



April 20, 2016

**BY: U.S. CERTIFIED MAIL, RETURN RECEIPT REQUESTED**

9590 9401 0037 5168 3777 14

William F. Durham  
Director, Division of Air Quality  
WVDEP  
601 57<sup>th</sup> Street  
Charleston, WV 25304



RE: **Dominion Transmission, Inc.**  
**Pineville G&P Office Building**  
**Permit Determination Request**

Dear Mr. Durham:

Dominion Transmission, Inc. (Dominion) is submitting this request for permit determination for the addition of a natural gas auxiliary generator at our Pineville G&P Office Building, an existing office building located near Brenton, Wyoming County, West Virginia.

Based on the response from DEP dated December 16, 2013 (enclosed) for a similar unit, Dominion believes a permit is not necessary for the installation and operation of a Generac 006729-0 auxiliary generator at the Pineville G&P Office Building. Information on the unit is included below:

**Engine Manufacturer and Model:** Generac 006729-0, manufactured 2014  
**Manufacturer's Rated bhp:** 65 hp (20 kW)  
**Subject to NSPS Subpart JJJJ?** Yes, certified  
**Subject to NESHAP Subpart ZZZZ?** Yes, new source, area source  
**Fuel Type:** Pipeline Quality Natural Gas

**Potential Emissions (Based on 8,760 hours)**

Pollutant	Source	lbs/hr	tons/yr
NO <sub>x</sub>	AP-42	0.71	3.12
CO	AP-42	1.17	5.12
VOC	AP-42	9.30E-03	0.04
SO <sub>2</sub>	AP-42	1.85E-04	8.09E-04
PM (filterable)	AP-42	2.98E-03	0.01
PM <sub>10</sub> (filterable)	AP-42	2.98E-03	0.01
PM <sub>2.5</sub> (filterable)	AP-42	2.98E-03	0.01
PM (condensibles)	AP-42	3.11E-03	0.01
Formaldehyde	AP-42	6.44E-03	0.03
Total HAP	AP-42	0.01	0.05

The auxiliary generator is not deemed to be a stationary source since there are no substantive requirements and the potential emission are below permitting thresholds. 40 CFR 60 Subpart JJJJ applies to the generator which requires Dominion to purchase an engine certified to emission standards in 40 CFR 1048.101(c); therefore, no performance tests are required. The engine is EPA certified and by meeting Subpart JJJJ requirements, the engine also meets 40 CFR Part 63, Subpart ZZZZ requirements. Dominion will meet the requirements of Subpart JJJJ by complying with the following requirements:

- Maintaining records of maintenance conducted in accordance with the manufacturer's instructions or per the facility maintenance plan;
- Maintaining records of the hours of operation including number of hours of emergency usage with reason and number of hours of non-emergency usage; and
- Maintaining a copy of the engine certification.

If you require any additional information, please contact Rebekah Remick at 804-273-3536 or via email at [Rebekah.J.Remick@dom.com](mailto:Rebekah.J.Remick@dom.com).

Sincerely,



Amanda B. Tornabene  
Director, Energy Infrastructure Environmental Services

Enclosures

- Appendix A: Permit Determination for Pineville G&P Office Building
- Appendix B: Previous Review for Similar Unit

**Appendix A**  
**Permit Determination for Pineville G&P Office Building**



WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF AIR QUALITY  
601 57<sup>th</sup> Street, SE  
Charleston, WV 25304  
Phone: (304) 926-0475  
www.dep.wv.gov/daq

**PERMIT DETERMINATION FORM  
(PDF)**

FOR AGENCY USE ONLY: PLANT I.D. # \_\_\_\_\_  
PDF # \_\_\_\_\_ PERMIT WRITER: \_\_\_\_\_

1. NAME OF APPLICANT (AS REGISTERED WITH THE WV SECRETARY OF STATE'S OFFICE):  
Dominion Transmission, Inc.

2. NAME OF FACILITY (IF DIFFERENT FROM ABOVE): Pineville G&P Office Building	3. NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS) CODE:  551114
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4A. MAILING ADDRESS: 925 White Oaks Blvd., Bridgeport, WV 26330	4B. PHYSICAL ADDRESS: Off Route 97
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5A. DIRECTIONS TO FACILITY (PLEASE PROVIDE MAP AS ATTACHMENT A):  
From Pineville, travel Route 97 west for 9.9 miles. The office building is on the left, beside Route 97 in Brenton, WV.

5B. NEAREST ROAD: Route 97	5C. NEAREST CITY OR TOWN: Brenton, WV	5D. COUNTY: Wyoming
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5E. UTM NORTHING (KM): 4161334	5F. UTM EASTING (KM): 443529.2	5G. UTM ZONE: 17
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6A. INDIVIDUAL TO CONTACT IF MORE INFORMATION IS REQUIRED: Rebekah Remick	6B. TITLE: Environmental Consultant
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6C. TELEPHONE: 804-273-3536	6D. FAX: 804-273-2964	6E. E-MAIL: Rebekah.J.Remick@dom.com
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7A. DAQ PLANT I.D. NO. (FOR AN EXISTING FACILITY ONLY): _____	7B. PLEASE LIST ALL CURRENT 45CSR13, 45CSR14, 45CSR19 AND/OR TITLE V (45CSR30) PERMIT NUMBERS ASSOCIATED WITH THIS PROCESS (FOR AN EXISTING FACILITY ONLY): N/A
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7C. IS THIS PDF BEING SUBMITTED AS THE RESULT OF AN ENFORCEMENT ACTION? IF YES, PLEASE LIST: No

8A. TYPE OF EMISSION SOURCE (CHECK ONE): <input checked="" type="checkbox"/> NEW SOURCE <input type="checkbox"/> ADMINISTRATIVE UPDATE <input type="checkbox"/> MODIFICATION <input type="checkbox"/> OTHER (PLEASE EXPLAIN IN 11B)	8B. IF ADMINISTRATIVE UPDATE, DOES DAQ HAVE THE APPLICANT'S CONSENT TO UPDATE THE EXISTING PERMIT WITH THE INFORMATION CONTAINED HEREIN?  <input type="checkbox"/> YES <input type="checkbox"/> NO
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9. IS DEMOLITION OR PHYSICAL RENOVATION AT AN EXISTING FACILITY INVOLVED?     YES     NO

10A. DATE OF ANTICIPATED INSTALLATION OR CHANGE: <u>8/31/2016</u>	10B. DATE OF ANTICIPATED START-UP: <u>9/7/2016</u>
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11A. PLEASE PROVIDE A DETAILED PROCESS FLOW DIAGRAM SHOWING EACH PROPOSED OR MODIFIED PROCESS EMISSION POINT AS ATTACHMENT B.

