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## PERMIT REQUIREMENTS GENERATOR

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Applying for a residential optional stand-by generator permit:

Forms can be downloaded from the Schuylkill Township website. An application should include a Building Permit Application, appropriate permit inserts, typical clearances, a single line diagram, and a worksheet

Please supply the information as outlined below:

1. A Building Permit/UCC Application
2. An Electrical Permit Insert
3. A Mechanical Permit Insert
4. The size and type of generator and transfer switch
5. The interconnection of all equipment. Include details such as wiring methods (cable, conduit and conductors), size of conductors and type of insulation. "Single Line Worksheet" or similar drawing. Include over-current protection devices and disconnects (size and location).
6. A diagram showing the proposed location of the generator. Include setbacks and clearances. Include all building openings and overhangs in the vicinity of the proposed location.
7. Manufacturers' specifications (installation manual) for generator and transfer switch.
8. Indicate the type of fuel (LP or natural gas), and provide information for the materials being installed and details of the installation.

If the transfer switch is automatic and does not contain "load shedding" then the worksheet must be completed. The generator must be sized to carry the full load that is transferred by the automatic transfer equipment

If the transfer switch incorporates load management, please submit documentation outlining how this is to be accomplished.

Transfer equipment must be designed and installed so as to prevent the inadvertent interconnection of normal and alternate sources of power supply in any operation of the transfer equipment.

**IMPORTANT: There are specific requirements such as a mandatory interlock and proper cord connections for portable generators connected to the service panel (back feeding). Please contact the Township Building Inspector at [building@schuylkilltp.org](mailto:building@schuylkilltp.org) for further information and guidance on this type of installation.**

**If an inspection fails, an \$80.00 re-inspection fee is due prior to rescheduling.**

**APPROVED SPECIFICATIONS MUST BE KEPT ON-SITE DURING INSTALLATION**

PERMIT REQUIREMENTS GENERATOR

BACK UP GENERATOR LOAD CALCULATIONS (**SAMPLE\***)

(ALL LOADS TO BE PICKED UP BY AUTOMATIC MEANS MUST BE INCLUDED)

|                                       | QUANTITY    |         | RATING              |                                  |                      |
|---------------------------------------|-------------|---------|---------------------|----------------------------------|----------------------|
| Lighting Fixtures                     | _____       | X       | _____ watts each    | =                                | _____ watts/VA       |
| Sump/well pumps                       | 1/3hp _____ | X       | _____ 750 watts/VA  | =                                | _____ 750 watts/VA   |
|                                       | 1/2hp _____ | X       | _____ 1100 watts/VA | =                                | _____ watts/VA       |
| Refrigerator                          | _____ 1     | X       | _____ 1400 watts/VA | =                                | _____ 1400 watts/VA  |
| Microwave (built-in)                  | _____       | X       | _____ 1630 watts/VA | =                                | _____ watts/VA       |
| Dishwasher                            | _____       | X       | _____ 1030 watts/VA | =                                | _____ watts/VA       |
| Water heater                          | _____ 1     | X       | _____ 4500 watts/VA | =                                | _____ 4500 watts/VA  |
| Clothes washer                        | _____ 1     | X       | _____ 1140 watts/VA | =                                | _____ 11400 watts/VA |
| Clothes dryer                         | _____       | X       | _____ 500 watts/VA  | =                                | _____ watts/VA       |
| Other: (list)                         |             |         |                     |                                  |                      |
| 20 amp branch circuit                 | _____ 2     | X       | _____ 1500 watts/VA | =                                | _____ 3000 watts/VA  |
| _____                                 | _____       | X       | _____ watts/VA      | =                                | _____ watts/VA       |
| _____                                 | _____       | X       | _____ watts/VA      | =                                | _____ watts/VA       |
| Subtotal                              | ----->      |         |                     |                                  | _____ 10790 watts/VA |
| First 10000 watts @ 100%              | ----->      |         |                     | (A)                              | _____ 10000 watts/VA |
| Remaining watts @ 40%                 | ----->      |         |                     | (B)                              | _____ 316 watts/VA   |
| Air conditioning                      | _____ 1380  | VA      | Heating equipment   | _____ 5760                       | VA                   |
| Larger of heating or air conditioning | ----->      |         |                     | (C)                              | _____ 5760 watts/VA  |
| Total (Add A+B+C)                     | _____ 16076 | /1000 = | _____ 16.076        | KW (17KW Minimum size generator) |                      |
| Total watts/VA                        | _____ 16076 | / 240 = | _____ 66.9          | Amps required                    |                      |

