



VILLAGE OF NORTHBROOK  
Development & Planning Services  
1225 Cedar Lane  
Northbrook, Illinois 60062  
847 664-4050  
[www.northbrook.il.us](http://www.northbrook.il.us)

## **Single-Family Residential Back-up Generator**

Submit the application and drawing requirements listed below for the installation of a Single-Family Back-up Generator to [permits@northbrook.il.us](mailto:permits@northbrook.il.us) .

### **Application Requirements:**

- Permit Application Deposit of \$60 (Payment will be requested after the application is accepted)
- Form 1.2 – Electrical Application
- Form 1.2a – Back-up Generator Worksheet
- One-line Diagram

### **Drawing Requirements: (Submit with permit application):**

- Plat of Survey (Must indicate location of proposed generator with dimensions to the lot lines; Survey must be sealed and to scale)
- Generator Manufacturer Specifications

Please direct any questions regarding the permit process to [permits@northbrook.il.us](mailto:permits@northbrook.il.us)  
or call the Development and Planning Services Department at 847-664-4050.  
Office hours are Monday-Friday, 8:30am – 4:30pm.



## FORM 1.2

Permit #: \_\_\_\_\_  
Fee: \_\_\_\_\_

**VILLAGE OF NORTHBROOK**  
**Development & Planning Services**  
1225 Cedar Lane  
Northbrook, Illinois 60062  
847 664-4050 FAX: 847 272-5068  
[www.northbrook.il.us](http://www.northbrook.il.us)

### Electrical Application

Property Address \_\_\_\_\_

Owner \_\_\_\_\_

E-Mail Address \_\_\_\_\_ Phone \_\_\_\_\_ Fax \_\_\_\_\_

**IMPORTANT – ELECTRICIANS MUST HAVE A VALID VILLAGE CONTRACTOR'S LICENSE**

Electrical Contractor \_\_\_\_\_

Address \_\_\_\_\_

E-Mail Address \_\_\_\_\_ Phone \_\_\_\_\_ Fax \_\_\_\_\_

Primary Contact \* \_\_\_\_\_

E-Mail Address \_\_\_\_\_ Phone \_\_\_\_\_ Fax \_\_\_\_\_

\* All plan review correspondence shall be sent to the Primary Contact via email. The Primary contact will also be notified once the permit has been approved and is ready for issuance (pick-up).

**Description of Work** (example: service panel upgrade, install new wiring, install new receptacles/outlets, etc.):  
\_\_\_\_\_  
\_\_\_\_\_

• Circuits  Not Applicable

Number of circuits \_\_\_\_\_ Number of Panel Circuits \_\_\_\_\_

• Electrical Service Information  Not Applicable

Existing:

Location:  underground  overhead

Size:  100  200  300  400  other \_\_\_\_\_ amp

Proposed:

Location:  underground  overhead

Size:  100  200  300  400  other \_\_\_\_\_ amp

#### **Scheduling of Inspections:**

Please contact the Permit Coordinators at **847-664-4050** in order to schedule necessary inspections.

If you have electrical related questions, please contact Electrical Inspector, Corey Friedman at **847-664-4061**.

Office Use:

Comments: \_\_\_\_\_  
\_\_\_\_\_

Reviewer: \_\_\_\_\_ Approval Date: \_\_\_\_\_



## Back-up Generator Worksheet

Please provide the necessary information in the spaces below:

### GAS

Gas Meter Capacity (BTU)	Generator Capacity (BTU)	Total Gas BTU Usage (generator & all other appliances)	Length of New Gas Pipe to Generator	Diameter of New Gas Pipe to Generator	New Gas Pipe Capacity (BTU)	Type of Gas Pipe: Steel or PE Plastic

### ELECTRICAL

Size of Main Breaker on Generator	Size of Breaker for Feeder into ATS from Panel	Feeder Size: Panel to ATS	Feeder Size: Generator to ATS	Circuits Connected to Load Shed