11B. PLEASE PROVIDE A DETAILED PROCESS DESCRIPTION AS ATTACHMENT C.

12. PLEASE PROVIDE MATERIAL SAFETY DATA SHEETS (MSDS) FOR ALL MATERIALS PROCESSED, USED OR PRODUCED AS ATTACHMENT D. FOR CHEMICAL PROCESSES, PLEASE PROVIDE A MSDS FOR EACH COMPOUND EMITTED TO AIR.

**13A. REGULATED AIR POLLUTANT EMISSIONS:**

⇒ FOR A NEW FACILITY, PLEASE PROVIDE PLANT WIDE EMISSIONS BASED ON THE POTENTIAL TO EMIT (PTE) FOR THE FOLLOWING AIR POLLUTANTS INCLUDING ALL PROCESSES.

⇒ FOR AN EXISTING FACILITY, PLEASE PROVIDE THE PROPOSED CHANGE IN EMISSIONS BASED ON THE PTE OF ALL PROCESS CHANGES FOR THE FOLLOWING AIR POLLUTANTS.

PTE FOR A GIVEN POLLUTANT IS TYPICALLY BEFORE AIR POLLUTION CONTROL DEVICES AND IS COLLECTED BASED ON THE MAXIMUM DESIGN CAPACITY OF PROCESS EQUIPMENT.

POLLUTANT	HOURLY PTE (LB/HR)	YEARLY PTE (TON/YR) (HOURLY PTE MULTIPLIED BY 8760 HR/YR) DIVIDED BY 2000 LB/TON
PM	6.10E-03	0.03
PM <sub>10</sub>	2.98E-03	0.01
VOCs	9.30E-03	0.04
CO	1.17	5.12
NO <sub>x</sub>	0.71	3.12
SO <sub>2</sub>	1.85E-04	8.90E-04
Pb	N/A	N/A
HAPs (AGGREGATE AMOUNT)	0.01	0.05
TAPs (INDIVIDUALLY)*		
OTHER (INDIVIDUALLY)*		

\* ATTACH ADDITIONAL PAGES AS NEEDED

**13B. PLEASE PROVIDE ALL SUPPORTING CALCULATIONS AS ATTACHMENT E.**

CALCULATE AN HOURLY AND YEARLY PTE OF EACH PROCESS EMISSION POINT (SHOWN IN YOUR DETAILED PROCESS FLOW DIAGRAM) FOR ALL AIR POLLUTANTS LISTED ABOVE INCLUDING INDIVIDUAL HAP'S (LISTED IN SECTION 112[b] OF THE 1990 CAAA), TAP'S (LISTED IN 45CSR27), AND OTHER AIR POLLUTANTS (E.G. POLLUTANTS LISTED IN TABLE 45-13A OF 45CSR13, MINERAL ACIDS PER 45CSR7, ETC.).

**14. CERTIFICATION OF DATA**

I, BRIAN SHEPPARD (TYPE NAME) ATTEST THAT ALL THE REPRESENTATIONS CONTAINED IN THIS APPLICATION, OR APPENDED HERETO, ARE TRUE, ACCURATE, AND COMPLETE TO THE BEST OF MY KNOWLEDGE BASED ON INFORMATION AND BELIEF AFTER REASONABLE INQUIRY, AND THAT I AM A **RESPONSIBLE OFFICIAL**\*\* (PRESIDENT, VICE PRESIDENT, SECRETARY OR TREASURER, GENERAL PARTNER OR SOLE PROPRIETOR) OF THE APPLICANT.

SIGNATURE OF RESPONSIBLE OFFICIAL: 

TITLE: VICE PRESIDENT, PIPELINE OPERATIONS DATE: 04 / 11 / 2016

\*\*THE DEFINITION OF THE PHRASE 'RESPONSIBLE OFFICIAL' CAN BE FOUND AT 45CSR13, SECTION 2.23.

**NOTE: PLEASE CHECK ENCLOSED ATTACHMENTS:**

ATTACHMENT A  ATTACHMENT B  ATTACHMENT C  ATTACHMENT D  ATTACHMENT E

RECORDS ON ALL CHANGES ARE REQUIRED TO BE KEPT AND MAINTAINED ON-SITE FOR TWO (2) YEARS.

