

July 30, 2015

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

7014 3490 0000 0448 4211

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

RE: <u>Dominion Transmission, Inc. – General Permit Application (G60-C)</u> Weston G&P / Weston 24 Hr Field Office

Dear Mr. Durham:

Enclosed are one complete original and two (2) cd copies of a G60-C General Permit application for the proposed installation of a new natural gas emergency generator at Dominion Transmission, Inc.'s Weston G&P / Weston 24 hr Field Office in Lewis County, WV.

The emergency generator is a certified engine under 40 CFR 60 Subpart JJJJ; therefore, stack testing is not required. However, the emergency generator triggers permitting as potential to emit calculations are above exemption thresholds as stated in West Virginia's R13 Regulations (§45-13-2).

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

Sincerely,

Amanda B. Tornabene Director, Gas Environmental Services

DOMINION TRANSMISSION, INC. WESTON G&P / WESTON 24 HR FIELD OFFICE

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Application for General Permit Registration to Construct, Modify, Relocate or Administratively Update a Stationary Source of Air Pollutants

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- Attachment J. Class I Legal Advertisement
- Attachment L. General Permit Registration Application Fee
- **Note There are no Attachments C, E, H, K, M, N, and O for this permit application

X CONST	WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTIO DIVISION OF AIR QUALITY 601 57 th Street, SE Charleston, WV 25304 Phone: (304) 926-0475 • www.dep.wv.gov/daq TRUCTION MODIFICATION RE CLASS II ADMINISTR/		F COI A STAT	PLICATION FOR GENERAL PERMIT REGISTRATION NSTRUCT, MODIFY, RELOCATE OR ADMINISTRATIVELY UPDATE IONARY SOURCE OF AIR POLLUTANTS CLASS I ADMINISTRATIVE UPDATE
	CHECK WHICH TYPE OF GENERAL PERMIT	REGIS	RATIO	N YOU ARE APPLYING FOR:
G10-D – Coal	Preparation and Handling		G4	0-C – Nonmetallic Minerals Processing
G20-B – Hot	Mix Asphalt		G5	0-B – Concrete Batch
G30-D – Natu	Iral Gas Compressor Stations		X 66	0-C - Class II Emergency Generator
G33-A – Spar	k Ignition Internal Combustion Engines		G65	5-C – Class I Emergency Generator
G35-A – Natu	anal Gas Compressor Stations (Flare/Glycol Dehydration	Unit)	G7	0-A – Class II Oil and Natural Gas Production Facility
	SECTION L CENEL			
	SECTION I. GENEI		JRIVIATI	
1. Name of applic Dominion Transm	ant (as registered with the WV Secretary of State's Office nission, Inc.	e):		2. Federal Employer ID No. (FEIN): 550629203
3. Applicant's mai	ling address:	4. Appli	cant's phy	ysical address:
445 West Main	Street	1222	Vallay	Shanal Baad
Clarksburg, W			ton, WV 2	Chapel Road 26452
, , , , , , , , , , , , , , , , , , ,			,	
5. If applicant is a	subsidiary corporation, please provide the name of pare	nt corpora	ition: N/A	1
6. WV BUSINESS	REGISTRATION. Is the applicant a resident of the Stat	e of West	Virginia?	X yes no
-		tion/ Orga	nization	/ Limited Partnership (one page) including any name
-	IF NO, provide a copy of the Certificate of Authority a amendments or other Business Certificate as Attach		y of LLC	/ Registration (one page) including any name change
<u> </u>	SECTION II. FACIL			
7. Type of plant of	r facility (stationary source) to be constructed, 8a.	Standard	Industria	al Classification (SIC) Code: 8741

7. Type of plant or facility (stationary source) to be constructed, modified, relocated or administratively updated (e.g., coal preparation plant, primary crusher, etc.):	 8a. Standard Industrial Classification (SIC) Code: 8741 8b. North American Industry Classification System (NAICS) Code: 551114
Installation of a natural gas emergency generator	
9. DAQ Plant ID No. (for existing facilities only):	10. List all current 45CSR13 and other General Permit numbers associated with this process (for existing facilities only):
N/A	N/A

A: PRIMARY OPERATING SITE INFORMATION						
11A. Facility name of primary operating site:	12A. Address of primary operating site:					
Weston G&P / Weston 24 hr Field Office	<u>Mailing:</u> 445 West Main Street Clarksburg, WV 26301	<u>Physical:</u> 1333 Valley Chapel Road Weston, WV 26452				
13A. Does the applicant own, lease, have an optic	13A. Does the applicant own, lease, have an option to buy, or otherwise have control of the proposed site? XYES NO					
 IF YES, please explain: Own 						
- IF NO , YOU ARE NOT ELIGIBLE FOR A PE	RMIT FOR THIS SOURCE.					
14A. – For Modifications or Administrative U nearest state road;	pdates at an existing facility, please provide di	rections to the present location of the facility from the				
For Construction or Relocation permits, MAP as Attachment F.	please provide directions to the proposed new	site location from the nearest state road. Include a				
Jane Lew exit 105 off I-79. Go toward Jane Lev make left at Exxon, and go 100 yards. Make a r		6 miles to Jackson Mill Road Rt. 12. Go 2 miles, 1.5 miles to the office.				
15A. Nearest city or town:	16A. County:	17A. UTM Coordinates:				
Weston	Lewis	Northing (KM): 4328909.7 Easting (KM): 543610 Zone: 17				
18A. Briefly describe the proposed new operation	or change (s) to the facility:	19A. Latitude & Longitude Coordinates (NAD83,				
Dominion Transmission, Inc. is proposing to in		Decimal Degrees to 5 digits):				
emergency generator.		Latitude: <u>39.10824</u> Longitude: <u>-80.49560</u>				
B: 1 ST ALTERNATE OPERATII	NG SITE INFORMATION (only available for G	20, G40, & G50 General Permits)				
11B. Name of 1 st alternate operating site:	12B. Address of 1 st alternate operating site:					
N/A	Mailing: N/A					
	Physical: N/A					
13B. Does the applicant own, lease, have an optic	on to buy, or otherwise have control of the prop	osed site? N/A				
 IF YES, please explain: 						
- IF NO, YOU ARE NOT ELIGIBLE FOR A PE	RMIT FOR THIS SOURCE.					
14B. – For Modifications or Administrative U nearest state road;	pdates at an existing facility, please provide di	rections to the present location of the facility from the				
 For Construction or Relocation permits, please provide directions to the proposed new site location from the nearest state road. Include a MAP as Attachment F. 						
Ν/Α						
15B. Nearest city or town:	16B. County:	17B. UTM Coordinates:				
N/A	N/A	Northing (KM): N/A				
		Easting (KM): N/A Zone: N/A				

18B. Briefly describe the proposed new operation or change (s) to the facility:	19B. Latitude & Longitude Coordinates (NAD83, Decimal Degrees to 5 digits):
N/A	Latitude: N/A Longitude: N/A
C: 2 ND ALTERNATE OPERATING SITE INFORMATION (only available for G20,	G40, & G50 General Permits):

11C. Name of 2 nd alternate operating site:	12C. Address of 2	I2C. Address of 2 nd alternate operating site:			
N/A	Mailing: N/A Physical: N/A				
13C. Does the applicant own, lease, have an option to buy, or otherwise have control of the proposed site? N/A					
 IF YES, please explain: N/A 					
- IF NO, YOU ARE NOT ELIGIBLE FOR A PE	RMIT FOR THIS SO	OURCE.			
14C. – For Modifications or Administrative U nearest state road;	pdates at an existir	ng facility, please provide direct	tions to the pres	ent location of the facility from the	
 For Construction or Relocation permits, MAP as Attachment F. 	please provide dire	ctions to the proposed new site	e location from th	ne nearest state road. Include a	
N/A					
15C. Nearest city or town:	16C. County:		17	C. UTM Coordinates:	
N/A	N/A		Northing (KM) Easting (KM):		
			Zone:	N/A	
18C. Briefly describe the proposed new operation	or change (s) to the	e facility:		& Longitude Coordinates mal Degrees to 5 digits):	
N/A			Latitude: Longitude:	N/A N/A	
20. Provide the date of anticipated installation or c	hange:	21. Date of anticipated Start-	up if registration	is granted:	
10/1/15		Day or two after install			
If this is an After-The-Fact permit application, pupon which the proposed change did happen: :	provide the date				
22. Provide maximum projected Operating Schedule of activity/activities outlined in this application if other than 8760 hours/year. (Note: anything other than 24/7/52 may result in a restriction to the facility's operation).					
Hours per day 24 Days per week 7 Weeks per year 3 Percentage of operation 5.7% (500 hrs/8760 hrs)					

SECTION III. ATTACHMENTS AND SUPPORTING DOCUMENTS

23. Include a check payable to WVDEP – Division of Air Quality with the appropriate application fee (per 45CSR22 and 45CSR13).

