of personnel assigned (title)
3. Proposed rate by level of personnel
4. Chart identifying time frames in which activities will be completed and deliverables that result, if any, from each activity.

Each bidder must also indicate if it is willing to cap the total travel and living expenses at 15% of the project price. T&L is to be billed at cost without provision for mark-up.

The proposal must be submitted in two separate envelopes clearly identified, (1) the proposed pricing for the scope of work requested; and (2) the bidder's proposed technical response for performing the scope of work requested including the completion of the Vendor Packet. All proposal information shall be submitted in an unbound format or if bound, shall be submitted with five (5) complete copies.

*Please return your bids via overnight mail, post marked no later than Thursday, August 31, 2000 to Mr. Marc Rubin, General Auditor, NYISO, 3890 Carman Road, Schenectady, NY 12303. Mr. Rubin must receive all bids by Friday, September 1, 2000.*

## **9.0 Required Resource Assistance**

Each of the ISO's is expected to assign an individual to work with the successful bidder to coordinate the execution of this project. Bidders are requested to advise if further ISO staff support will be required as well as identify staff support functions requested, if any, to be provided by the other ISO's. Bidders are also requested to identify their expectations for Market Participant input and the manner in which it will be obtained. Bidders are requested to employ web-based applications as a vehicle for participant input to facilitate the project schedule and to minimize cost.

## **10.0 Attachments – Terms and Conditions**

The NYISO Vendor Packet is attached for review and confirmation of bidder's compliance with regard to Requirements 1, 3 and 4. In lieu of Requirement 2, the successful bidder will be required to execute a Master Consulting Agreement and a specific Statement of Work, samples of which are also attached. NYISO reserves the right to contract for the work under a mutually negotiated contract form.

The successful bidder will also be required to execute separate Confidentiality Agreements with each of the three ISOs.