THE PERMIT DETERMINATION FORM WITH THE INSTRUCTIONS CAN BE FOUND ON DAQ'S PERMITTING SECTION WEB SITE:

[www.dep.wv.gov/daq](http://www.dep.wv.gov/daq)



**Attachment A**

Facility Location



☰ 37.59735, -81.63871  
37°35'50.57"N 81°  
38'23.0"W  
Directions

Sign in



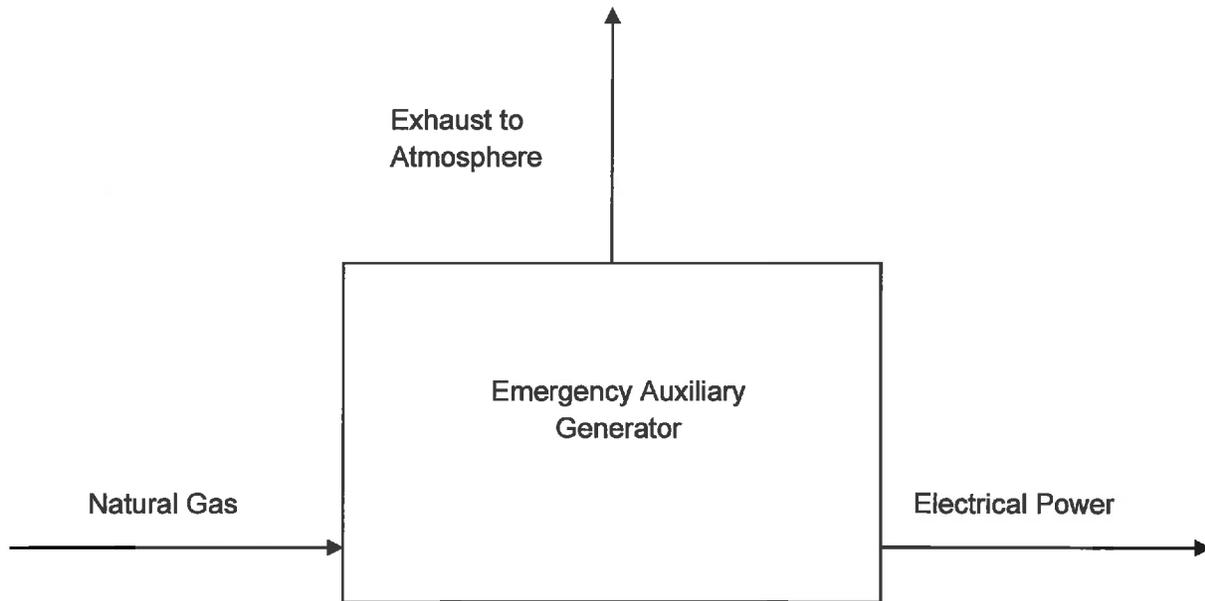
Google

**Attachment B**

Process Flow Diagram

**Process Flow Diagram for the Emergency Auxiliary Generator**

**Pineville G&P Office Building**



## **Attachment C**

### Process Description

### **Process Description**

Pineville G&P Office Building is a field office building for Dominion Transmission, Inc. located near Route 97, Brenton, West Virginia. This permit determination is for a new natural gas emergency generator to supply power to the office in the event of a power loss.

**Attachment E**  
Supporting Calculations

Emergency Engine Potential Emissions

Date: April 2016

Dominion Transmission, Inc.  
Pineville G&P Office Building

Input Data: Generac 006729-0  
 Design Class: 4-stroke rich burn  
 Engine Power: 65 hp  
 20 kW  
 Fuel Input: 0.31 MMBtu/hr  
 Maximum Hours of Operation: 8,760 hrs/yr  
 500 hrs/yr  
 Fuel Throughput: 308 cf/hr (manufacturer spec sheet)  
 154,000 cf/yr  
 Heating Value of Natural Gas: 1,020 Btu/cf

Emission Calculations

Pollutant	Emission Factor		Emissions (8760 hrs/yr)			Emissions (500 hrs/yr)		
			(lb/hr)	(lbs/day)	(tons/yr)	(lb/hr)	(lbs/day)	(tons/yr)
<b>Criteria Pollutants</b>								
PM (filterable)	9.50E-03	lb/MMBtu	2.98E-03	7.16E-02	1.31E-02	2.98E-03	7.16E-02	7.46E-04
PM-10 (filterable)	9.50E-03	lb/MMBtu	2.98E-03	7.16E-02	1.31E-02	2.98E-03	7.16E-02	7.46E-04
PM-2.5 (filterable)	9.50E-03	lb/MMBtu	2.98E-03	7.16E-02	1.31E-02	2.98E-03	7.16E-02	7.46E-04
PM (condensibles)	9.91E-03	lb/MMBtu	3.11E-03	0.07	0.01	3.11E-03	0.07	7.78E-04
SO2	5.88E-04	lb/MMBtu	1.85E-04	0.00	8.09E-04	1.85E-04	0.00	4.62E-05
CO	3.72	lb/MMBtu	1.17	28.05	5.12	1.17	28.05	0.29
NO <sub>x</sub>	2.27	lb/MMBtu	0.71	17.12	3.12	0.71	17.12	0.18
VOC	0.03	lb/MMBtu	9.30E-03	0.22	0.04	9.30E-03	0.22	2.32E-03
<b>Greenhouse Gases</b>								
CO <sub>2</sub>	117.0	lb/MMBtu	36.75	--	160.96	36.75	--	9.19
CH <sub>4</sub>	2.20E-03	lb/MMBtu	0.00	--	0.00	0.00	--	0.00
N <sub>2</sub> O	2.20E-04	lb/MMBtu	0.00	--	0.00	0.00	--	0.00
CO <sub>2</sub> e	117.1	lb/MMBtu	36.79	--	161.13	36.79	--	9.20
<b>Hazardous Air Pollutants</b>								
1,1,2,2-Tetrachloroethane	2.53E-05	lb/MMBtu	7.95E-06	--	3.48E-05	7.95E-06	--	1.99E-06
1,1,2-Trichloroethane	1.53E-05	lb/MMBtu	4.81E-06	--	2.11E-05	4.81E-06	--	1.20E-06
1,1-Dichloroethane	1.13E-05	lb/MMBtu	3.55E-06	--	1.55E-05	3.55E-06	--	8.88E-07
1,2-Dichloroethane	1.13E-05	lb/MMBtu	3.55E-06	--	1.55E-05	3.55E-06	--	8.88E-07
1,2-Dichloropropane	1.30E-05	lb/MMBtu	4.08E-06	--	1.79E-05	4.08E-06	--	1.02E-06
1,3-Butadiene	6.63E-04	lb/MMBtu	2.08E-04	--	9.12E-04	2.08E-04	--	5.21E-05
1,3-Dichloropropene	1.27E-05	lb/MMBtu	3.99E-06	--	1.75E-05	3.99E-06	--	9.97E-07
Acrolein	2.63E-03	lb/MMBtu	8.26E-04	--	3.62E-03	8.26E-04	--	2.07E-04
Acetaldehyde	2.79E-03	lb/MMBtu	8.77E-04	--	3.84E-03	8.77E-04	--	2.19E-04
Benzene	1.58E-03	lb/MMBtu	4.96E-04	--	2.17E-03	4.96E-04	--	1.24E-04
Carbon Tetrachloride	1.77E-05	lb/MMBtu	5.56E-06	--	2.44E-05	5.56E-06	--	1.39E-06
Chlorobenzene	1.29E-05	lb/MMBtu	4.05E-06	--	1.78E-05	4.05E-06	--	1.01E-06
Chloroform	1.37E-05	lb/MMBtu	4.30E-06	--	1.89E-05	4.30E-06	--	1.08E-06
Ethylbenzene	2.48E-05	lb/MMBtu	7.79E-06	--	3.41E-05	7.79E-06	--	1.95E-06
Ethylene Dibromide	2.13E-05	lb/MMBtu	6.69E-06	--	2.93E-05	6.69E-06	--	1.67E-06
Formaldehyde	2.05E-02	lb/MMBtu	6.44E-03	--	2.82E-02	6.44E-03	--	1.61E-03
Methanol	3.06E-03	lb/MMBtu	9.61E-04	--	4.21E-03	9.61E-04	--	2.40E-04
Methylene Chloride	4.12E-05	lb/MMBtu	1.29E-05	--	5.67E-05	1.29E-05	--	3.24E-06
Naphthalene (POM)	9.71E-05	lb/MMBtu	3.05E-05	--	1.34E-04	3.05E-05	--	7.63E-06
Styrene	1.19E-05	lb/MMBtu	3.74E-06	--	1.64E-05	3.74E-06	--	9.35E-07
Toluene	5.58E-04	lb/MMBtu	1.75E-04	--	7.68E-04	1.75E-04	--	4.38E-05
Vinyl Chloride	7.18E-06	lb/MMBtu	2.26E-06	--	9.88E-06	2.26E-06	--	5.64E-07
Xylene	1.95E-04	lb/MMBtu	6.13E-05	--	2.68E-04	6.13E-05	--	1.53E-05
TOTAL HAP:			<b>1.02E-02</b>		<b>4.45E-02</b>	<b>1.02E-02</b>		<b>2.54E-03</b>