### GENERATOR

Brand	Size: KW	db Levels: Run Test	

### DISTANCE & CLEARANCES

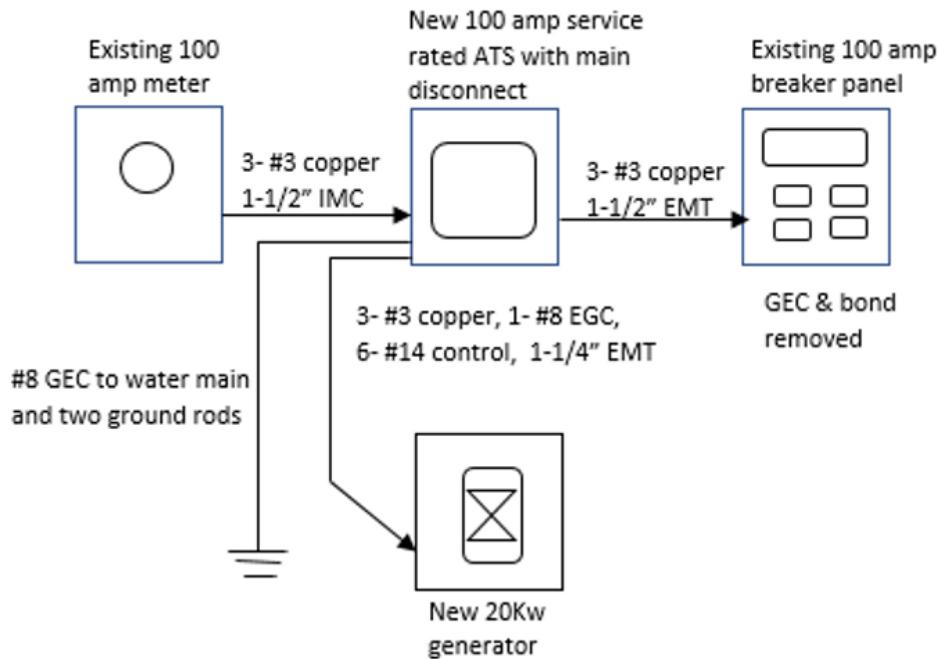
Generator Distances from...	
Windows: Doors: Other Intakes: Other:	House Wall: Electric Meter: Gas Meter: Other:

### NOTES:

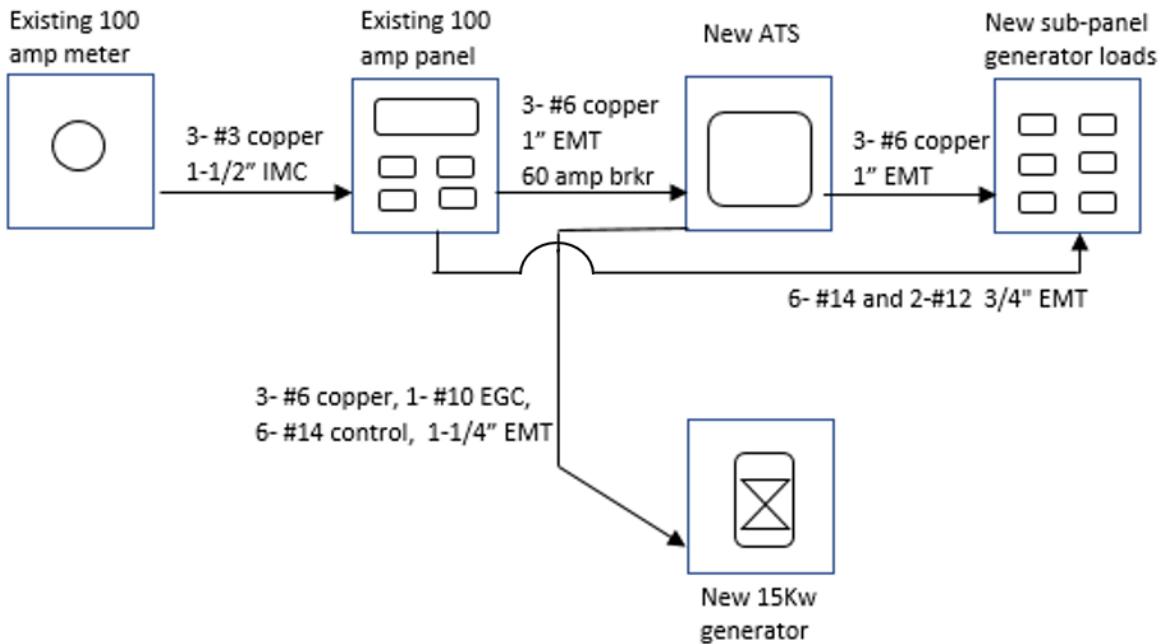
1. Primary codes are the 2017 NEC and 2018 IRC.
2. With application, submit an electrical & gas one-line diagram with load calculation.
3. With application, submit load calculation for generator sizing and sub-panels with transferred circuits (or ATS with built in sub-panel transferred circuits).
4. Steel gas pipe is not permitted below grade and PE plastic pipe is not permitted above grade.
5. Below grade PE plastic pipe is to be terminated above grade with appropriate risers.
6. If electrical and / or gas is installed in the ground for distances greater than 5 feet, call for an underground inspection prior to backfill.
7. When setting the generator, ATS or sub-panels, appropriate clearances and distances are needed to the new equipment / existing equipment and features of the house.
8. For final inspection, an electrician or other qualified technician must be on site.
9. If located within an HOA, provide HOA approval letter.