**\*SAMPLE only. Please calculate with actual load requirements and considerations.**

**PERMIT REQUIREMENTS GENERATOR**

**BACK UP GENERATOR LOAD CALCULATIONS**

(ALL LOADS TO BE PICKED UP BY AUTOMATIC MEANS MUST BE INCLUDED)

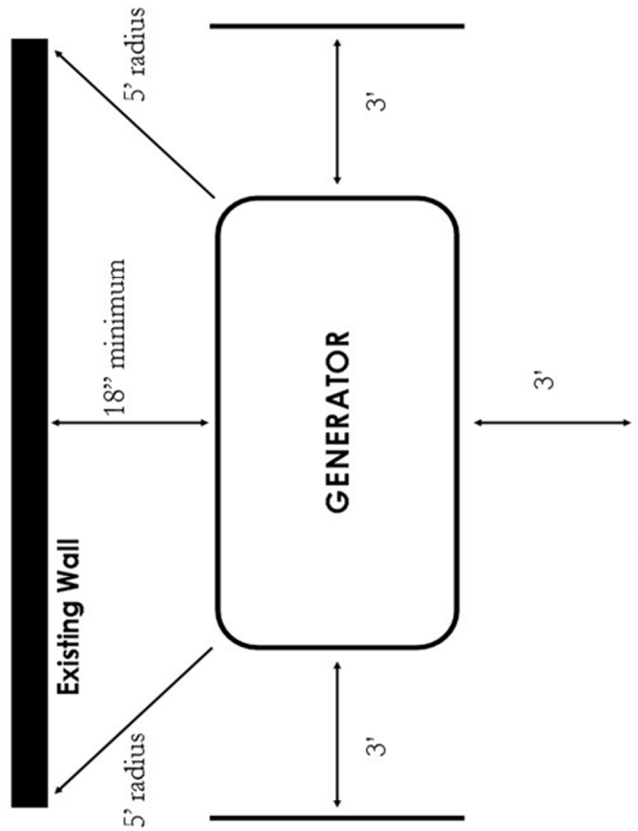
|                                       | <b>QUANTITY</b> | <b>RATING</b> |                   |                                  |
|---------------------------------------|-----------------|---------------|-------------------|----------------------------------|
| Lighting Fixtures                     | _____           | X             | _____             | watts each = _____ watts/VA      |
| Sump/well pumps                       | 1/3hp _____     | X             | _____             | watts/VA = _____ watts/VA        |
|                                       | 1/2hp _____     | X             | _____             | watts/VA = _____ watts/VA        |
| Refrigerator                          | _____           | X             | _____             | watts/VA = _____ watts/VA        |
| Microwave (built-in)                  | _____           | X             | _____             | watts/VA = _____ watts/VA        |
| Dishwasher                            | _____           | X             | _____             | watts/VA = _____ watts/VA        |
| Water heater                          | _____           | X             | _____             | watts/VA = _____ watts/VA        |
| Clothes washer                        | _____           | X             | _____             | watts/VA = _____ watts/VA        |
| Clothes dryer                         | _____           | X             | _____             | watts/VA = _____ watts/VA        |
| Other: (list)                         |                 |               |                   |                                  |
| _____                                 | _____           | X             | _____             | watts/VA = _____ watts/VA        |
| _____                                 | _____           | X             | _____             | watts/VA = _____ watts/VA        |
| _____                                 | _____           | X             | _____             | watts/VA = _____ watts/VA        |
| Subtotal                              | ----->          |               |                   | _____ watts/VA                   |
| First 10000 watts @ 100%              | ----->          |               |                   | (A) _____ watts/VA               |
| Remaining watts @ 40%                 | ----->          |               |                   | (B) _____ watts/VA               |
| Air conditioning                      | _____           | VA            | Heating equipment | _____ VA                         |
| Larger of heating or air conditioning | ----->          |               |                   | (C) _____ watts/VA               |
| Total (Add A+B+C)                     | _____           | /1000 =       | _____             | KW (17KW Minimum size generator) |
| Total watts/VA                        | _____           | / 240 =       | _____             | Amps required                    |