(1) Criteria and HAP pollutant lb/MMBtu emission factors from AP-42, Section 3.2, Natural Gas-Fired Reciprocating Engines, Table 3.2-2, 7/00

(2) GHG lb/MMBtu numbers based on 40 CFR Part 98 Tables C-1 and C-2 for natural gas

For example: CO<sub>2</sub> = (53.06 kg CO<sub>2</sub>/MMBtu) / (0.453592 kg/lb) = 117.0 lb/MMBtu

(3) Global Warming Potentials = 25 for CH<sub>4</sub> and 298 for N<sub>2</sub>O (per 40 CFR Part 98 Table A-1 to Subpart A)

For example: CO<sub>2</sub>e = (117.0 lb/MMBtu) + (0.0022 lb/MMBtu \* 25) + (0.00022 lb/MMBtu \* 298) = 117.1 lb/MMBtu



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**2014 MODEL YEAR**  
**CERTIFICATE OF CONFORMITY**  
**WITH THE CLEAN AIR ACT OF 1990**

**OFFICE OF TRANSPORTATION  
 AND AIR QUALITY  
 ANN ARBOR, MICHIGAN 48105**

**Certificate Issued To:** Generac Power Systems, Inc.  
 (U.S. Manufacturer or Importer)

**Certificate Number:** EGNXB.9992ST-028

**Effective Date:**  
 12/12/2013

**Expiration Date:**  
 12/31/2014

**Issue Date:**  
 12/12/2013

**Revision Date:**  
 N/A

Byron J. Bunker, Division Director  
 Compliance Division

**Manufacturer:** Generac Power Systems, Inc.  
**Engine Family:** EGNXB.9992ST  
**Certificate Number:** EGNXB.9992ST-028  
**Certification Type:** Stationary (Part 60)  
**Fuel:** Natural Gas (CNG/LNG)  
**Emission Standards:** CO ( g/kW-hr ) : 519  
 HC + NOx ( g/kW-hr ) : 13.4  
 NMHC + NOx ( g/kW-hr ) : 13.4  
**Emergency Use Only:** Y

Pursuant to Section 213 of the Clean Air Act (42 U.S.C. section 7547) and 40 CFR Part 60, 1065, 1068, and 60 ( stationary only and combined stationary and mobile ) and subject to the terms and conditions prescribed in those provisions, this certificate of conformity is hereby issued with respect to the test engines which have been found to conform to applicable requirements and which represent the following nonroad engines, by engine family, more fully described in the documentation required by 40 CFR Part 60 and produced in the stated model year.

This certificate of conformity covers only those new nonroad spark-ignition engines which conform in all material respects to the design specifications that applied to those engines described in the documentation required by 40 CFR Part 60 and which are produced during the model year stated on this certificate of the said manufacturer, as defined in 40 CFR Part 60. This certificate of conformity does not cover nonroad engines imported prior to the effective date of the certificate.

It is a term of this certificate that the manufacturer shall consent to all inspections described in 40 CFR 1068.20 and authorized in a warrant or court order. Failure to comply with the requirements of such a warrant or court order may lead to revocation or suspension of this certificate for reasons specified in 40 CFR Part 60. It is also a term of this certificate that this certificate may be revoked or suspended or rendered void *ab initio* for other reasons specified in 40 CFR Part 60.