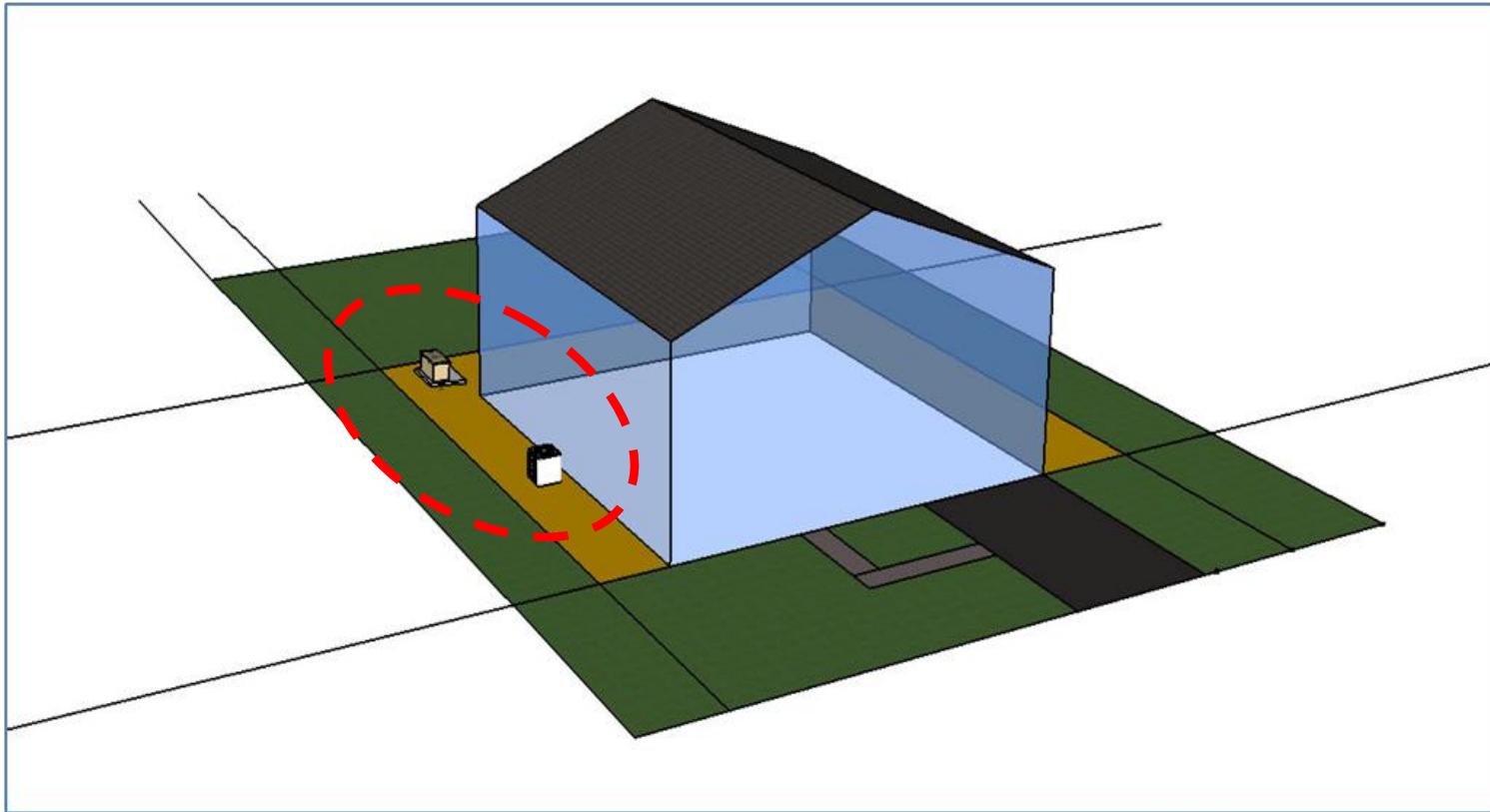
## Sample One-line Diagram

Example of electrical one-line diagram for whole house generator system:



Example of electrical one-line diagram with limited branch circuits:





**Plan ahead!**

**Air conditioning units and standby generators cannot be located in any required yard.**

YARD REQUIREMENTS	R-1	R-2	R-3	R-4	R-5
<b>1. <u>Front &amp; Corner Side Yard (feet)</u></b>	<b>60</b>	<b>40</b>	<b>35</b>	<b>30</b>	<b>25</b>
<b>2. <u>Interior Lots</u></b>	<b>40</b>	<b>12</b>	<b>10</b>	<b>9</b>	<b>6</b>
<b>3. <u>Rear Yard (feet)</u></b>	<b>40</b>	<b>40</b>	<b>40</b>	<b>40</b>	<b>40</b>