5.8 Communication and Metering Requirements for Control Area Services

The ISO shall arrange for and maintain reliable communications and metering facilities between the ISO and the Transmission Owners in the NYCA and the Control Area operators of all neighboring interconnected Control Areas. Such facilities may consist of data circuits, voice lines, meters and other facilities deemed necessary by the ISO to maintain reliable communication links for the sole purpose of transmitting operations and reliability data and instructions. The ISO shall be responsible for the specification, installation and maintenance of the required facilities according to ISO Procedures. The costs incurred by the ISO to establish communications facilities between the ISO and a Security Coordinators of a neighboring Control Area shall be borne by the Control Area that requested the establishment of the communications facilities unless a different arrangement is agreed to by both Control Areas. The total cost of the communications facilities between the ISO and the Transmission Owners and the portion of the cost of inter-Control Area communication facilities assigned to the ISO shall be collected from all Customers in accordance with Rate Schedule 15.1 of the ISO Services Tariff. Transmission Owners with communications requirements which exceed those required by the ISO shall procure and maintain such additional facilities at their own expense.

Generators, Suppliers and Loads are required to exchange certain operating and reliability data with the ISO and the Transmission Owners' Control Centers in accordance with the ISO Agreement and the ISO/TO Agreement, applicable ISO operating and reliability requirements, and in conjunction with any requirements for interconnection with the Transmission Owner.

In addition, Suppliers wishing to submit Bids in the RTC for Energy or Regulation Service must make provision to receive command and control information from the ISO. Those Generators or Suppliers currently providing this capability via a Transmission Owner may

continue to do so. Those requiring installation of this capability must contract with the ISO or with the interconnected Transmission Owner and must comply with applicable ISO or Transmission Owner data and other technical requirements.

Suppliers with multiple units at a single location must maintain a consistent representation of the plant with the ISO with respect to aggregation of units for purposes of bidding. If an aggregate Bid is to be provided for a group of units and those units are bidding in the RTC, or providing Regulation Service, then the ISO shall model those units as a group for purposes of dispatch, control and security modeling. The ISO will provide a single aggregate Base Point Signal and unit control error. If, however, the Supplier wishes to dispatch units individually, then it must configure both its bidding and data interfaces accordingly. Each Supplier must initially specify the configuration of the plant for purposes of bidding aggregation and must then maintain bidding and data interfaces consistent with that configuration. Similar modeling, control and bidding Constraints apply to an LSE that bids Load that is dispatchable by the ISO.

5.8.1 Collection and Communication of Energy Forecasting Data by Intermittent Power Resources that Depend on Wind <u>or Solar Energy</u> as Their Fuel

Pursuant to ISO Procedures, Intermittent Power Resources that depend on wind <u>or solar</u> <u>energy</u> as their fuel shall maintain in good working order equipment to collect <u>data required for</u> <u>energy forecasting wind speed and wind direction data at their site</u> and shall provide the ISO, or its agent, with <u>thiswind speed</u>, wind direction and maximum available megawatt data in the manner identified by the ISO, provided however this requirement shall not apply to any Intermittent Power Resource in commercial operation as of January 1, 2002 with nameplate capacity of 12 MWs or fewer. <u>An Intermittent Power Resource that depends on wind as its fuel</u>

shall, in accordance with ISO Procedures, provide the ISO with wind speed and wind direction data for its site, and maximum available megawatt data. An Intermittent Power Resource that depends on solar energy as its fuel shall, in accordance with ISO Procedures, provide the ISO with plane of array irradiance and back panel temperature data for its site, and maximum available megawatt data. Maximum available megawatts shall be the sum of the individual nameplate capacities for all turbines that are online and currently capable of producing power (including those turbines that are not producing any power due to low wind speeds); this value should exclude those turbines that are not producing power due to a fault condition or a network communication failure condition or that are offline for service. Each Intermittent Power Resource <u>subject to this Section</u> that depends on wind as its fuel shall be responsible for the cost of installing and maintaining such equipment at its site, as well as the cost of installing and maintaining the software and hardware necessary to provide the required data described above, in accordance with ISO Procedures and shall share in funding the ISO's cost of wind forecasting function pursuant to this Services Tariff.

The ISO may impose financial sanctions for failure to provide <u>the required wind speed</u> and wind direction data <u>described above</u>pursuant to ISO Procedures.

Upon a determination of failure to provide <u>the required wind speed and wind direction</u> data <u>pursuant to ISO Procedures</u>, the ISO shall take the following actions. The ISO shall notify the Intermittent Power Resource <u>that depends on wind as its fuel</u> by written notice of its determination of failure to provide <u>the required wind speed and wind direction</u> data and that the ISO may impose financial sanctions if the failure is not corrected. The ISO shall offer a reasonable opportunity to correct the failure to provide <u>the required wind speed and wind</u> direction data <u>pursuant to ISO Procedures</u>. If, following such reasonable opportunity to cure,

such failure is not cured, the ISO may impose daily sanctions of the greater of \$500 or \$20/MW of nameplate capacity until such failure is cured. The ISO shall offer the Intermittent Power Resource an opportunity to be heard by senior officers of the ISO prior to imposing sanctions.