This certificate does not cover large nonroad engines sold, offered for sale, or introduced, or delivered for introduction, into commerce in the U.S. prior to the effective date of the certificate.

16/20/22 kW

**GENERAC®**

**GUARDIAN® SERIES**  
**Residential Standby Generators**  
**Air-Cooled Gas Engine**

16/20/22 kW

1 of 5

**INCLUDES:**

- True Power™ Electrical Technology
- Two Line LCD Multilingual Digital Evolution™ Controller (English/Spanish/French/Portuguese)
- Two Transfer Switch Options Available:  
100 Amp Pre-Wired Switch or  
200 Amp Smart Switch.  
See Page 4 for Details.
- Electronic Governor
- External Main Circuit Breaker, System Status & Maintenance Interval LED Indicators
- GFCI Duplex Outlet
- Sound Attenuated Enclosure
- Flexible Fuel Line Connector
- Composite Mounting Pad
- Natural Gas or LP Gas Operation
- 5 Year Limited Warranty
- Capability to be installed within 18" (457 mm) of a building\*

\*Only if located away from doors, windows and fresh air intakes, and unless otherwise directed by local codes.

**Standby Power Rating**

Models 006459-0, 006461-0, 006462-0 (Steel - Bisque) - 16 kW 60 Hz

Model 006721-0 (Aluminum - Gray) - 16 kW 60 Hz

Models 006729-0, 006730-0 (Steel - Bisque) - 20 kW 60 Hz

Models 006551-0, 006552-0 (Aluminum - Gray) - 22 kW 60 Hz



**QUIET-TEST**

Note: CUL certification only applies to unbundled units and units packaged with pre-wired switches. Units packaged with the Smart Switch are UL certified in the USA only.

**FEATURES**

- **INNOVATIVE DESIGN & PROTOTYPE TESTING** are key components of GENERAC'S success in "IMPROVING POWER BY DESIGN." But it doesn't stop there. Total commitment to component testing, reliability testing, environmental testing, destruction and life testing, plus testing to applicable CSA, NEMA, EGSA, and other standards, allows you to choose GENERAC POWER SYSTEMS with the confidence that these systems will provide superior performance.
- **TRUE POWER™ ELECTRICAL TECHNOLOGY:** Superior harmonics and sine wave form produce less than 5% Total Harmonic Distortion for utility quality power. This allows confident operation of sensitive electronic equipment and micro-chip based appliances, such as variable speed HVAC systems.
- **TEST CRITERIA:**
  - ✓ **PROTOTYPE TESTED**
  - ✓ **SYSTEM TORSIONAL TESTED**
  - ✓ **NEMA MG1-22 EVALUATION**
  - ✓ **MOTOR STARTING ABILITY**
- **SOLID-STATE, FREQUENCY COMPENSATED VOLTAGE REGULATION.** This state-of-the-art power maximizing regulation system is standard on all Generac models. It provides optimized FAST RESPONSE to changing load conditions and MAXIMUM MOTOR STARTING CAPABILITY by electronically torque-matching the surge loads to the engine. Digital voltage regulation at ±1%.
- **SINGLE SOURCE SERVICE RESPONSE** from Generac's extensive dealer network provides parts and service know-how for the entire unit, from the engine to the smallest electronic component.
- **GENERAC TRANSFER SWITCHES.** Long life and reliability are synonymous with GENERAC POWER SYSTEMS. One reason for this confidence is that the GENERAC product line includes its own transfer systems and controls for total system compatibility.

**GENERAC®**



**features and benefits****Engine**

- Generac (OHV) design  
Maximizes engine "breathing" for increased fuel efficiency. Plateau honed cylinder walls and plasma moly rings helps the engine run cooler, reducing oil consumption resulting in longer engine life.
- Quiet-Test™  
Greatly reduces sound output and fuel consumption during bi-weekly exercise, compared to other brands.
- "Spiny-lok" cast iron cylinder walls  
Rigid construction and added durability provide long engine life.
- Electronic ignition/spark advance  
These features combine to assure smooth, quick starting every time.
- Full pressure lubrication system  
Pressurized lubrication to all vital bearings means better performance, less maintenance and longer engine life. Now featuring up to a 2 year/200 hour oil change interval.
- Low oil pressure shutdown system  
Shutdown protection prevents catastrophic engine damage due to low oil.
- High temperature shutdown  
Prevents damage due to overheating.

**Generator**

- Revolving field  
Allows for a smaller, light weight unit that operates 25% more efficiently than a revolving armature generator.
- Skewed stator  
Produces a smooth output waveform for compatibility with electronic equipment.
- Displaced phase excitation  
Maximizes motor starting capability.
- Automatic voltage regulation  
Regulates the output voltage to  $\pm 1\%$  prevents damaging voltage spikes.
- UL 2200 listed  
For your safety.

**Transfer Switch**

- Fully automatic  
Transfers your vital electrical loads to the energized source of power.
- Pre-wired, color-coded conduits (Pre-wired switches only)  
Ensures the easiest, trouble-free installation.
- DPM Technology (Smart Switch only)  
Digital Power Management Technology allows for the smart control of two air conditioners without any additional items.
- Remote mounting  
Mounts near your existing distribution panel for simple, low-cost installation.