24. Include a Table of Contents as the first page of your application package.

All of the required forms and additional information can be found under the Permitting Section (General Permits) of DAQ's website, or requested by phone.

25. Please check all attachments included with this permit application. Please refer to the appropriate reference document for an explanation of the attachments listed below.

- X ATTACHMENT A : CURRENT BUSINESS CERTIFICATE
- X ATTACHMENT B: PROCESS DESCRIPTION
 - ATTACHMENT C: DESCRIPTION OF FUGITIVE EMISSIONS
- X ATTACHMENT D: PROCESS FLOW DIAGRAM
 - ATTACHMENT E: PLOT PLAN
- X ATTACHMENT F: AREA MAP
- ${\sf X}$ ATTACHMENT G: EQUIPMENT DATA SHEETS AND REGISTRATION SECTION APPLICABILITY FORM
 - ATTACHMENT H: AIR POLLUTION CONTROL DEVICE SHEETS
- X ATTACHMENT I: EMISSIONS CALCULATIONS
- X ATTACHMENT J: CLASS I LEGAL ADVERTISEMENT
 - ATTACHMENT K: ELECTRONIC SUBMITTAL
- X ATTACHMENT L: GENERAL PERMIT REGISTRATION APPLICATION FEE
 - ATTACHMENT M: SITING CRITERIA WAIVER
 - ATTACHMENT N: MATERIAL SAFETY DATA SHEETS (MSDS)
 - ATTACHMENT O: EMISSIONS SUMMARY SHEETS
 - OTHER SUPPORTING DOCUMENTATION NOT DESCRIBED ABOVE (Equipment Drawings, Aggregation Discussion, etc.)

Please mail an original and two copies of the complete General Permit Registration Application with the signature(s) to the DAQ Permitting Section, at the address shown on the front page of this application. Please DO NOT fax permit applications. For questions regarding applications or West Virginia Air Pollution Rules and Regulations, please refer to the website shown on the front page of the application or call the phone number also provided on the front page of the application.

SECTION IV. CERTIFICATION OF INFORMATION			
This General Permit Registration Application shall be signed below by a Responsible Official. A Responsible Official is a President, Vice President, Secretary, Treasurer, General Partner, General Manager, a member of a Board of Directors, or Owner, depending on business structure. A business may certify an Authorized Representative who shall have authority to bind the Corporation, Partnership, Limited Liability Company, Association, Joint Venture or Sole Proprietorship. Required records of daily throughput, hours of operation and maintenance, general correspondence, Emission Inventory, Certified Emission Statement, compliance certifications and all required notifications must be signed by a Responsible Official or an Authorized Representative. If a business wishes to certify an Authorized Representative, the official agreement below shall be checked off and the appropriate names and signatures entered. Any administratively incomplete or improperly signed or unsigned Registration Application will be returned to the applicant.			
FOR A CORPORATION (domestic or foreign) X I certify that I am a President, Vice President, Secretary, Treasurer or in charge of a principal business function of the corporation			
FOR A PARTNERSHIP O I certify that I am a General Partner			
FOR A LIMITED LIABILITY COMPANY O I certify that I am a General Partner or General Manager			
FOR AN ASSOCIATION O I certify that I am the President or a member of the Board of Directors			
FOR A JOINT VENTURE O I certify that I am the President, General Partner or General Manager			
FOR A SOLE PROPRIETORSHIP O I certify that I am the Owner and Proprietor			
I hereby certify that (please print or type) <u>Brian Sheppard</u> is an Authorized Representative and in that capacity shall represent the interest of the business (e.g., Corporation, Partnership, Limited Liability Company, Association Joint Venture or Sole Proprietorship) and may obligate and legally bind the business. If the business changes its Authorized Representative, a Responsible Official shall notify the Director of the Office of Air Quality immediately, and/or,			
I hereby certify that all information contained in this General Permit Registration Application and any supporting documents appended hereto is, to the best of my knowledge, true, accurate and complete, and that all reasonable efforts have been made to provide the most comprehensive information possible			
Signature 07-27-/5 (please use blue ink) Responsible Official Date			
Name & Title Brian Sheppard, Vice President, Pipeline Operations (please print or type)			
Signature			
Applicant's NameDominion Transmission, Inc			
Phone & Fax			
EmailBrian.C.Sheppard@dom.com			

Attachment A

Current Business Certificate

WEST VIRGINIA STATE TAX DEPARTMENT BUSINESS REGISTRATION

CERTIFICATE

ISSUED TO: DOMINION TRANSMISSION INC 445 W MAIN ST CLARKSBURG, WV 26301-2843

BUSINESS REGISTRATION ACCOUNT NUMBER: 1038-3470

This certificate is issued on: 06/8/2011

This certificate is issued by the West Virginia State Tax Commissioner in accordance with Chapter 11, Article 12, of the West Virginia Code

The person or organization identified on this certificate is registered to conduct business in the State of West Virginia at the location above.

This certificate is not transferrable and must be displayed at the location for which issued. This certificate shall be permanent until cessation of the business for which the certificate of registration, was granted or until it is suspended, revoked or cancelled by the Tax Commissioner.

Change in name or change of location shall be considered a cessation of the business and a new certificate shall be required.

TRAVELING/STREET VENDORS: Must carry a copy of this certificate in every vehicle operated by them. CONTRACTORS, DRILLING OPERATORS, TIMBER/LOGGING OPERATIONS: Must have a copy of this certificate displayed at every job site within West Virginia.

atL006 v.4 L0228957312

Attachment B

Process Description

PROCESS DESCRIPTION

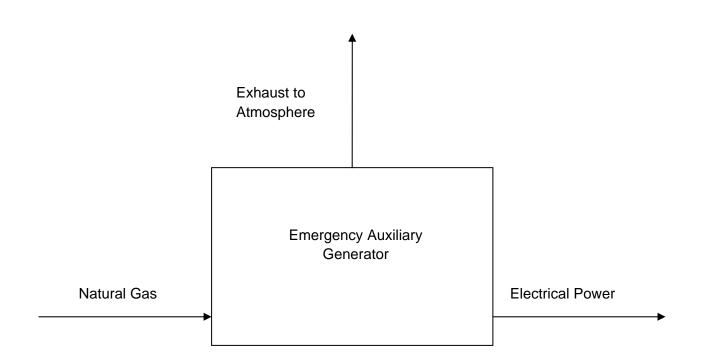
Weston G&P / Weston 24 hr Field Office is an office building for Dominion Transmission, Inc. The site also has an underground storage tank for fueling vehicles. This general permit application is for a new natural gas emergency generator to supply power to the office in the event of a power loss.

Attachment D

Process Flow Diagram

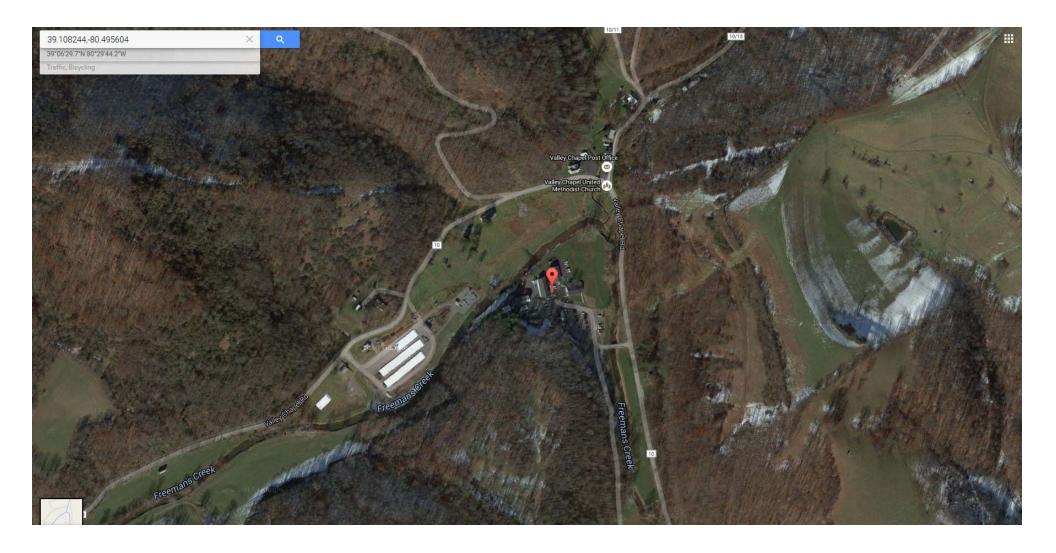
Process Flow Diagram for the Emergency Auxiliary Generator

Weston G&P / Weston 24 hr Field Office



Attachment F

Area Map



Attachment G

Equipment Data Sheets and Registration Section Applicability Form

G60-C REGISTRATION APPLICATION FORMS

General Permit G60-C Registration Section Applicability Form

General Permit G60-C was developed to allow qualified registrants to seek registration for emergency generator(s).

