

..DID: 10496  
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NIAGARA MOHAWK POWER CORPORATION  
300 Erie Blvd. West  
Syracuse, New York 13202

November 19, 1999

Honorable Debra Renner, Acting Secretary  
Public Service Commission  
3 Empire State Plaza  
Albany, New York 12223

Dear Acting Secretary Renner:

Enclosed for filing with the Commission is Niagara Mohawk Power Corporation's (Company) tariff amendments in recognition of Mr. Paul Powers', Director-Office of Energy & Environment, correspondence dated May 19, 1999 pertaining to traffic signals.

First Revised Leaf No. 3  
Fourth Revised Leaf No. 72  
First Revised Leaf No. 77  
Original Leaf No. 78.1  
Original Leaf No. 78.2  
Original Leaf No. 78.3  
Original Leaf No. 78.4

To P.S.C. No. 214 Electricity

Effective: March 1, 2000

The purpose of this filing is to comply with Mr. Powers' request for electric utilities of New York State, if applicable, to file tariff revisions recognizing recent traffic control technological advancements that advocate energy efficiency. This filing also provides for metered measurement of kilowatt-hour consumption of equipment at a traffic control location (location).

Niagara Mohawk's resolution of the above situations is to implement a metered traffic control tariff schedule, Service Classification (S.C.) No. 4A to P.S.C. No. 214. Niagara Mohawk currently serves traffic control equipment by an unmetered traffic signal tariff, P.S.C. No. 214, S.C. No. 4, or by metered service under the Company's General Electric Tariff, P.S.C. No. 207-Electricity. This filing will promote customer cost savings resulting from the utilization of lower energy consuming technologies.

Niagara Mohawk is aware of the light-emitting diodes (LED) effort headed by the New York State Energy Research and Development Authority (NYSERDA) and is cooperating fully. Company representatives have attended all the working group meetings assembled by NYSERDA and participated wholly with the survey conducted by Science Applications International Corporation (SAIC), a consulting firm retained by NYSERDA.

Niagara Mohawk's P.S.C. No. 214 ELECTRICITY tariff currently defines a signal-face, as follows (Leaf No. 72, DETERMINATION OF BILLING QUANTITIES, Paragraph B):

A signal-face of a stop and go signal is defined as a signal or portion of a signal designed to control traffic approaching from a single direction. Each signal-face consists of two or more lenses of which only one is illuminated at any one time with lamps installed having a capacity not exceeding 69 watts per lens, and a control mechanism other than the electromagnetic type.

Niagara Mohawk has always interpreted the above paragraph as any lamp that does not exceed 69 watts is counted as one signal-face. LED electrical loads are stated by the manufacturers to be in the 8 - 12 watts range, significantly lower than the current billing minimum of 69 watts. Sixty-nine watts is the basis for the signal-face charge.

The Company has refrained from simply rephrasing S.C. No. 4, Paragraph B to eliminate the 'not exceeding 69 watts per lens' statement. This reasoning allows for an interpretation of the tariff to aggregate actual wattage from all lenses and equipment, then divide the total intersection wattage by 69.

Aside from implementation problems and the requirement to audit the entire system in a short period of time, Niagara Mohawk sees a larger issue; that is accurately accounting for total kilowatt-hour consumption by all traffic control equipment. The current billing methodology incorporates various inaccuracies, several primary ones are; 1) determination of wattage accuracy for lamps and equipment, 2) determination of billing quantity accuracy, 3) reliance on the honor system for utility notification of intersection construction and upgrades and (4) ever changing application of varied technologies to manage and enforce traffic control. Thus, at the end of the day, the current traffic signal system, from a billing perspective, is based on estimates and the assumption that all equipment are accounted for accurately.

The Company is of the opinion that metering energy consumption, rather than estimating wattage and determining signal-faces, is the most equitable method of billing for all parties. Metering will account for any changes at a location, whether it be; converting to energy efficient sources, adding supplemental traffic control equipment, utilizing timed control mechanisms, or adding and removing ancillary devices.

Leaf No. 3 of P.S.C. No. 214, contains the inclusion of the Service Classification 4A in the Table of Contents. The revisions contained on Leaf No. 72, direct the new applicant to Service Classification No. 4A effective March 1, 2000 and direct the current customer to S.C. No. 4A effective no later than March 1, 2005. Leaf No. 77, updates the S.C. No. 4 Form "TS" - Application for Service to include the phrase, "This Application for Service is no longer available for use as of March 1, 2000. Traffic Control Service is served under P.S.C. No. 214 Electricity-S.C. No. 4A."

Leaf Nos. 78.1 through 78.3 contain the metered traffic control language and the charges that the Company is proposing for approval. This service will be available for all traffic control equipment at a location, regardless of the entity responsible for its operation; State, municipal or private. All new traffic control applications will be served under this service classification as of the effective date of these leaves. The current unmetered service classification will not be available for new traffic control applicants. Existing metered service under P.S.C. No. 207-Electricity, for the sole purpose of serving traffic control equipment at an individual location, will be served under this service classification as of the effective date of these leaves. Existing metered service under P.S.C. No. 207-

Electricity, not for the sole purpose of serving traffic control equipment at an individual location will be grandfathered and will continue to be served under the service classification in effect on March 1, 2000. Additionally, it will be mandatory for all existing unmetered traffic control devices be metered within five years hence the effective date of these leaves.