**Evolution™ Controls**

- Auto/Manual/Off illuminated buttons  
Selects the operating mode and provides easy, at-a-glance status indication in any condition.
- Two-line LCD multilingual display  
Provides homeowners easily visible logs of history, maintenance and events up to 50 occurrences.
- Sealed, raised buttons  
Smooth, weather-resistant user interface for programming and operations.
- Utility voltage sensing  
Constantly monitors utility voltage, setpoints 60% dropout, 80% pick-up, of standard voltage.
- Generator voltage sensing  
Constantly monitors generator voltage to ensure the cleanest power delivered to the home.
- Utility interrupt delay  
Prevents nuisance start-ups of the engine, adjustable 2-1500 seconds from the factory default setting of 5 seconds by a qualified dealer.
- Engine warm-up  
Ensures engine is ready to assume the load, setpoint approximately 5 seconds.
- Engine cool-down  
Allows engine to cool prior to shutdown, setpoint approximately 1 minute.
- Programmable exerciser  
Operates engine to prevent oil seal drying and damage between power outages by running the generator for 5 minutes every other week. Also offers a selectable setting for weekly or monthly operation providing flexibility and potentially lower fuel costs to the owner.
- Smart battery charger  
Delivers charge to the battery only when needed at varying rates depending on outdoor air temperature.
- Electronic governor  
Maintains constant 60 Hz frequency.

**Unit**

- SAE weather protective enclosure  
Sound attenuated enclosure ensures quiet operation and protection against mother nature, withstanding winds up to 150 mph. Hinged key locking roof panel for security. Lift-out front for easy access to all routine maintenance items. Electrostatically applied textured epoxy paint for added durability.
- Enclosed critical grade muffler  
Quiet, critical grade muffler is mounted inside the unit to prevent injuries.
- Small, compact, attractive  
Makes for an easy, eye appealing installation, as close as 18" away from a building.\*

**Installation System**

- 1 ft (305 mm) flexible fuel line connector  
Absorbs any generator vibration when connected to rigid pipe.
- Composite mounting pad  
Eliminates the need to pour a concrete pad unless required by local municipalities.

### 16/20/22 kW

Generator Model	006459-0, 006461-0, 006462-0, 006721-0 (16 kW)	006729-0, 006730-0, (20 kW)	006551-0, 006552-0 (22 kW)
Rated Maximum Continuous Power Capacity (LP)	16,000 Watts*	20,000 Watts*	22,000 Watts*
Rated Maximum Continuous Power Capacity (NG)	16,000 Watts*	18,000 Watts*	19,500 Watts*
Rated Voltage	240	240	240
Rated Maximum Continuous Load Current – 240 Volts (LP/NG)	66.6/66.6	83.3/75	91.6/81.3
Total Harmonic Distortion	Less than 5%	Less than 5%	Less than 5%
Main Line Circuit Breaker	65 Amp	90 Amp	100 Amp
Phase	1	1	1
Number of Rotor Poles	2	2	2
Rated AC Frequency	60 Hz	60 Hz	60 Hz
Power Factor	1.0	1.0	1.0
Battery Requirement (not included)	Group 26R, 12 Volts and 525 CCA Minimum		
Unit Weight (lb/kg)	513/232.7 (Steel); 448/203.2 (Aluminum)	516/234.1	526/238.6
Dimensions (L x W x H) in/mm	48 x 25 x 29/1218 x 638 x 732		
Sound output in dB(A) at 23 ft (7 m) with generator operating at normal load**	66	66	67
Sound output in dB(A) at 23 ft (7 m) with generator in Quiet-Test™ low-speed exercise mode**	60	60	58
Exercise duration	5 min	5 min	6 min

Engine	GENERAC OHVI V-TWIN	GENERAC OHVI V-TWIN	GENERAC OHVI V-TWIN
Type of Engine	GENERAC OHVI V-TWIN	GENERAC OHVI V-TWIN	GENERAC OHVI V-TWIN
Number of Cylinders	2	2	2
Displacement	992 cc	999 cc	999 cc
Cylinder Block		Aluminum w/ Cast Iron Sleeve	
Valve Arrangement	Overhead Valve	Overhead Valve	Overhead Valve
Ignition System	Solid-state w/ Magneto	Solid-state w/ Magneto	Solid-state w/ Magneto
Governor System	Electronic	Electronic	Electronic
Compression Ratio	9.5:1	9.5:1	9.5:1
Starter	12 Vdc	12 Vdc	12 Vdc
Oil Capacity Including Filter	Approx. 1.9 qt/1.8 L	Approx. 1.9 qt/1.8 L	Approx. 1.9 qt/1.8 L
Operating rpm	3,600	3,600	3,600
Fuel Consumption			
Natural Gas	ft <sup>3</sup> /hr (m <sup>3</sup> /hr)		
1/2 Load	193 (5.47)	205 (5.8)	184 (5.21)
Full Load	312 (8.83)	308 (8.72)	281 (7.98)
Liquid Propane	ft <sup>3</sup> /hr (gal/hr) [l/hr]		
1/2 Load	72.4 (1.99) [7.53]	75.6 (2.08) [7.87]	83 (2.16) [8.16]
Full Load	130 (3.57) [13.53]	140 (3.85) [14.57]	127 (3.68) [13.98]

Note: Fuel pipe must be sized for full load. Required fuel pressure to generator fuel inlet at all load ranges - 3.5-7" water column (7-18 mm mercury) for natural gas, 10-12" water column (10-22 mm mercury) for LP gas. For Btu content, multiply ft<sup>3</sup>/hr x 2500 (LPG) or ft<sup>3</sup>/hr x 1000 (NG). For Megajoule content, multiply m<sup>3</sup>/hr x 93.15 (LPG) or m<sup>3</sup>/hr x 37.26 (NG).