General Permit G60-C allows the registrant to choose which sections of the permit that they wish to seek registration under. Therefore, please mark which sections that you are applying for registration under. Please keep in mind, that if this registration is approved, the issued registration will state which sections will apply to your affected facility.

Reciprocating Internal Combustion Engines (R.I.C.E.)*	\boxtimes
Tanks	\bowtie
Standards of Performance for Stationary Compression Ignition Internal	
Combustion Engines (40CFR60 Subpart IIII)	
Standards of Performance for Stationary Spark Ignition Internal	\boxtimes
Combustion Engines (40CFR60 Subpart JJJJ)	
	Tanks Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40CFR60 Subpart IIII) Standards of Performance for Stationary Spark Ignition Internal

* Affected facilities that are subject to Section 5 may also be subject to Sections 7 or 8. Therefore, if the applicant is seeking registration under both sections, please select both.

EMERGENCY	GENERATOR	ENGINE DATA	SHEET

						-	
Source Identification Number ¹		EC	G-1				
Engine Manufacturer and Model		Generac QT048					
Manufactur	er's Rated bhp/rpm	82.1 hp	(48 kW)				
So	urce Status ²	N	IS				
Date Installed	d/Modified/Removed ³	20)15				
Engine Manufact	ured/Reconstruction Date ⁴	20)14				
Is this a Certified Engine according (Yes or No) ⁵	Stationary Spark Ignition to 40CFR60 Subpart IIII?	Ν	lo				
	Stationary Spark Ignition to 40CFR60 Subpart JJJJ?	Y	es				
	Engine Type ⁷	RE	34S				
	APCD Type ⁸	A	/F				
	Fuel Type ⁹	Р	PQ				
Engine, Fuel and	H ₂ S (gr/100 scf)	20 (tariff)					
Combustion Data	Operating bhp/rpm	82.1 hp (at 1800 rpm)					
Data	BSFC (Btu/bhp-hr)	9392 (worst case)					
	Fuel throughput (ft ³ /hr)	756 (worst case)					
	Fuel throughput (MMft ³ /yr)	378,000					
	Operation (hrs/yr)	5	00				
Reference ¹⁰	Potential Emissions ¹¹	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
MD	NO _X	0.46	0.11				
MD	СО	17.25	4.31				
MD	VOC	0.29	0.07				
AP	SO ₂	4.53E-04	1.13E-04				
AP	PM ₁₀	7.33E-03	1.83E-03				
AP	Formaldehyde	1.58E-02	3.95E-03				
			8				

1. Enter the appropriate Source Identification Number for each emergency generator. Generator engines should be designated EG-1, EG-2, EG-3 etc. If more than three (3) engines exist, please use additional sheets.

2. Enter the Source Status using the following codes:

- NS Construction of New Source (installation)
- ES **Existing Source**
- MS Modification of Existing Source
- RS Removal of Source

- 3. Enter the date (or anticipated date) of the engine's installation (construction of source), modification or removal.
- 4. Enter the date that the engine was manufactured, modified or reconstructed.
- 5. Is the engine a certified stationary spark ignition internal combustion engine according to 40CFR60 Subpart IIII. If so, the engine and control device must be operated and maintained in accordance with the manufacturer's emission-related written instructions. You must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required. If the certified engine is not operated and maintained in accordance with the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine and you must demonstrate compliance according to 40CFR§60.4210 as appropriate.

Provide a manufacturer's data sheet for all engines being registered.

6. Is the engine a certified stationary spark ignition internal combustion engine according to 40CFR60 Subpart JJJJ. If so, the engine and control device must be operated and maintained in accordance with the manufacturer's emission-related written instructions. You must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required. If the certified engine is not operated and maintained in accordance with the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine and you must demonstrate compliance according to 40CFR§60.4243a(2)(i) through (iii), as appropriate.

Provide a manufacturer's data sheet for all engines being registered.

7. Enter the Engine Type designation(s) using the following codes:

LB2S	Lean Burn Two Stroke	RB4S	Rich Burn Four Stroke
LB4S	Lean Burn Four Stroke		

8. Enter the Air Pollution Control Device (APCD) type designation(s) using the following codes:

	A/F	Air/Fuel Ratio	IR	Ignition Retard
	HEIS	High Energy Ignition System	SIPC	Screw-in Precombustion Chambers
	PSC	Prestratified Charge	LEC	Low Emission Combustion
	NSCR	Rich Burn & Non-Selective Catalytic Reduction	SCR	Lean Burn & Selective Catalytic Reduction
9.	Enter the I	Fuel Type using the following codes:		
	PQ	Pipeline Quality Natural Gas	RG	Raw Natural Gas
	2FO	#2 Fuel Oil	LPG	Liquid Propane Gas
10	F (4		·	

10. Enter the Potential Emissions Data Reference designation using the following codes. Attach all referenced data to this *Compressor/Generator Data Sheet(s)*.

MD	Manufacturer's Data	AP	AP-42	
GR	GRI-HAPCalc TM	OT	Other	(please list)

11. Enter each engine's Potential to Emit (PTE) for the listed regulated pollutants in pounds per hour and tons per year. PTE shall be calculated at manufacturer's rated brake horsepower and may reflect reduction efficiencies of listed Air Pollution Control Devices. Emergency generator engines may use 500 hours of operation when calculating PTE. PTE data from this data sheet shall be incorporated in the *Emissions Summary Sheet*.

Source ID # ¹	Status ²	Content ³	Volume ⁴	Dia ⁵	Throughput ⁶	Orientation ⁷	Liquid Height ⁸
TK01	EXIST	Gasoline	10,000	8.0	41,200	HORZ	
TK02	EXIST	Diesel	4,000	6.0	6,100	HORZ	
*Note: These	tanks are u	nderground stora	ge tanks for fuelin	g vehic	les only.		

STORAGE TANK DATA SHEET

1. Enter the appropriate Source Identification Numbers (Source ID #) for each storage tank located at the compressor station. Tanks should be designated T01, T02, T03, etc.

2. Enter storage tank Status using the following:

EXIST Existing Equipment

NEW Installation of New Equipment

REM Equipment Removed

3. Enter storage tank content such as condensate, pipeline liquids, glycol (DEG or TEG), lube oil, etc.

4. Enter storage tank volume in gallons.

5. Enter storage tank diameter in feet.

6. Enter storage tank throughput in gallons per year.7. Enter storage tank orientation using the following:

VERT Vertical Tank

8. Enter storage tank average liquid height in feet.

HORZ Horizontal Tank

EMERGI	ENCY GE	NERAT(OR EMIS	SSION SU	U MMARY	SHEET	FOR CRI	TERIA PO	OLLUTAN	NTS
Emergency Generat	tor Location:	Weston G&	kP / Weston	24 hr Field	Office		Registratio	on Number (Agen	cy Use) <u>G60-C</u>	
		Potentia	al Emissions	s (lbs/hr)			Potenti	ial Emissions (tons/yr)	
Source ID No.	NO _X	СО	VOC	SO ₂	PM ₁₀	NO _X	СО	VOC	SO_2	PM ₁₀
EG-1	0.46	17.25	0.29	4.53E-04	7.33E-03	0.11	4.31	0.07	1.13E-04	1.83E-03
										I
Total	0.46	17.25	0.29	4.53E-04	7.33E-03	0.11	4.31	0.07	1.13E-04	1.83E-03

	EMER(GENCY C	ENERA'	TOR EM				EET FO	R HAZA	RDOUS/	ΓΟΧΙΟ	<u>-</u>
					<u>PC</u>	DLLUTA	<u>NTS</u>					
Emergen	ncy Generato	or Location:	Weston G&	&P / Weston	24 hr Fie	eld Office		Registra	ation Numbe	er (Agency Use) G	<u>60-C</u>	
		Pot	tential Emiss	sions (lbs/hr))			Pote	ential Emissi	ions (tons/yr)	
Source ID No.	Benzene	Ethyl- benzene	Toluene	Xylenes	n- Hexane	Formalde- hyde	Benzene	Ethyl- benzene	Toluene	Xylenes	n- Hexane	Formalde- hyde
EG-1	1.22E-03	1.91E-05	4.30E-04	1.50E-04	N/A	1.58E-02	3.05E-04	4.78E-06	1.08E-04	3.76E-05	N/A	3.95E-03
Total	1.22E-03	1.91E-05	4.30E-04	1.50E-04	N/A	1.58E-02	3.05E-04	4.78E-06	1.08E-04	3.76E-05	N/A	3.95E-03

General Permit Levels Construction, Modification, Relocation, Administrative Update

