## Oregon Windfarms, LLC

PEOCIVED

3145 Geary Blvd., #723 San Francisco, CA 94118

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VIA US MAIL

June 15, 2015

Filing Center Oregon Public Utilities Commission PO Box 2148 Salem, OR 97308-2148

Subject:

QF Self Certification of Benson Creek Windfarm, LLC

QF Self Certification of Durbin Creek Windfarm, LLC QF Self Certification of Jett Creek Windfarm, LLC QF Self Certification of Prospector Windfarm, LLC

Dear Sir/Madam:

On behalf of Benson Creek Windfarm, LLC, Durbin Creek Windfarm, LLC, Jett Creek Windfarm, LLC and Prospector Windfarm, LLC, QF certificates for the above-named qualifying facilities are enclosed for submittal to the Oregon Public Utilities Commission in accordance with the regulations of the Federal Energy Regulatory Commission.

Respectfully,

Oregon Windfarms, LLC

Mar & Mill

Maurice Miller Manager

## FEDERAL ENERGY REGULATORY COMMISSION WASHINGTON, DC

OMB Control # 1902-0075 Expiration 5/31/2013

Form 556 Certification of Qualifying Facility (QF) Status for a Small Power Production or Cogeneration Facility

1b Applicant street c/o Keating A Two Waterview			
1c City		1d State/provi	ince
West Chester		PA	
1e Postal code 19380	1f Country (if not United States)		<b>1g</b> Telephone number 610 235-2580
1h Has the instant fa	cility ever previously been certified as a Q	F? Yes ⊠ N	No []
1i If yes, provide the	docket number of the last known QF filing	g pertaining to th	his facility: QF12 - 181 - 000
1i Under which cert	fication process is the applicant making th	nis filing?	
Notice of self-c		-	ommission certification (requires filing e" section on page 3)
QF status. A not notice of self-ce	elf-certification is a notice by the applicant ice of self-certification does not establish a tification to verify compliance. See the "W 3 for more information.	proceeding, an	d the Commission does not review a
1k What type(s) of C	F status is the applicant seeking for its fac	ility? (check all th	nat apply)
🔀 Qualifying sma	ll power production facility status 🔲 🔾	ualifying cogene	eration facility status
11 What is the purpo	se and expected effective date(s) of this fi	ling?	
Original certific	ation; facility expected to be installed by	<u> </u>	nd to begin operation on
	previously certified facility to be effective	-	
	s) of change(s) below, and describe change	e(s) in the Miscel	laneous section starting on page 19)
	ge and/or other administrative change(s)		
☐ Change in c			
	ffecting plant equipment, fuel use, power	. ,	acity and/or cogeneration thermal outpu
5-m-*	correction to a previous filing submitted o		
	pplement or correction in the Miscellaneo		
	owing three statements is true, check the k sible, explaining any special circumstance		
└ previously gr	icility complies with the Commission's QF anted by the Commission in an order date Miscellaneous section starting on page 19	d	virtue of a waiver of certain regulations (specify any other relevant waiver
	cility would comply with the Commission with this application is granted	's QF requiremer	nts if a petition for waiver submitted
employment	cility complies with the Commission's reg of unique or innovative technologies not ration of compliance via this form difficult	contemplated by	y the structure of this form, that make

	<b>2a</b> Name of contact person Robert Jans			<b>2b</b> Telephone number 610 235–2580	
	2c Which of the following describes	the contact person's relat	ionship to the app	plicant? (check one)	
		•		zed to represent the applicant	İ
on	Employee of a company affiliat				
ati	Lawyer, consultant, or other re	• •	-	• •	
Ē	2d Company or organization name				
ıfο	Oregon International Holdi		,		
Contact Information	<b>2e</b> Street address (if same as Applica	ant, check here and skip to	o line 3a) 🔀		
ပိ	2f City		2g State/provi	ince	
	2h Postal code	2i Country (if not United	States)		
	3a Facility name				
on	Benson Creek Windfarm				
ocati	<b>3b</b> Street address (if a street address	does not exist for the fac	ility, ch <b>e</b> ck here a	nd ski <b>p</b> to line 3c)⊠	Ü
дp	·				
ility Identification and Location	then you must specify the latitude the following formula to convert degrees + (minutes/60) + (secon provided a street address for you	le and longitude coordina to decimal degrees from ds/3600). See the "Geog	ites of the facility degrees, minutes raphic Coordinate	our facility by checking the box in line 3b, in degrees (to three decimal places). Use and seconds: decimal degrees = es" section on page 4 for help. If you graphic coordinates below is optional.	and the state of t
len	Longitude East (+) 117	•344 degrees	Latitude	North (+)	
P/	3d City (if unincorporated, check he	re and enter nearest city)	3e State/pi	hand	
lit	Huntington	ŕ	OR		
Faci	3f County (or check here for indepe	ndent city) 3	g Country (if not	United States)	
	Identify the electric utilities that are o	ontemplated to transact	with the facility.		
ties	4a Identify utility interconnecting w Idaho Power Company	ith the facility			
Transacting Utilities	4b Identify utilities providing wheel	ing service or check here	if none 🛛		
tine	<b>4c</b> Identify utilities purchasing the u	seful electric power outp	ut or check here if	f none	
Sac	Idaho Power Company	, , , , , ,		hammed	
Tran	4d Identify utilities providing supple service or check here if none	ementary power, backup p	oower, maintenar	nce power, and/or interruptible power	J
	Idaho Power Company				

