Newmarket-Tay Power Distribution

Ltd.

Conditions of Service

Standard Voltage Offerings

Number: NT POWER COS-230-04

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1. Preamble

Newmarket-Tay Power Distribution Ltd. (NT POWER) provides various voltages to *Consumers* based on their supply requirements and availability. This section outlines both the primary and secondary voltages that are available.

2. Primary Voltage

The primary voltage to be used will be determined by NT POWER for both NT POWER owned and *Consumer-owned substations*. The primary voltage will be 44,000V, delta, three phase, three-wire system, **or** 13,800/8000V, grounded wye, three phase, four-wire system in the Newmarket service area and 8,320/4800V, grounded wye, three phase, four-wire system in the Tay service area.

Electrical services with capacity rated at 500 KVA or less are serviced from the 13.8KV system or 8.32KV system, as appropriate. Electrical services with capacity rated greater than 500 KVA are fed from the 44 KV system and require a Consumer-owned substation.

3. Secondary Voltage

13.8 KV and 8.32KV Distribution Systems

Secondary voltages will normally be 120/240V single phase, 120/208V three phase, **or** 600/347V, three phase.

44 KV Distribution System

Secondary voltage will normally be 120/208V **or** 600/347V three phase, four wire wye.

4. Limit of Supply

The actual voltage to be used governs the limit of supply capacity for any Consumer.

4.1 13.8 KV and 8.32KV Distribution Systems - Overhead

General guidelines for supply from existing 13.8 KV overhead street circuits are as follows:

- (i) 120/240V, single phase, up to 75 kVA demand load, or
- (ii) 600/347V, three phase, four wire up to 80 kVA demand load, or
- (iii) at both 120/240V, single phase, and 600/347V, three phase, up to 100 kVA sum total *demand* load, or
- (iv) 208/120V, three phase, up to 100 kVA demand load,

New or upgraded *electrical services* that cannot be adequately serviced from existing overhead transformer banks must be serviced underground.

4.2 13.8 KV and 8.32KV Distribution Systems – Underground (Site Specific)

Where a site specific transformer exist or is planned on *private property*;

- (i) 120/240V, single phase, supply is available up to 167 kVA *demand* load, or
- (ii) 208/120V, three phase, four wire, supply is available for loads up to 500 kVA *demand* load, or
- (iii) 600/347V, three-phase, four-wire, supply is available for loads up to 500 kVA *demand* load.

4.3 13.8 KV and 8.32KV Distribution Systems - Underground (Public Property)

Where a transformer for common servicing is located on public property, 120/240V, single phase, supply is available up to 100 kVA *demand* load.

4.4 44 KV Distribution System

Services rated at greater than 500 kVA *demand* load and less than 30 MVA shall require a 44KV *Consumer-owned substation*.

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