Class II General Permits – G10-C (Coal Preparation and Handling), G20-B (Hot Mix Asphalt), G30-D (Natural Gas Compressor Stations), G35-A (Natural Gas Compressor Stations with Flares/Glycol Dehydration Units), G40-B (Nonmetallic Minerals Processing), G50-B (Concrete Batch Plant), G60-C (Emergency Generators)

Class I General Permit - G65-C (Emergency Generators)

General Permit	Public Notice	Review Period	Application Fee	Criteria	Application Type
		as per			
		45CSR13			
Class II General Permit	30 days	90 days	\$500 + applicable	6 lb/hr and 10 tpy of any regulated air pollutant	Registration Application
(Construction)	(applicant)		NSPS fees	OR 144 lb/day of any regulated air pollutant, OR	
				2 lb/hr of any hazardous air pollutant OR 5 tpy of	
				aggregated HAP OR 45CSR27 TAP (10%	
				increase if above BAT triggers or increase to	
				BAT triggers) or subject to applicable standard or	
				rule, but subject to specific eligibility	
				requirements	
Class II General Permit	30 days	90 days	\$500 + applicable	Same as Class II General Permit (Construction)	Registration Application
(Modification)	(applicant)		NSPS fees	but subject to specific eligibility requirements	
Administrative Update	None	60 days	None	Decrease in emissions or permanent removal of	Registration Application
(Class I)		-		equipment OR more stringent requirements or	or Written Request
				change in MRR that is equivalent or superior	-
Administrative Update	30 days	60 days	\$300 + applicable	No change in emissions or an increase less than	Registration Application
(Class II)	(applicant)		NSPS fees	Class II Modification levels	
Relocation	30 days	45 days	\$500 + applicable	No emissions increase or change in facility	Registration Application
	(applicant)	-	NSPS fees	design or equipment	
Class I General Permit	None	45 days	\$250	Same as Class II General Permit (Construction)	Registration Application
				but subject to specific eligibility requirements	



Quietsource® Series

INCLUDES:

- Two Line LCD Tri-Lingual Digital Nexus™ Controller
- Isochronous Electronic Governor
- Sound Attenuated Enclosure
- Closed Coolant Recovery System
- Smart Battery Charger
- UV/Ozone Resistant Hoses
- ±1% Voltage Regulation
- Natural Gas or LP Operation
- 2 Year Limited Warranty
- UL 2200 Listed

QUIETSOURCE® SERIES Standby Generators Liquid-Cooled Gas Engine

GENED/

Standby Power Rating

Model QT022 (Aluminum - Gray) - 22 kW 60Hz Model QT027 (Aluminum - Gray) - 27 kW 60Hz Model QT036 (Aluminum - Gray) - 36 kW 60Hz Model QT048 (Aluminum - Gray) - 48 kW 60Hz



Meets EPA Emission Regulations 22 & 27kW are CA/MA emissions compliant 48kW meets CA/MA emissions requirements with optional catalyst 36kW not for sale in CA/MA

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.
- O TEST CRITERIA:
 - ✓ PROTOTYPE TESTED
 - ✓ SYSTEM TORSIONAL TESTED
- NEMA MG1-22 EVALUATION
 MOTOR STARTING ABILITY
- O 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 $\pm 1\%$.
- 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.





application & engineering data

GENERATOR SPECIFICATIONS

Туре	Synchronous
Rotor Insulation Class	H (22 & 27 kW) or F (36 & 48 kW)
Stator Insulation Class	Н
Telephone Interference Factor (TIF)	<50
Alternator Output Leads 1-Phase	· 4 wire
Alternator Output Leads 3-Phase	6 wire
Bearings	Sealed Ball
Coupling	Flexible Disc
Excitation System	Direct

VOLTAGE REGULATION

Туре	Electronic
Sensing	Single Phase
Regulation	± 1%

GOVERNOR SPECIFICATIONS

Туре	Electronic
Frequency Regulation	Isochronous
Steady State Regulation	± 0.25%

ELECTRICAL SYSTEM

Battery Charge Alternator	12 Volt 30 Amp
Static Battery Charger	2 Атр
Recommended Battery	Group 26 (22, 27 & 36 kW) or Group 24F (48 kW), 525CCA
System Voltage	12 Volts

GENERATOR FEATURES

Revolving field heavy duty generator	
Directly connected to the engine	
Operating temperature rise 120 °C above a 40 °C ambient	
Class H insulation is rated at 150 °C rise at 25 °C ambient	
Class F insulation is rated at 145 °C rise at 25 °C ambient	
All models fully prototyped tested	

ENCLOSURE FEATURES

Aluminum weather protective enclosure	Ensures protection against mother nature. 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.		
SAE	Sound attenuated enclosure ensures quiet operation.		

ENGINE SPECIFICATIONS: 22, 27 & 36kW

Make	Generac
Model	In-line
Cylinders	4
Displacement (Liters)	2.4
Bore (in/mm)	3.41/86.5
Stroke (in/mm)	3.94/100
Compression Ratio	9.5:1
Intake Air System	Naturally Aspirated (22 & 27 KW) or Turbocharged/Aftercooled (36 KW)
Lifter Type	Hydraulic

ENGINE SPECIFICATIONS: 48kW

Make	Generac
Model	V-Type
Cylinders	8
Displacement (Liters)	5.4
Bore (in/mm)	3.55/90.2
Stroke (in/mm)	4.17/105.9
Compression Ratio	9:1
Intake Air System	Naturally Aspirated
Lifter Type	Hydraulic

ENGINE LUBRICATION SYSTEM

Cil Pump Type	Gear
Oil Filter Type	Full flow spin-on cartridge
Crankcase Capacity (quarts/liters)	4/3.8 (22, 27 & 36 kW) or 6/5.7 (48 kW)

ENGINE COOLING SYSTEM

Туре	Closed
Water Pump	Belt driven
	1980 - 22 & 27 KW
Fan Speed (rpm)	1500 - 36 KW
	1954 - 48 kW
Fan Diameter (in/mm)	18.1/459.7 (22 & 27 kW) or
ran Diameter (iiyinii)	22/558.8 (36 & 48 kW)
Faa Mada	Pusher (22 & 27 kW) or
Fan Mode	Puller (36 & 48 kW)

FUEL SYSTEM

Fuel Type	Natural gas, propane vapor
Carburetor	Down Draft
Secondary Fuel Regulator	Standard
Fuel Shut Off Solenoid	Standard
Operating Fuel Pressure	5" - 14" H ₂ 0

(All ratings in accordance with BS5514, ISO3046, ISO8528, SAE J1349 and DIN6271)

operating data

GENERATOR OUTPUT VOLTAGE/kW - 60Hz

		kW LPG	Amp LPG	kW Nat. Gas	Amp Nat. Gas	CB Size (Both)
	120/240 V, 1Ø, 1.0 pl	22	92	22	92	100
QT022	120/208 V, 3Ø, 0.8 pf	22	76	22	76	80
	120/240 V, 3Ø, 0.8 pf	22	66	22	66	80
	120/240 V, 1Ø, 1.0 pf	27	113	25	104	125
QT027	120/208 V, 3Ø, 0.8 pl	27	94	25	87	100
	120/240 V, 3Ø, 0.8 pf	27	81	25	75	90
	120/240 V, 1Ø, 1.0 pf	36	150	35	146	175
QT036	120/208 V, 3Ø, 0.8 pf	36	125	35	121	150
01030	120/240 V, 3Ø, 0.8 pf	36	108	. 35	105	125
	277/480 V, 3Ø, 0.8 pf	36	54	35	53	60
	120/240 V, 1Ø, 1.0 pf	48	200	48	200	200
QT048	120/208 V, 3Ø, 0.8 pl	48	166.5	48	166	175
1040	120/240 V, 3Ø, 0.8 pf	48	144	48	144	150
	277/480 V, 3Ø, 0.8 pf	48	72	48	72	80

SURGE CAPACITY IN AMPS

		Voitage Dig) @ < .4 pl
		15%	30%
	120/240 V, 1Ø	89	216
QT022	120/208 V, 3Ø	74	180
	120/240 V, 3Ø	64	156
	120/240 V, 1Ø	109	265
QT027	120/208 V, 3Ø	91	221
	120/240 V, 3Ø	79	192
	120/240 V, 1Ø	54	149
0T036	120/208 V, 3Ø	87	210
01050	120/240 V, 3Ø	75	182
	277/480 V, 3Ø	36	87
	120/240 V, 1Ø	69	189
QT048 -	120/208 V, 3Ø	111 -	269
	120/240 V, 3Ø	96	233
[277/480 V, 3Ø	43	104

ENGINE FUEL CONSUMPTION

Natural Gas Propane

				••••	Pano	
		(ft³/hr)	(m³/hr)	(gal/hr)	(l/hr)	
	Exercise cycle	42	1.2	0.44	1.7	
	25% of rated load	100	2.8	1.1	4.2	
QT022	50% of rated load	190	5.4	2.1	7.8	
	75% of rated load	255	7.2	2.8	10.5	
	100% of rated load	316	9	3.4	13	
	Exercise cycle	42	1.2	0.44	1.7	
	25% of rated load	108	3.1	1.2	4.5	
QT027	50% of rated load	197	5.6	2.1	8.1	
	75% of rated load	287	8.2	3.1	11.8	
	100% of rated load	359	10.2	3.9	14.8	
	Exercise cycle	48	1.4	0.5	2	
	25% of rated load	156	4.4	1.7	6.4	
QT036	50% of rated load	282	8	3.1	11.6	
	75% of rated load	392	11.1	4.3	16.2	
	100% of rated load	503	14.3	5.5	20.8	
	Exercise cycle	95	2.7	1	3.9	
	25% of rated load	204	5.8	2.16	8.5	
QT048	50% of rated load	392	11.1	4.14	15.7	
	75% of rated load	547	15.5	5.8	22.8	
	100% of rated load	756	21.5	7.96	31.3	

Note: Fuel pipe must be sized for full load.