PERMIT REQUIREMENTS GENERATOR

**Typical Clearances for Stand-By Generators**  
 (follow manufacturers' specifications)

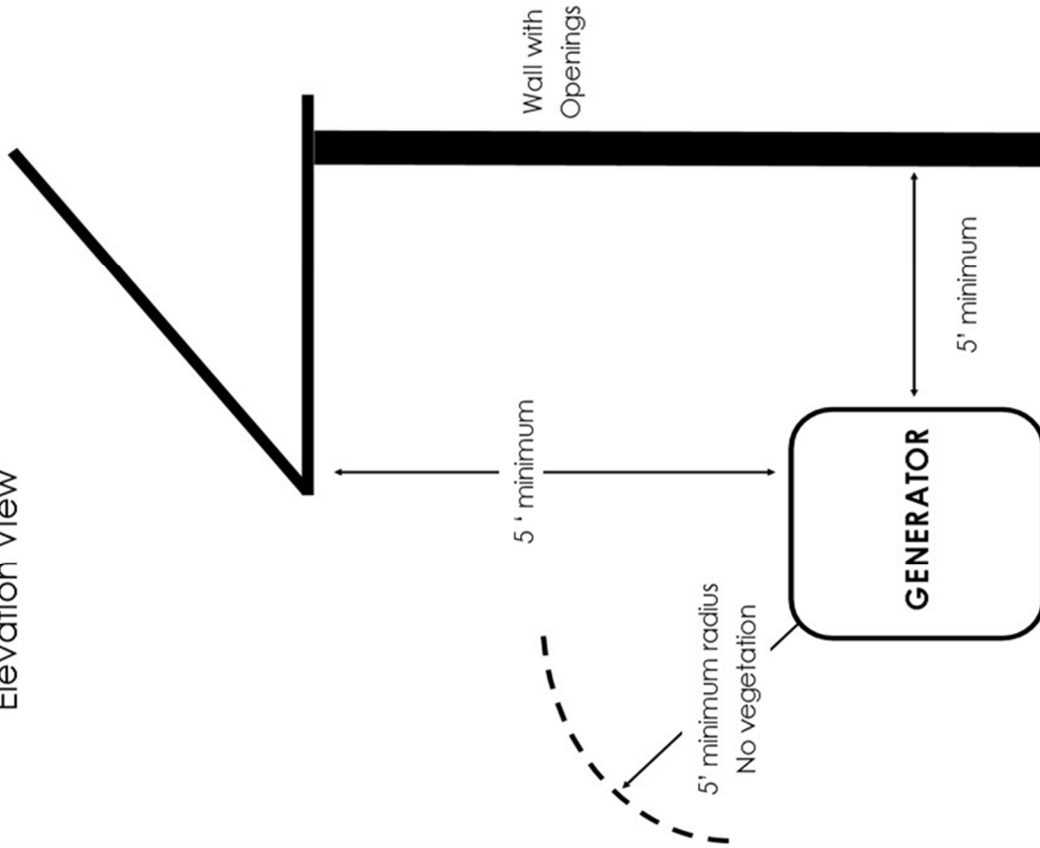
Plan View

\* No openings in the wall permitted within 5 feet of the generator



3' Clearance from ends and front of generator.  
 This includes vegetation 12" and shorter.  
 Vegetation taller than 12" must have a clearance of 5'.

Elevation View



PERMIT REQUIREMENTS GENERATOR

GENERATOR SINGLE LINE

Service Size: \_\_\_\_\_

**Main Panel**

\_\_\_\_\_ Amp

Manual \_\_\_\_\_  
Automatic \_\_\_\_\_

**Transfer Switch**

\_\_\_\_\_ Amp

**Generator**

\_\_\_\_\_ KW

**Subpanel**

\_\_\_\_\_ Amp

Circuits:

\_\_\_\_\_  
\_\_\_\_\_

- ✦ Connect all applicable components.
- ✦ List size and type of cable, or conductors and wiring method.
- ✦ Indicate grounding/bonding.