Controls	
2-Line Plain Text Multilingual LCD Display	Simple user interface for ease of operation.
Mode Buttons: Auto	Automatic Start on Utility failure, 7 day exerciser.
Manual	Start with starter control, unit stays on, if utility fails, transfer to load takes place.
Off	Stops unit. Power is removed. Control and charger still operate.
Ready to Run/Maintenance Messages	Standard
Engine Run Hours Indication	Standard
Programmable start delay between 2-1500 seconds	Standard (programmable by dealer only)
Utility Voltage Loss/Return to Utility Adjustable (Brownout Setting)	From 140-171 V/190-216 V
Future-Set Capable Exerciser/Exercise Set Error Warning	Standard
Run/Alarm/Maintenance Logs	50 Events Each
Engine Start Sequence	Cyclic cranking: 15 sec on, 7 rest (90 sec maximum duration)
Starter Lock-out	Starter cannot re-engage until 5 sec after engine has stopped.
Smart Battery Charger	Standard
Charger Fault/Missing AC Warning	Standard
Low Battery/Battery Problem Protection and Battery Condition Indication	Standard
Automatic Voltage Regulation with Over and Under Voltage Protection	Standard
Under-Frequency/Overload/Stepper Overcurrent Protection	Standard
Safety Fused/Fuse Problem Protection	Standard
Automatic Low Oil Pressure/High Oil Temperature Shutdown	Standard
Overcrank/Overspeed (@ 72 Hz)/rpm Sense Loss Shutdown	Standard
High Engine Temperature Shutdown	Standard
Internal Fault/Incorrect Wiring Protection	Standard
Common External Fault Capability	Standard
Field Upgradable Firmware	Standard

\*\*Sound levels are taken from the front of the generator. Sound levels taken from other sides of the generator may be higher depending on installation parameters. Rating definitions - Standby: Applicable for supplying emergency power for the duration of the utility power outage. No overload capability is available for this rating. (All ratings in accordance with B5514, ISO9046 and DNE271). \* Maximum voltage and current are subject to and limited by such factors as fuel flow/megajoule content, ambient temperature, altitude, engine power and condition, etc. Maximum power decreases about 3.5 percent for each 1,000 feet (304.8 meters) above sea level; and also will decrease about 1 percent for each 6 °C (10 °F) above 16 °C (60 °F).

# GENERAC

## switch options

### 16/20/22 kW

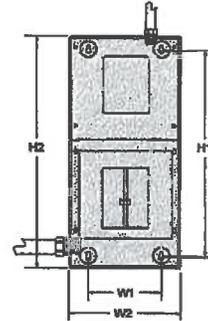
#### Pre-wired Features

available on Steel 16 kW models only

- Electrically operated, mechanically-held contacts for fast, positive connections.
- Rated for all classes of load, 100% equipment rated, both inductive and resistive.
- 2 pole, 250 VAC contactors.
- 30 millisecond transfer time.
- Dual coil design.
- Main contacts are silver plated or silver alloy to resist welding and sticking.
- NEMA 1 (indoor rated) enclosure is standard on the pre-wired switch.
- Pre-wired 30 foot (9.1 meter) whip to connect to the provided 5 foot pre-wired whip and external connection box.
- Pre-wired 2 foot (0.61 meter) whip, color coded to connect into the existing electrical panel.

<b>Model</b>	<b>006461-0 (16 kW)</b>
No. of Poles	2
Current Rating (Amps)	100
Voltage Rating (VAC)	120/240, 1Ø
Utility Voltage Monitor (Fixed)*	
-Pick-up	80%
-Dropout	60%
Return to Utility*	approx. 15 sec.
Exercise weekly for 12 minutes*	Standard
UL Listed	Standard
Total of Pre-wired Circuits	16
No. 15 A 120 V	5
No. 20 A 120 V	5
No. 20 A 240 V	1
No. 30 A 240 V	-
No. 40 A 240 V	1
No. 50 A 240 V	1
Circuit Breaker Protected	
Available RMS Symmetrical Fault Current @ 250 Volts	10,000

\*Function of Evolution Controller



#### Dimensions

Mechanical Dimensions					
	Height		Width		Depth
	H1	H2	W1	W2	
in	23.5	26.4	8.3	12.6	6.3
mm	597	671.7	211	320.7	159.6

Wire Ranges		
Conductor Lug	Neutral Lug	Ground Lug
2/0 - #14	2/0 - #14	2/0 - #14

#### Smart Switch Features

- Includes Digital Power Management Technology standard (DPM).
- Intelligently manages two air conditioner loads with no additional hardware.
- Up to four more large (120/240 VAC) loads can be managed when used in conjunction with Power Management Modules (PMM\*\*).
- Electrically operated, mechanically-held contacts for fast, clean connections.
- Rated for all classes of load, 100% equipment rated, both inductive and resistive.
- 2 pole, 250 VAC contactors.
- Service equipment rated, dual coil design.
- Rated for both aluminum and copper conductors.
- NEMA/UL 3R aluminum outdoor enclosure.
- Main contacts are silver plated or silver alloy to resist welding and sticking.

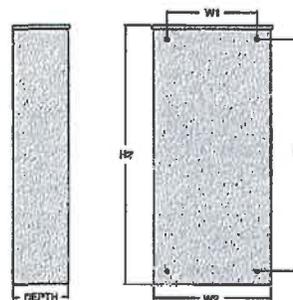
\*\*Note: PMM starter kit is required prior to using the modules.

#### Dimensions

	200 Amps 120/240, 1Ø Open Transition Service Rated				
	Height		Width		Depth
	H1	H2	W1	W2	
in	27.24	30.0	11.4	13.5	7.09
mm	692.0	762.4	289.0	343.0	180.0

<b>Model</b>	<b>006462-0 (16 kW)/006729-0 (20 kW)/006551-0 (22 kW)</b>
No. of Poles	2
Current Rating (Amps)	200
Voltage Rating (VAC)	120/240, 1Ø
Utility Voltage Monitor (Fixed)*	
-Pick-up	80%
-Dropout	60%
Return to Utility*	approx. 13 sec.
Exercise weekly for 12 minutes*	Standard
UL Listed	Standard
Enclosure Type	NEMA/UL 3R
Withstand Rating (Amps)	22,000
Lug Range	250 MCM - #6