For Btu content, multiply ft3/hr x 2520 (LP) or ft3/hr x 1000 (NG)

For megajoule content, multiple m³/hr x 93.89 (LP) or m³/hr x 37.26 (NG)

Refer to "Emissions Data Sheets" for maximum fuel flow for EPA and SCAQMD permitting purposes.

STANDBY RATING: Standby ratings apply to installations served by a reliable utility source. The standby rating is applicable to varying loads for the duration of a power outage. There is no overload capability for this rating. Ratings are in accordance with ISO-3046-1. Design and specifications are subject to change without notice.



operating data

ENGINE COOLING

	22 kW	27 kW	36 kW	48 kW
Air flow (inlet air including alternator and combustion air in cfm/cmm)	2400/68	2400/68	2200/62.3	4350/123.2
System coolant capacity (gal/liters)	3/11.4	3/11.4	2.5/9.5	3/11.4
Heat rejection to coolant (BTU per hr/MJ per hr)	99,000/104.5	105,000/110.8	145,000/153	186,000/196.
Maximum operation air temperature on radiator (°C/°F)	· · · ·	60/	/150	
Maximum ambient temperature (°C/°F)			/140	
COMBUSTION REQUIREMENTS	I			
Flow at rated power (cfm/cmm)	68/1.9	68/1.9	106/3	163/4.6
SOUND EMISSIONS	· ·			
Sound oulput in dB(A) at 23 ft (7 m) with generator in exercise mode*	61	61	58	63
Sound output in dB(A) at 23 ft (7 m) with generator operating at normal load*	70	70	64	68
*Sound levels are taken from the front of the generator. Sound levels taken from other sides of the g		1		I
Exhaust flow at rated output (cfm/cmm)	165/4.7	180/5.1	300/8.5	414/11.7
Exhaust temperature at muffier outlet (°C/°F)	482/900	538/1000	579/1075	552/1025
Rated Synchronous RPM		18	00	
OWER ADJUSTMENT FOR AMBIENT CONDITIONS emperature Deration Ititude Deration (22, 27 & 48 kW) Ititude Deration (36 kW)		100 m above 183 n	n or 3% for every 10	100 ft ab <u>ove 600</u>
ONTROLLER FEATURES				//////////////////////////////////////
-Line Plain Text LCD Display		Sim	nle user interface fo	r ease of onerali
lode Switch: Auto				
011				
Manual	Start with starter contr	ol, unit stays on. If u	utility fails, transfer l	io load takes pla
rogrammable start delay between 10-30 seconds				
ngine Start Sequence				
ngine Warm-up				
igine Cool-Down				
arter Lock-out				
nart Battery Charger Itomatic Voltage Regulation with Over and Under Voltage Protection		•••••••		
tomatic Low Oil Pressure Shutdown				
erspeed Shutdown				
gh Temperature Shutdown				
vercrank Protection				
fely Fused				
ilure to Transfer Protection				
				Standa
W Dattery Floteotion				
w Battery Protection) Event Run Log				Stand

 Future Set Capable Exerciser
 Standard

 Incorrect Wiring Protection
 Standard

 Internal Fault Protection
 Standard

 Common External Fault Capability
 Standard

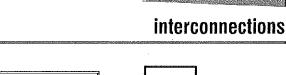
 Governor Failure Protection
 Standard

GENERAC

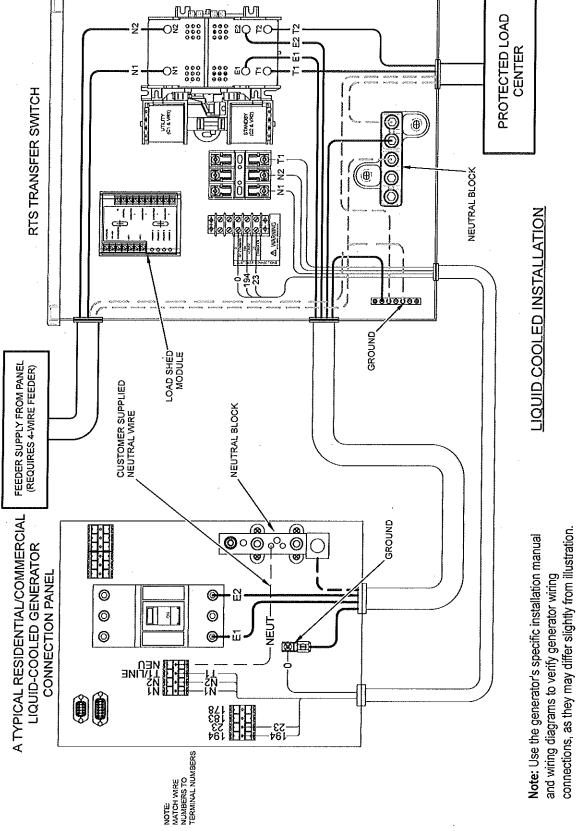
22 • 27 • 36 • 48 kW

available accessories

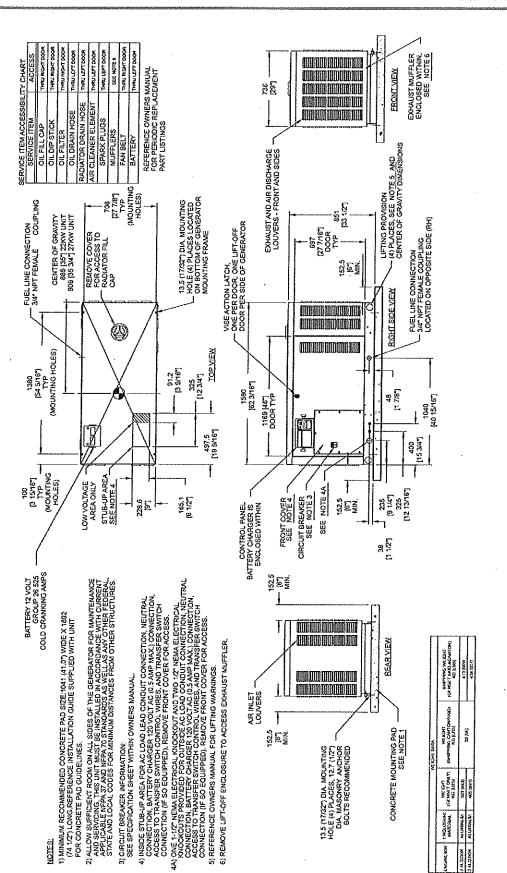
Model #	Product	Description
005630-0 - 22, 27 & 36 kW 005632-0 - 48 kW	Cold Weather Kit	If the temperature regularly falls below 32 °F (0 °C), install a cold weather kit to maintain optimal battery temperature. Kit consists of battery warmer with thermostat built into the wrap.
005616-0 - 22, 27 &36 kW 006204-0 - 48 kW	Extreme Cold Weather Kit	Recommended where the temperature regularly falls below 32 °F (0 °C) for extended periods of time. For liquid cooled units only.
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.
005651-0	Base Plug Kit	Add base plugs to the base of the generator to keep out debris.
005704-0	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.
005656-0 - 22 & 27 kW 005984-0 - 36 kW 006205-0 - 48 kW	Scheduled Maintenance Kit	The Liquid-Cooled Scheduled Maintenance Kits offer all the hardware necessary to perform complete maintenance on Generac liquid-cooled generators.
005928-0	Wireless Remote	Completely wireless and battery powered, Generac's wireless remote monitor provides you with instant status information without ever leaving the house.
005951-0	Advanced Wireless Remote	Remotely control generator functions with the advanced model's LCD display. In addition to remote testing of the generator, set the exercise cycle and maintenance interval reminders.
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.
006463-0	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. Note: Harness Adapter Kit required.
006478-0	Harness Adapter Kit	The Harness Adapter Kit is required to make liquid-cooled units compatible with Mobile Link™.



