AVAILABLE SHORT-CIRCUIT CURRENT FORM

CITY OF LOVES PARK
BUILDING DEPARTMENT
(815) 654-5003 Fax- (815) 654-5004

This form must be submitted to the Building Department prior to inspection.

Date:_____ Permit Number _____

_____ _____
Electrical Contractor Phone number

_____
Street Address

_____
City State Zip

Location of work in City of Loves Park:

_____
Name of Occupant or Owner

_____
Street Address

Note: The following information is requested to determine that the electrical equipment to be installed is in compliance with the National Electrical Code 1999 as it relates to available short-circuit currents and the interrupting ratings. See sections 110-3(b), 110-9, 110-10, 230-205(b), 240-11, 250-2(d), 250-90, and 250-96. This form is to be completed and returned to the City of Loves Park Building Department for approval prior to any requests for inspections.

THE RESPONSIBLE PARTY SHALL SUPPLY THE FOLLOWING INFORMATION:

Secondary Voltage _____ Single Phase or Three Phase (circle one)

Available short circuit current on secondary side of transformer _____amps

Contact person at Commonwealth Edison_____

Length of service Conductors from transformer to meter pedestal or riser_____

Size of service conductors_____ Copper or Aluminum (circle one)

Service conductors paralleled? yes or no (circle one)

Number of Conduit(s)_____ Type of Raceway _____

Amperes Interrupting Rating (A.I.R.) rating of the overcurrent device used as the main service disconnect

_____

(NOTE! If the A.I.R. of the overcurrent device is greater than the fault current at the transformer secondary, no further calculation is necessary.)

Formula: Short Circuit Calculation—Phase to Phase

Short-Circuit Current at transformer secondary	Factors C	Factors F	Factors M	Short Circuit Amps at Fault

C Factor = $\frac{1000}{Z/Kft}$ _____.

F Factor = $\frac{Phase \times L \times I}{PC \times C \times E}$ _____.

M Factor = $\frac{1}{1 + F}$ _____.

Short Circuit Amps at Fault = I x M _____.

C = C Factor as calculated above
E = Highest line-to-line voltage available at transformer secondary
F = F Factor
I = Available short-circuit current amps at transformer secondary
L = Conductor length in feet
M = M Factor
PC = Number of parallel conductors per phase
Phase = 2.00 for single phase
1.73 for three-phase
Z/Kft = Conductor impedance per thousand foot from NEC 1999 Chapter 9, Table 9

	Location of Available Short-Circuit Current	Short Circuit Current	Overcurrent Device		
			Ampere Rating	Interrupting Rating	Apparent RMS Let-Through Current
1	At transformer secondary terminals (infinite primary) —per Com Ed		N/A	N/A	N/A
2	On line side of main service equipment				
3	Let-through current on load side of main over-current device				

Please submit additional panel and sub-panel calculations on a separate sheet.

Signed_____