

# ELECTRICAL INSPECTION BULLETIN

B-02-016.1

Utility Power Connection for New Services



*(Effective 09/01/1999)*

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The Electrical Installation and Inspection Act prohibits a public utility from making a connection or supplying electrical power to a consumer until the electrical installation conforms with the Act and its regulations. The existing regulations adopt the latest edition of the Canadian Electrical Code Part I. The intent of the Act is to ensure that electrical installations conform to all applicable aspects of the latest edition of the C. E. Code Part I before a connection is made.

This effectively limits construction power to an unfinished building to that which may be supplied by means of an independently supported temporary service.

Effective 1993 05 01, the following connection policy shall be used:

## **1. Detached Single Family Dwellings, Duplex, Row Housing**

A physical permanent full capacity utility power connection shall not be made to a single family dwelling, duplex, row housing until such time that the complete electrical installation is in full compliance with the Electrical Installation and Inspection Act and its regulations.

This in effect means that a utility connection will not be made until the installation has received a final inspection and acceptance.

## **2. Apartments and Similar Multi-Family Occupancies**

Utility power connections may be made to apartment buildings and similar multi-family occupancies upon the inspection and acceptance of the permanent main service entrance equipment and a minimum of one sub-service, normally the supply to the owner's house panel.

Energizing of a sub-service or feeder supplying an individual dwelling unit or building service shall not be authorized until the respective dwelling unit or building service has received a final inspection and acceptance.

## **3. Commercial, Institutional, Industrial**

Utility power connection may be made to commercial, institutional, industrial and similar type projects upon the successful inspection of the main permanent service entrance equipment and a minimum of one sub-service. Sub-services and feeders may be energized upon the successful inspection of the sub-service and feeder plus a major portion of their associated rough-in-wiring.

Final inspections must be obtained immediately upon completion of an installation or upon completion of a contract. Contractors are reminded that they may be held responsible for all electrical work performed in or on a building where an outstanding permit is in effect and that the privilege of obtaining permits could be revoked when an excessive number of unjustified outstanding permits is allowed to persist.

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## **Temporary and Restricted Utility Power Connection Methods:**

At the discretion of the NS Power Regional Manager, and/or the NS Power Chief Electrical Inspector, or their designates, a temporary restricted utility power connection may be made to a single family dwelling upon the inspection and acceptance of a permanent service entrance and a major portion of the rough-in-wiring.

Restricted connections shall only be provided in compliance with the NS Power Working Procedure, WP-10, entitled, "*Utility Restricted Power Connection for Residential Occupancies*".

To help overcome the limitations for contractors, one of the following three methods may be used to provide for a temporary restricted utility power connection to a new permanent residential service.

1. Use of a contractor owned service current limiter; or
2. Connect independent temporary service to permanent service at the service entrance weatherhead; or
3. Restrict circuits and seal the panelboard.

The above methods are subject to the following conditions:

- A. Method used is decided by electrical contractor or owner.
- B. The building cannot be occupied.

Notes Related to Method 2 and Method 3, above:

### 1. Method 2 –

Authorization would be granted to install an electrical connection from the load side of a temporary service switch to the permanent service conductors protruding from the service weatherhead. The ampacity of the temporary service cannot exceed 60 amperes. The connection must be made in an acceptable manner, pre-manufactured jumpers must be installed at the permanent service meter base, and the meter base shall be suitably covered by the contractor and sealed by the utility.

No connections shall be made between the temporary and the permanent service without the approval of the Wiring Inspector.

All other requirements of providing a Utility Restricted Power Connection for Residential occupancies, as documented on the following pages of this Bulletin B-2-016.1, shall apply.

### 2. Method 3 –

Three requirements shall be fulfilled should the number of circuits be restricted for the temporary connection and the panelboard be sealed.

- a. The distribution panel must be capable of being effectively sealed.
- b. Only those circuits inspected and authorized to be energized are installed in the distribution panel.  
Note: No other circuits are permitted to be tied into the breaker prior to sealing the panel.

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- c. The maximum number of circuits to be energized is limited to those required to energize the heating system plus light and power circuits. The total shall not exceed ten (10).

## Utility Restricted Power Connection for Residential Occupancies

Residential consumer services (detached single family dwellings, duplex, row housing, etc.) shall not be provided with a full power or electrical energy connection until the installation has received a final inspection and acceptance by a wiring inspector.

At the discretion of the NS Power Regional Manager, and/or the NS Power Chief Electrical Inspector, or their designate, a temporary restricted power/energy connection may be made:

Available to all residential occupancies having a maximum service capacity of 200 ampere, 120/240 volt single phase, or less,

and

Where a valid wiring permit is in place for the complete installation.

and

Where the permanent service entrance and major portion of the rough-in wiring has been inspected and accepted.

and

Where the facility is not occupied.

### The following requirements shall apply when a temporary restricted power/energy connection is to be established -

1. Restricted power/energy shall be provided through a double pole, single throw, 3 wire, 240 volt, 4 jaw service limiter for self-contained socket type installations.
2. Restricted ampacity shall be limited to a maximum of 30 Amperes single phase 120/240 volts.
3. A maximum of five (5) branch circuits shall be permitted to be energized. All receptacles, switches, thermostats, boxes, etc., complete with covers, shall be installed, inspected and accepted before the individual circuits may be energized.
4. The Wiring Inspector shall identify the five circuits permitted to be energized on the Inspection Report Form. No other circuits shall be permitted to be energized. For the purpose of this policy a 240 volt circuit shall be counted as two branch circuits.
5. All other branch circuits may be installed in the distribution panel with the grounded conductors and bonding conductors properly terminated. The ungrounded conductor (phase conductor) shall not be terminated on the branch circuit breaker until such time the final inspection has been successfully completed.

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6. Service limiters shall be valid for the life of the building wiring permit unless otherwise determined by the Inspection Authority.
7. It shall be the responsibility of the electrical contractor to provide, install and maintain all service limiters.
8. Service limiters shall be installed in compliance with the Provincial Electrical Installation Act and latest edition of the Canadian Electrical Code Part I. Inspection shall be performed under the wiring permit issued for the facility and the inspection fee shall be included in the appropriate flat rate fee schedule.
9. Upon receiving authorization from the Inspection Authority a utility energy meter may be installed. All utility meters shall be installed by NS Power personnel in accordance with established practices and procedures. Both the service limiter and the utility meter shall be sealed by the utility.
10. Upon final acceptance of a complete installation the wiring inspector shall remove the service limiter, reset and reseal the utility meter thus providing full power. Contractor owned service limiters shall be left on site; normally at the distribution panel. It shall be the Contractor's responsibility to ensure that the service limiter is returned to their possession. NS Power assumes no responsibility for damage to, misplacement of, loss or theft involving customer owned service limiters.

**Note:** N.S. Power wishes to advise contractors that they should identify their service current limiters. Acceptable service current limiters shall be the Ekstrom SL-1048 or equivalent.