GENERA



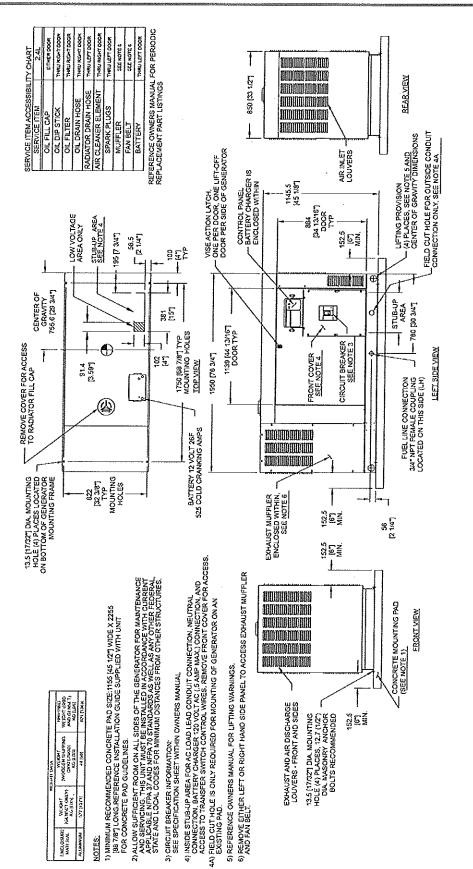
e Quietsource® Series



22 & 27 kW

Quietsource® Series

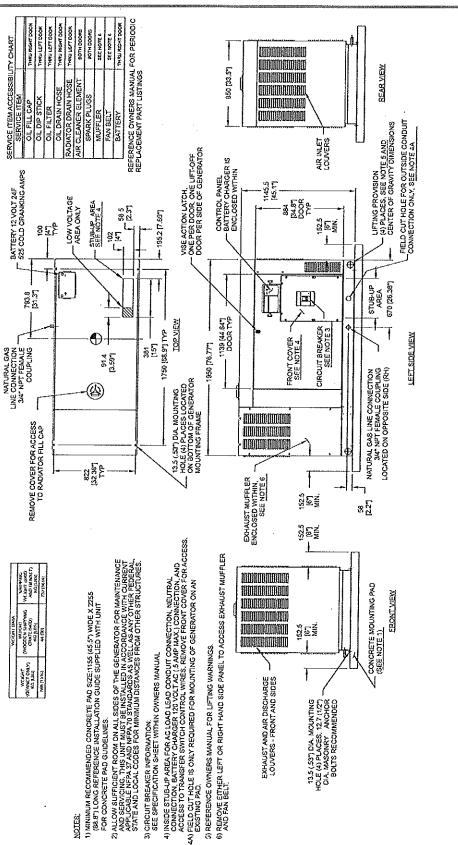
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NOTES.

GENERAC

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48 kW

SERVICE ITEM ACCESSIBILITY CHART

installation layout

GENERA

GENERAC

NOTES

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STATEMENT OF EXHAUST EMISSIONS 2015 SPARK-IGNITED, NON-SCAQMD

	Model	Engine	EPA Engine	Fuel	CAT	Comb Cat or	EPA		Grams/bhp-hi		Rated	BHP	Fuel Flow
	model	Ligine	Family	1 461	Req'd	Separate Cat	Cert #	THC	NOx	CO	RPM	DIII	(lb/hr)
	QTA25	2.4	FGNXB02.42NN	NG	No	NR	FGNXB02.42NN-005	2.14	2.37	93.95	1800	38.39	16.52
	QTA25	2.4	FGNXB02.42NL	LPG	No	NR	FGNXB02.42NL-006	1.43	4.38	86.18	1800	43.29	17.59
	SG035	5.4	FGNXB05.42NN	NG	No	NR	FGNXB05.42NN-009	<mark>1.60</mark>	<mark>2.52</mark>	95.32	<mark>1800</mark>	<mark>82.10</mark>	36.91
ŝ	SG035	5.4	FGNXB05.42NL	LPG	No	NR	FGNXB05.42NL-010	1.24	3.45	112.01	1800	82.30	34.60
SSIE (SORE)	SG040	5.4	FGNXB05.42NN	NG	No	NR	FGNXB05.42NN-009	1.60	2.52	95.32	1800	82.10	36.91
E (S	SG040	5.4	FGNXB05.42NL	LPG	No	NR	FGNXB05.42NL-010	1.24	3.45	112.01	1800	82.30	34.60
SSI	SG045	5.4	FGNXB05.42NN	NG	No	NR	FGNXB05.42NN-009	1.60	2.52	95.32	1800	82.10	36.91
'	SG045	5.4	FGNXB05.42NL	LPG	No	NR	FGNXB05.42NL-010	1.24	3.45	112.01	1800	82.30	34.60
ines	SG050	5.4 5.4	FGNXB05.42NN	NG LPG	No	NR	FGNXB05.42NN-009	1.60	2.52	95.32	1800	82.10	36.91
Small Spark Ignited Engines	SG050 SG050	5.4 6.8	FGNXB05.42NL FGNXB06.82NN	NG	No No	NR	FGNXB05.42NL-010 FGNXB06.82NN-011	1.24	3.45 6.57	112.01 30.88	1800 1800	82.30 84.90	34.60 37.17
ted	SG050 SG050	6.8	FGNXB06.82NL	LPG	No	NR	FGNXB06.82NL-012	1.46	2.67	172.30	1800	84.66	46.55
lgni	SG060	6.8	FGNXB06.82NN	NG	No	NR	FGNXB06.82NN-011	1.00	2.07	75.88	1800	96.67	38.76
ark	SG060	6.8	FGNXB06.82NL	LPG	No	NR	FGNXB06.82NL-012	1.47	4.23	99.05	1800	96.60	41.20
ll Sp	SG070	6.8	FGNXB06.82NN	NG	No	NR	FGNXB06.82NN-011	1.46	3.55	68.40	1800	109.72	42.37
Sma	SG070	6.8	FGNXB06.82NL	LPG	No	NR	FGNXB06.82NL-012	1.26	3.28	111.49	1800	118.41	51.86
0,	SG080	8.0	FGNXB08.02NN	NG	No	NR	FGNXB08.02NN-013	1.16	2.86	49.60	1800	127.61	44.02
	SG080 (DF)	8.0	FGNXB08.02NN	NG/LPV	No	NR	FGNXB08.02NN-013	0.85	4.24	27.29	1800	128.06	42.50
	SG080 (DF)	8.0	FGNXB08.02NN	NG/LPL	No	NR	FGNXB08.02NN-013	1.23	4.09	37.06	1800	127.90	42.60
	SG080	8.0	FGNXB08.02NL	LPV	No	NR	FGNXB08.02NL-014	0.95	2.24	86.43	1800	127.46	50.13
	SG080	8.0	FGNXB08.02NL	LPL	No	NR	FGNXB08.02NL-014	1.00	2.77	71.36	1800	128.09	46.61
	SG130 (DF)	6.8	FGNXB06.82C3	NG & LP	Yes	Cat Muff	FGNXB06.82C3-033	0.06	0.05	0.92	3000	193.49	72.31
	SG150 (DF)	6.8	FGNXB06.82C3	NG & LP	Yes	Cat Muff	FGNXB06.82C3-033	0.18	0.14	1.54	3600	231.00	91.34
	SG100	9.0	FGNXB08.92C1	NG	Yes	Cat Muff	FGNXB08.92C1-035	0.17	0.003	0.06	1800	148.90	46.86
	SG100 (DF)	9.0	FGNXB08.92C1	NG/LPV	Yes	Cat Muff	FGNXB08.92C1-035	0.30	0.400	0.79	1800	133.16	45.36
	SG100 (DF)	9.0	FGNXB08.92C1	NG/LPL	Yes	Cat Muff	FGNXB08.92C1-035	0.34	0.006	1.10	1800	135.75	45.47
	SG100	9.0	FGNXB08.92C2	LPG	Yes	Cat Muff	FGNXB08.92C2-036	0.03	0.08	0.13	1800	157.67	53.08
	SG100	9.0	FGNXB08.92C2	LPL	Yes	Cat Muff	FGNXB08.92C2-036	0.07	0.04	0.30	1800	156.15	54.47
	SG130,150	9.0	FGNXB08.92C3	NG	Yes	Cat Muff	FGNXB08.92C3-053	0.10	0.03	0.02	1800	230.30	71.97
	SG130,150 (DF)	9.0	FGNXB08.92C3	NG/LPV	Yes	Cat Muff	FGNXB08.92C3-053	0.10	0.03	0.02	1800	230.30	71.97
	SG130,150 (DF)	9.0	FGNXB08.92C3	NG/LPL	Yes	Cat Muff	FGNXB08.92C3-053	0.10	0.03	0.02	1800	230.30	71.97
	MG130,150	9.0	FGNXB08.92C3	NG	Yes	Cat Muff	FGNXB08.92C3-053	0.10	0.03	0.02	1800	230.30	71.97
	MG130,150 (DF)	9.0	FGNXB08.92C3	NG/LPV	Yes	Cat Muff	FGNXB08.92C3-053	0.10	0.03	0.02	1800	230.30	71.97
	MG130,150 (DF)	9.0	FGNXB08.92C3	NG/LPL	Yes	Cat Muff	FGNXB08.92C3-053	0.10	0.03	0.02	1800	230.30	71.97
ŝ	SG130, 150	9.0	FGNXB08.92C4	LPG	Yes	Cat Muff	FGNXB08.92C4-054	0.02	0.57	1.30	1800	230.30	75.43
LSII	SG130, 150	9.0	FGNXB08.92C4	LPL	Yes	Cat Muff	FGNXB08.92C4-054	0.02	0.57	1.30	1800	230.30	75.43
es (MG130,150	9.0	FGNXB08.92C4	LPG	Yes	Cat Muff	FGNXB08.92C4-054	0.02	0.57	1.30	1800	230.30	75.43
ngin	MG130,150 SG150	9.0	FGNXB08.92C4 FGNXB12.92C2	LPL NG	Yes	Cat Muff Cat Muff	FGNXB08.92C4-054 FGNXB12.92C2-042	0.02	0.57	1.30 0.53	1800 1800	230.30 307.87	75.43
Б	MG150	12.9 12.9	FGNXB12.92C2	NG	Yes Yes	Cat Mult Cat Muff	FGNXB12.92C2-042	0.53	0.13	0.53	1800	307.87	107.99
gnite	SG175	12.9	FGNXB12.92C2	NG	Yes	Cat Muff	FGNXB12.92C2-042	0.53	0.13	0.53	1800	307.87	107.99
oark Ignited Engines (LSIE)	SG200	12.9	FGNXB12.92C2	NG	Yes	Cat Muff	FGNXB12.92C2-042	0.53	0.13	0.53	1800	307.87	107.99
S	MG200	12.9	FGNXB12.92C2	NG	Yes	Cat Muff	FGNXB12.92C2-042	0.53	0.13	0.53	1800	307.87	107.99
Large	SG230	12.9	FGNXB12.92C2	NG	Yes	Cat Muff	FGNXB12.92C2-042	0.38	0.03	0.53	1800	379.10	125.30
La	SG250	12.9	FGNXB12.92C2	NG	Yes	Cat Muff	FGNXB12.92C2-042	0.38	0.03	0.53	1800	379.10	125.30
	MG250	12.9	FGNXB12.92C2	NG	Yes	Cat Muff	FGNXB12.92C2-042	0.38	0.03	0.53	1800	379.10	125.30
	SG275	12.9	FGNXB12.92C3	NG	Yes	Cat Muff	FGNXB12.92C3-043	0.06	0.06	0.81	2150	477.00	164.20
	SG300	12.9	FGNXB12.92C3	NG	Yes	Cat Muff	FGNXB12.92C3-043	0.06	0.06	0.81	2150	477.00	164.20
	MG300	12.9	FGNXB12.92C3	NG	Yes	Cat Muff	FGNXB12.92C3-043	0.06	0.06	0.81	2150	477.00	164.20
	SG150, 175, 200	14.2	FGNXB14.22C1	NG	Yes	Cat Muff	FGNXB14.22C1-047	0.06	0.05	0.39	1800	304.00	98.54
	MG150	14.2	FGNXB14.22C1	NG	Yes	Cat Muff	FGNXB14.22C1-047	0.06	0.05	0.39	1800	304.00	98.54
	MG200	14.2	FGNXB14.22C1	NG	Yes	Cat Muff	FGNXB14.22C1-047	0.06	0.05	0.39	1800	304.00	98.54
	SG230, 250	14.2	FGNXB14.22C1	NG	Yes	Cat Muff	FGNXB14.22C1-047	0.04	0.02	0.23	1800	374.00	120.84
	MG250	14.2	FGNXB14.22C1	NG	Yes	Cat Muff	FGNXB14.22C1-047	0.04	0.02	0.23	1800	374.00	120.84
	SG350	21.9	FGNXB21.92C1	NG	Yes	Cat Muff	FGNXB21.92C1-037	0.18	0.14	0.82	1800	636.00	201.17
	MG350	21.9	FGNXB21.92C1	NG	Yes	Cat Muff	FGNXB21.92C1-037	0.18	0.14	0.82	1800	636.00	201.17
	SG400	21.9	FGNXB21.92C1	NG	Yes	Cat Muff	FGNXB21.92C1-037	0.18	0.14	0.82	1800	636.00	201.17
	MG400	21.9	FGNXB21.92C1	NG	Yes	Cat Muff	FGNXB21.92C1-037	0.18	0.14	0.82	1800	636.00	201.17