\*Function of Evolution Controller

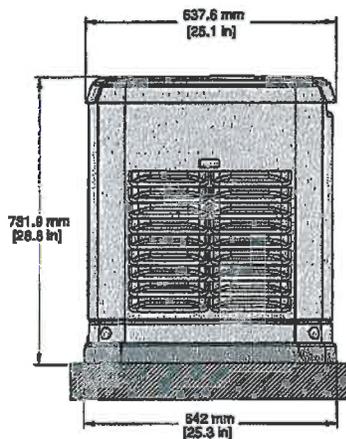


Model #	Product	Description
006463-1	Mobile Link™	Generac's Mobile Link allows you to check the status of your generator from anywhere that you have access to an Internet connection from a PC or with any smart device. You will even be notified when a change in the generator's status occurs via e-mail or text message.
005819-0	26R Wet Cell Battery	Every standby generator requires a battery to start the system. Generac offers the recommended 26R wet cell battery for use with all air-cooled standby product (excluding PowerPact®).
006212-0	Cold Weather Kit	If the temperature regularly falls below 32 °F (0 °C), a cold weather kit is required to maintain optimal battery and oil temperatures. Kit consists of a battery warmer and oil filter heater with built-in thermostats.
005621-0	Auxiliary Transfer Switch Contact Kit	The auxiliary transfer switch contact kit allows the transfer switch to lock out a single large electrical load you may not need. Not compatible with 50 amp pre-wired switches.
005839-0 - Bisque 005666-0 - Gray	Fascia Base Wrap Kit* (Standard on 22 kW)	The fascia base wrap snaps together around the bottom of the new air cooled generators. This offers a sleek, contoured appearance as well as offering protection from rodents and insects by covering the lifting holes located in the base.
005703-0 - Bisque 005704-0 - Gray	Paint Kit*	If the generator enclosure is scratched or damaged, it is important to touch-up the paint to protect from future corrosion. The paint kit includes the necessary paint to properly maintain or touch-up a generator enclosure.
006484-0 - 16 kW 006485-0 - 20 & 22 kW	Scheduled Maintenance Kit	Generac's scheduled maintenance kits provide all the hardware necessary to perform complete routine maintenance on a Generac automatic standby generator.
006664-0	Wireless Remote Monitor	Completely wireless and battery powered, Generac's wireless remote monitor provides you with instant status information without ever leaving the house. Not compatible with CorePower or EcoGen systems.
006199-0	PMM Starter Kit	The PMM Starter Kit consists of a 24 VAC, field installed transformer that enables the use of the 24 VAC Power Management Modules (PMMs) and one PMM. The standard controller (without starter kit) can control two HVAC loads with no additional hardware. Not compatible with pre-wired switches.
006186-0	Power Management Module (50 Amps)	Power Management Modules are used in conjunction with the Smart Switch to increase its power management capabilities. It gives the Smart Switch additional power management flexibility not found in any other transfer switch. Not compatible with pre-wired switches. Note: PMM Starter Kit required.

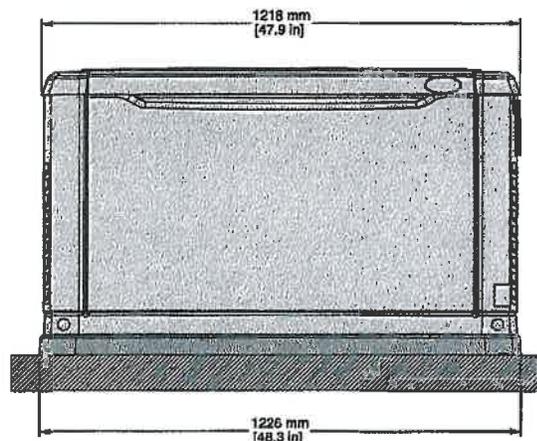
\* Note: Bisque kits are used in conjunction with steel enclosures. Gray kits are used in conjunction with aluminum enclosures.

## dimensions & UPCs

Dimensions shown are approximate. Refer to installation manual for exact dimensions. DO NOT USE THESE DIMENSIONS FOR INSTALLATION PURPOSES.



LEFT SIDE VIEW



FRONT VIEW

Model	UPC
006459-0	696471064599
006461-0	696471064612
006721-0	696471067217
006729-0	696471067293
006730-0	696471067309
006551-0	696471065510
006552-0	696471065527
006462-0	696471064629

**Appendix B**  
**Previous Review for Similar Unit**



west virginia department of environmental protection

Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304  
Phone (304) 926-0475 • FAX: (304) 926-0479

Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
www.dep.wv.gov

December 16, 2013

Jeffrey Barger  
P.O. Box 2450  
Clarksburg, WV 26302-2450

Re: Withdrawal of Permit Application  
Dominion Transmission, Inc.  
Racket Newberne M&R Facility  
Cox Mills, Gilmer County, WV  
Permit Application G60-C055  
Plant ID No.: 021-00021

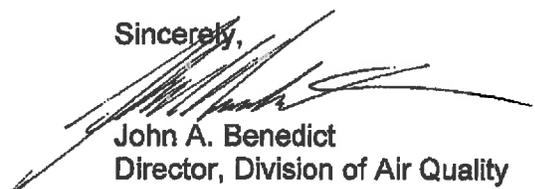
Dear Mr. Jeffrey Barger:

In accordance with your letter received on November 21, 2013, this Division hereby acknowledges the withdrawal of your company's application for a G60-C General Permit Registration for a Kohler 20 RESA, 27 bhp emergency generator/engine to be located at your Racket Newberne M&R Facility located near Cox Mills, Gilmer County, WV.

A permit registration was not needed for the generator engine because the generator was not deemed to be a stationary source and there are no substantive requirements. Although 40 CFR 60 Subpart JJJJ does apply, no performance tests are required. Dominion is aware that it must maintain maintenance records, a copy of the engine certification and fulfill any other applicable requirement(s) of Subpart JJJJ.

No further action will be taken by this Division regarding the G60-C General Permit Registration proposed in application G60-C055.

Sincerely,



John A. Benedict  
Director, Division of Air Quality

JAB/jcl

cc: John Legg  
Permit Writer

Meghann Quinn, Dominion Transmission, Inc.

Promoting a healthy environment.