The rate structure the Company is proposing is unique in that all calculated Distribution Delivery (DD) and Competitive Transition Charges (CTC) are aggregated and result in one Basic Service Charge applicable in all Load Zones. The proposed monthly Basic Service Charge is \$27.10 per delivery point (meter) at a traffic control location. The Company is of the opinion that the Distribution Delivery and the Competitive Transition Charge are truly fixed charges. Further, supporting the activity of deregulation, is the Electricity Supply Service (ESS) which is variable by character and is proposed as a per kilowatt-hour charge. The Electricity Supply Service is that portion of commodity service that the customer may receive from any qualified supplier, or from Niagara Mohawk pursuant to Rule 46 of P.S.C. No. 207. The charges to the customers will be simple for them to understand in that a fixed charge of \$27.10 per delivery point (meter) at a designated traffic control location will be assessed by the Company and any electricity supplier charges will be on a per kilowatt-hour basis. This method of billing allows for the recognition of any type and operation of equipment at the traffic control location, energy efficient or otherwise.

All customers served under this proposed tariff will be subject to the Market Rate Option outlined in Rule 48 of P.S.C. No. 207. Setting the Competitive Transition Charge within the Basic Service Charge obligates the CTC to be fixed. By definition of Rule 48, customers having a fixed CTC and a variable ESS will become Market Rate Option customers. Rule 48 of P.S.C. No. 207 Electricity has been amended accordingly to effectuate this amendment. A companion P.S.C. No. 207 tariff filing has also been issued to accompany this proposal.

In addition, the companion filing has been amended to propose new special provisions under S.C. Nos. 2, 3, and 3A whereby customers applying for service with traffic control equipment on or after March 1, 2000 will be required to take service under S.C. No. 4A of P.S.C. No. 214 Electricity.

The following table displays statistics for the traffic control locations in Niagara Mohawk's service area as of December 1998.

	<u>Total</u>	<u>Unmetered</u>	<u>Metered</u>
Base-Rate Revenue (annual)	\$ 2,445,002	\$ 1,943,886	\$ 501,116
Kilowatt-hours (annual)	31,150,558	27,929,100	3,221,458
Traffic Control Locations	4,767	4,367	400
Signal Faces	46,549	46,549	----

The \$27.10 Basic Service Charge coupled with the Company's current PowerChoice Load Area ESS charges retain the \$2.4 million total traffic control revenue. Thus, the Company maintains revenue neutrality with the traffic control customer. As with most rate structure revisions, there are customers that monetarily benefit and those that do not. From a Distribution Delivery and Competitive Transition Charge perspective, the traffic control locations migrating from the current unmetered service classification that contain nine (9) signal faces or less will pay more for this service. This

represents 2,198 locations, or approximately one-half of the sites. However, full customer impacts can not be determined because of the uncertainty of existing energy efficient devices and added equipment. The reduced energy consumption recorded through the meter will benefit customers on a kilowatt-hour basis whom would otherwise not benefit on a signal-face basis. The Company only possesses signal-face information. The Company can not readily determine the locations presently containing LED technology nor gain access to other traffic control equipment which is owned and operated by the customer or its third party.

The benefit to the entity that utilizes LED goes well beyond the reduced energy bill. The use of LED is supposed to increase traffic control reliability because the failure rate of LED is expected to be less than the current incandescent bulb technology. The service life of an LED installation is expected to be eight to ten years versus the six to twelve months for the incandescent. This results in reduced maintenance at the work-site, therefore increasing safety for the traffic control workers and the public in general. The New York State Department of Transportation (NYSDOT) and many municipalities within Niagara Mohawk's service territory have already implemented LED technology based on the increased reliability and reduced maintenance alone.

The Company is seeking to establish a distinct metered traffic control service classification separate from PSC No. 207, Service Classification No. 2, because the load factor for traffic control locations is nearly 100%, significantly higher than the small general service class. Metering will allow rate designs to be refined and reflective of true traffic control costs rather than estimates and physical audits.

The physical conversion of the equipment to a meter application at each location will be coordinated with the applicable entities to allow for uniform installation scheduling, therefore, preventing last-minute conversions. Customary with metered service taken under P.S.C. No. 207, S.C. No. 2, the customer is responsible for providing and installing the meter channel and all wiring from the customer-side of the meter channel. The customer installation will include compliance with all applicable inspection requirements. The Company will provide the meter and energize the service. An implementation plan including customer communication and conversion schedule will be submitted to the DPS staff.

Niagara Mohawk files this tariff in compliance with Mr. Powers' request, dated May 19,1999, that will file tariff revisions recognizing recent traffic control technological advancements that promote energy efficiency and rectifying many shortcomings associated with unmetered traffic control. The Company believes this proposal is a benefit to the Customer. This view is supported by the DPS staff and NYSERDA.

Workpapers will be submitted to the Department of Public Service staff under separate cover.

The Company requests waiver of newspaper publication for this filing. Each traffic control customer will be notified of the proposed revisions within four weeks of this filing issuance. The notice required by the State Administration Procedures Act is enclosed.

Please direct any questions regarding this matter to Mr. David F. McIntyre, Rate Analyst, Energy Transactions-Tariff Services, C-1, Syracuse, New York, 13202, phone; (315)428-6828, fax; (315)460-8592, e-mail; [mcintyred@NiagaraMohawk.com](mailto:mcintyred@NiagaraMohawk.com).

Please advise the undersigned of any action taken with respect to this filing.

Sincerely,

George A. Bauman, Manager  
Tariff Services