STATEMENT OF EXHAUST EMISSIONS 2014 SPARK-IGNITED, NON-SCAQMD

2015 EPA SPARK-IGNITED EXHAUST EMISSIONS DATA

Effective since 2009, the EPA has implemented exhaust emissions regulations on stationary spark-ignited (gaseous) engine generators for emergency applications. All Generac spark-ignited gensets, including SG, MG, QTA and QT series gensets, that are built with engines manufactured in 2009 and later meet the requirements of 40CFR part 60 subpart JJJJ and are EPA certified. These generator sets are labeled as EPA Certified with decals affixed to the engines' valve covers.

The attached documents summarize the general information relevant to EPA certification on these generator sets. This information can be used for submittal data and for permitting purposes, if required. These documents include the following information:

EPA Engine Family

The EPA Engine Family is assigned by the Manufacturer under EPA guidelines for certification purposes and appears on the EPA certificate.

Catalyst Required

Indicates whether an exhaust catalyst and Air/Fuel Ratio control system are required on the generator set to meet EPA certification requirements. Generally, units rated 80kW and smaller do not require a catalyst to meet EPA certification requirements. Please note that some units that do not require a catalyst to meet EPA requirements do need a catalyst if the California SCAQMD option is selected. Please see "California SCAQMD" below for additional information on this option.

Combination Catalyst or Separate Catalyst

SG and MG series generator sets typically utilize a single combination catalyst/silencer as part of meeting EPA certification requirements. Many QT and QTA series generator sets use the same engines as SG and MG series units, but have different exhaust configurations that require the use of conventional silencers with additional separate catalysts installed.

EPA Certificate Number

Upon certification by the EPA, a Certificate Number is assigned by the EPA.

Emissions Actuals -Grams/bhp-hr

Actual exhaust emission data for Total Hydrocarbons (THC), Nitrogen Oxides (NOx) and Carbon Monoxide (CO) that were submitted to EPA and are official data of record for certification. This data can be used for permitting if necessary. Values are expressed in grams per brake horsepower-hour; to convert to grams/kW-hr, multiply by 1.341. Please see advisory notes below for further information.

California Units, SCAQMD CEP Number

A separate low-emissions option is available on many Generac gaseous-fueled generator sets to comply with the more stringent South Coast Air Quality Management District requirements that are recognized in certain areas in California. Gensets that include this option are also EPA Certified.

General Advisory Note to Dealers

The information provided here is proprietary to Generac and its' authorized dealers. This information may only be disseminated upon request, to regulatory governmental bodies for emissions permitting purposes or to specifying organizations as submittal data when expressly required by project specifications, and shall remain confidential and not open to public viewing. This information is not intended for compilation or sales purposes and may not be used as such, nor may it be reproduced without the expressed written permission of Generac Power Systems, Inc.

Advisory Notes on Emissions Actuals

• The stated values are actual exhaust emission test measurements obtained from units representative of the generator types and engines described.

- Values are official data of record as submitted to the EPA and SCAQMD for certification purposes. Testing was conducted in accordance with prevailing EPA protocols, which are typically accepted by SCAQMD and other regional authorities.
- No emission values provided are to be construed as guarantees of emissions levels for any given Generac generator unit.
- · Generac Power Systems reserves the right to revise this information without prior notice.
- · Consult state and local regulatory agencies for specific permitting requirements.
- The emissions performance data supplied by the equipment manufacturer is only one element required toward completion of the permitting and installation
 process. State and local regulations may vary on a case-by-case basis and must be consulted by the permit applicant/equipment owner prior to equipment
 purchase or installation. The data supplied herein by Generac Power Systems cannot be construed as a guarantee of installability of the generator set.
- The emission values provided are the result of multi-mode, weighted scale testing in accordance with EPA testing regulations, and may not be representative of any specific load point.
- . The emission values provided are not to be construed as emission limits.

