

PSC NO: 220 ELECTRICITY  
NIAGARA MOHAWK POWER CORPORATION  
INITIAL EFFECTIVE DATE: DECEMBER 1, 2011  
STAMPS: Issued in Compliance with Order issued November 21, 2011 in Case No. 11-E-0321.

LEAF: 322  
REVISION: 3  
SUPERSEDING REVISION: 2

**NEW YORK STATE STANDARDIZED APPLICATION FOR ATTACHMENT OF PARALLEL GENERATION  
EQUIPMENT ABOVE 25 KW UP TO 2 MW TO THE ELECTRIC SYSTEM OF  
NIAGARA MOHAWK POWER CORPORATION D/B/A NATIONAL GRID**

**For Synchronous Machines:**

Submit copies of the Saturation Curve and the Vee Curve  
( ) Salient ( ) Non-Salient  
Torque: \_\_\_\_\_ lb-ft      Rated RPM: \_\_\_\_\_  
Field Amperes: \_\_\_\_\_ at rated generator voltage and current  
and \_\_\_\_\_ % PF over-excited  
Type of Exciter: \_\_\_\_\_  
Output Power of Exciter: \_\_\_\_\_  
Type of Voltage Regulator: \_\_\_\_\_  
Direct-axis Synchronous Reactance ( $X_d$ ) \_\_\_\_\_ ohms  
Direct-axis Transient Reactance ( $X'_d$ ) \_\_\_\_\_ ohms  
Direct-axis Sub-transient Reactance ( $X''_d$ ) \_\_\_\_\_ ohms

**For Induction Machines:**

Rotor Resistance ( $R_r$ ) \_\_\_\_\_ ohms      Exciting Current \_\_\_\_\_ Amps  
Rotor Reactance ( $X_r$ ) \_\_\_\_\_ ohms      Reactive Power Required:  
Magnetizing Reactance ( $X_m$ ) \_\_\_\_\_ ohms      \_\_\_\_\_ VARs (No Load)  
Stator Resistance ( $R_s$ ) \_\_\_\_\_ ohms      \_\_\_\_\_ VARs (Full Load)  
Stator Reactance ( $X_s$ ) \_\_\_\_\_ ohms  
Short Circuit Reactance ( $X''_d$ ) \_\_\_\_\_ ohms Phases:  
Frame Size: \_\_\_\_\_ Design Letter: \_\_\_\_\_ ( ) Single  
Temp. Rise: \_\_\_\_\_ °C. ( ) Three-Phase

**For Inverters:**

Manufacturer: \_\_\_\_\_ Model: \_\_\_\_\_  
Type: \_\_\_\_\_ ( ) Forced Commutated ( ) Line Commutated  
Rated Output: \_\_\_\_\_ Amps      \_\_\_\_\_ Volts  
Efficiency: \_\_\_\_\_ %

**Signature:**

\_\_\_\_\_  
CUSTOMER/AGENT SIGNATURE

\_\_\_\_\_  
TITLE

\_\_\_\_\_  
DATE

Issued by Kenneth D. Daly, President, Syracuse, NY