SWHOULTED STATEGY ON HOLE	UNITED STATES ENV 2 CERTIF WITH TH	OFFICE OF TRANS AND AIR QU ANN ARBOR, MICI	ALITY			
Certificate Issued To: Gen (U.S. M Certificate Number: EGNX	Manufacturer or Importer)	Effectiv 11/21 Expiratio 12/31	2013 on Date:		er, Division Director nace Division	Issue Date: 11/21/2013 Revision Date: N/A
Manufacturer: Generac Pow	-					
Engine Family: EGNXB05.4						
Certificate Number: EGNX	B05.42NN-012					
Certification Type: Stationar	ry (Part 60)					
Fuel: Natural Gas (CNG/LN	G)					
Emission Standards : NMH						
HC + NOx (g/kW-hr)	: 13.4					
CO (g/kW-hr): 519						
Emergency Use Only : Y						
		1.00				

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.

PRO

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.

Attachment I

Emissions Calculations

Emergency Engine Potential Emissions Dominion Transmission, Inc. Weston G&P / Weston 24 Hr Field Office

Input Data:	Generac QT048		
Design Class:	4-stroke rich burn		
Engine Power:	82.1	hp	(Manufacturer Specs)
Rated Elctrical Output:	48	kW	(Manufacturer Specs)
Fuel Input:	0.77	MMBtu/hr	
Maximum Hours of Operation:	8,760	hrs/yr	
	500	hrs/yr	
Fuel Throughput:	756	cf/hr	(Manufacturer Specs - worst case)
	378,000	cf/yr	
Heating Value of Natural Gas:	1,020	Btu/cf	

Emission Calculations

Pollutant	Emission	Emission Factor		Emissions (8760 hrs/yr)			Emissions (500 hrs/yr)		
Pollutant	Emission	Factor	(lb/hr)	(lbs/day)	(tons/yr)	(lb/hr)	(lbs/day)	(tons/yr)	
Criteria Pollutants									
PM (filterable)	9.50E-03	lb/MMBtu	7.33E-03	0.18	0.03	7.33E-03	0.18	1.83E-03	
PM-10 (filterable)	9.50E-03	lb/MMBtu	7.33E-03	0.18	0.03	7.33E-03	0.18	1.83E-03	
PM-2.5 (filterable)	9.50E-03	lb/MMBtu	7.33E-03	0.18	0.03	7.33E-03	0.18	1.83E-03	
PM (condensibles)	9.91E-03	lb/MMBtu	7.64E-03	0.18	0.03	7.64E-03	0.18	1.91E-03	
SO2	5.88E-04	lb/MMBtu	4.53E-04	0.01	1.99E-03	4.53E-04	0.01	1.13E-04	
со	95.32	g/hp-hr	17.25	414.07	75.57	17.25	414.07	4.31	
NO _x	2.52	g/hp-hr	0.46	10.95	2.00	0.46	10.95	0.11	
voc	1.60	g/hp-hr	0.29	6.95	1.27	0.29	6.95	0.07	
Greenhouse Gases									
CO ₂	117.0	lb/MMBtu	90.20		395.09	90.20		22.55	
CH ₄	2.20E-03	lb/MMBtu	0.00		0.01	0.00		0.00	
N ₂ O	2.20E-04	lb/MMBtu	0.00		0.00	0.00		0.00	
CO ₂ e	117.1	lb/MMBtu	90.30		395.50	90.30		22.57	
Hazardous Air Pollutants									
1,1,2,2-Tetrachloroethane	2.53E-05	lb/MMBtu	1.95E-05		8.55E-05	1.95E-05		4.88E-06	
1,1,2-Trichloroethane	1.53E-05	lb/MMBtu	1.18E-05		5.17E-05	1.18E-05		2.95E-06	
1,1-Dichloroethane	1.13E-05	lb/MMBtu	8.71E-06		3.82E-05	8.71E-06		2.18E-06	
1,2-Dichloroethane	1.13E-05	lb/MMBtu	8.71E-06		3.82E-05	8.71E-06		2.18E-06	
1,2-Dichloropropane	1.30E-05	lb/MMBtu	1.00E-05		4.39E-05	1.00E-05		2.51E-06	
1,3-Butadiene	6.63E-04	lb/MMBtu	5.11E-04		2.24E-03	5.11E-04		1.28E-04	
1,3-Dichloropropene	1.27E-05	lb/MMBtu	9.79E-06		4.29E-05	9.79E-06		2.45E-06	
Acrolein	2.63E-03	lb/MMBtu	2.03E-03		8.88E-03	2.03E-03		5.07E-04	
Acetaldehyde	2.79E-03	lb/MMBtu	2.15E-03		9.42E-03	2.15E-03		5.38E-04	
Benzene	1.58E-03	lb/MMBtu	1.22E-03		5.34E-03	1.22E-03		3.05E-04	
Butr/isobutyraldehyde	4.86E-05	lb/MMBtu	3.75E-05		1.64E-04	3.75E-05		9.37E-06	
Carbon Tetrachloride	1.77E-05	lb/MMBtu	1.36E-05		5.98E-05	1.36E-05		3.41E-06	
Chlorobenzene	1.29E-05	lb/MMBtu	9.95E-06		4.36E-05	9.95E-06		2.49E-06	
Chloroform	1.37E-05	lb/MMBtu	1.06E-05		4.63E-05	1.06E-05		2.64E-06	
Ethane	7.04E-02	lb/MMBtu	5.43E-02		2.38E-01	5.43E-02		1.36E-02	
Ethylbenzene	2.48E-05	lb/MMBtu	1.91E-05		8.38E-05	1.91E-05		4.78E-06	
Ethylene Dibromide	2.13E-05	lb/MMBtu	1.64E-05		7.19E-05	1.64E-05		4.11E-06	
Formaldehyde	2.05E-02	lb/MMBtu	1.58E-02		6.92E-02	1.58E-02		3.95E-03	
Methanol	3.06E-03	lb/MMBtu	2.36E-03		1.03E-02	2.36E-03		5.90E-04	
Methylene Chloride	4.12E-05	lb/MMBtu	3.18E-05		1.39E-04	3.18E-05		7.94E-06	
Naphthalene (POM)	9.71E-05	lb/MMBtu	7.49E-05		3.28E-04	7.49E-05		1.87E-05	
РАН	1.41E-04	lb/MMBtu	1.09E-04		4.76E-04	1.09E-04		2.72E-05	
Styrene	1.19E-05	lb/MMBtu	9.18E-06		4.02E-05	9.18E-06		2.29E-06	
Toluene	5.58E-04	lb/MMBtu	4.30E-04		1.88E-03	4.30E-04		1.08E-04	
Vinyl Chloride	7.18E-06	lb/MMBtu	5.54E-06		2.43E-05	5.54E-06		1.38E-06	
Xylene	1.95E-04	lb/MMBtu	1.50E-04		6.59E-04	1.50E-04		3.76E-05	
TOTAL HAP:			0.08		0.35	0.08		0.02	

(1) Lb/MMBtu emission factors from AP-42, Section 3.2, Natural Gas-Fired Reciprocating Engines, Table 3.2-3, 7/00

(2) G/hp-hr emission factors from manufacturer specification sheet.

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

For example: CO₂ = (53.06 kg CO₂/MMBtu) / (0.453592 kg/lb) = 117.0 lb/MMBtu

(4) Global Warming Potentials = 25 for CH_4 and 298 for N_2O (per 40 CFR Part 98 Table A-1 to Subpart A)

For example: CO₂e = (117.0 lb/MMBtu) + (0.0022 lb/MMBtu * 25) + (0.00022 lb/MMBtu * 298) = 117.1 lb/MMBtu

Attachment J

Class I Legal Advertisement

AIR QUALITY PERMIT NOTICE

Notice of Application

Notice is given that Dominion Transmission, Inc. has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a Class II General Permit (G60-C) for the Weston G&P / Weston 24 hr. Field Office located on Valley Chapel Road, Weston, in Lewis County, West Virginia. The latitude and longitude coordinates are:

Latitude: 39.10824 Longitude: -80.49560

The applicant estimates the increased potential to discharge the following Regulated Air Pollutants will be:

CO	+ 4.31 tons/yr
NOx	+ 0.11 tons/yr
VOC	+ 0.07 tons/yr

Startup of operation is planned to begin on or about October 2015. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57th Street, SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice.

Any questions regarding this permit application should be directed to the DAQ at (304) 926-0499, extension 1250, during normal business hours. Dated this the (Day) day of (Month), (Year).

By: Dominion Transmission, Inc. Brian Sheppard VP of Pipeline Operations 445 West Main Street Clarksburg, WV 26301

Attachment L

General Permit Registration Application Fee