	Direct ownership as of effective date or operation date: Identify all direct owners of the percent equity interest. For each identified owner, also (1) indicate whether that owned defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or a holding compart 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)), and (2) utilities or holding companies, provide the percentage of equity interest in the facility direct owners hold at least 10 percent equity interest in the facility, then provide the retwo direct owners with the largest equity interest in the facility.	er is an electric ut pany, as defined for owners which held by that own	ility, as in section in are electric ner. If no
	,	Electric utility o	
		holding	% equity
	Full legal names of direct owners	company	interest
	1) Oregon International Holdings, LLC	Yes 🗌 No 🛭	g
	2)	Yes No	3%
	3)	Yes No	§
	4)	Yes No	J
	5)	Yes No	<u> </u>
	6)	Yes No	3
	7)	Yes No	38
ت	8)	Yes No	
Operation	9)	Yes No	*
۶ra	10)	Yes No	] <sup>8</sup>
ğ	Check here and continue in the Miscellaneous section starting on page 19 if additional continues.	tional space is ne	eded
Ownership and	of the facility that both (1) hold at least 10 percent equity interest in the facility, and (2 defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or holding compa 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)). Also p equity interest in the facility held by such owners. (Note that, because upstream owners another, total percent equity interest reported may exceed 100 percent.)	anies, as defined rovide the perce	in section ntage of
ð	Check here if no such upstream owners exist. 🔀		94 aquita
	Full legal names of electric utility or holding company upstream owne	rs	% equity interest
	1)		
	2)	NAME OF TAXABLE PARTY.	8
	3)		90
	4)		9
	5)		8
	6)		8
	7)		8
	8)		8
	9)		8
	10)		ક
	Check here and continue in the Miscellaneous section starting on page 19 if additi	ional space is nee	eded
	5c Identify the facility operator		
	Benson Creek Windfarm, LLC		, , reparet

	6a	Describe t	he primary energy input: (ch	eck one ma	ain c	ategory and, if app	licable, o	ne subcategory)	
		Biomas	ss (specify)	⊠R	enev	wable resources (sp	ecify)	Geothermal	
		☐ ſ	_andfill gas			Hydro power - rive	er	Fossil fuel (spec	ify)
		□ M	Manure digester gas			Hydro power - tida	al	Coal (not	waste)
		□ M	Municipal solid waste			Hydro power - wa	ve	☐ Fuel oil/d	iesel
			Sewage digester gas			Solar - photovolta	ic	☐ Natural g	as (not waste)
		□ <i>\</i>	Wood			Solar - thermal		Other fos	
			Other biomass (describe on p	page 19)		Wind		— (describe	on page 19)
		☐ Waste	(specify type below in line 6	b)		Other renewable r (describe on page		Other (describe	on page 19)
	6b	If you spec	cified "waste" as the primary	energy inp	ut ir	line 6a, indicate tl	ne type of	f waste fuel used: (che	eck one)
		☐ Wast	e fuel listed in 18 C.F.R. § 292	2,202(b) (sp	ecify	one of the follow	ing)		
			Anthracite culm produced	prior to Jul	y 23,	, 1985			
			Anthracite refuse that has a ash content of 45 percent of		heat	content of 6,000 E	Stu or less	per pound and has a	n average
			Bituminous coal refuse that average ash content of 25		_		,500 Btu բ	per pound or less and	has an
nput			Top or bottom subbitumin determined to be waste by (BLM) or that is located on the applicant shows that the	the United	l Sta al or	tes Department of non-Indian lands o	the Interioutside of	or's Bureau of Land M BLM's jurisdiction, pr	anagement ovided that
Energy Input			Coal refuse produced on Fe BLM or that is located on n applicant shows that the la	on- Federal	l or r	non-Indian lands or	utside of E	BLM's jurisdiction, pro	
ш			Lignite produced in associa as a result of such a mining		he p	roduction of mont	an wax ar	nd lignite that becom	es exposed
		☐ Gaseous fuels (except natural gas and synthetic gas from coal) (describe on page 19)							
			Waste natural gas from gas C.F.R. § 2.400 for waste nat compliance with 18 C.F.R. §	ural gas; in					
			Materials that a governmen	nt agency h	as c	ertified for disposa	l by comb	oustion (describe on p	oage 19)
			Heat from exothermic reac	tions (desc	ribe	on page 19)	□ R	esidual heat (describe	e on page 19)
			Used rubber tires	] Plastic m	ateri	als 🗌 Re	finery off	-gas 🗌 Petr	oleum coke
		facili	er waste energy input that hat ty industry (describe in the N of commercial value and exi	Miscellaneo	us s	ection starting on p	oage 19; i	nclude a discussion o	
	6с	energy inp	e average energy input, calc outs, and provide the related ). For any oil or natural gas f	percentag	je of	the total average a	annual en	ergy input to the facil	
			Fuel			l average energy or specified fuel		Percentage of total	
			Natural gas				Btu/h	0 %	]
			Oil-based fuels				Btu/h	0 %	
			Coal			7-7-2	Btu/h	0 %	
	<u> </u>								1

Indicate the maximum gross and maximum net electric power production capacity of the facility at the point(s) of delivery by completing the worksheet below. Respond to all items. If any of the parasitic loads and/or losses identified in lines 7b through 7e are negligible, enter zero for those lines.

<b>7a</b> The maximum gross power production capacity at the terminals of the individual generator(s) under the most favorable anticipated design conditions	10,000	kW
7b Parasitic station power used at the facility to run equipment which is necessary and integral to the power production process (boiler feed pumps, fans/blowers, office or maintenance buildings directly related to the operation of the power generating facility, etc.). If this facility includes non-power production processes (for instance, power consumed by a cogeneration facility's thermal host), do not include any power consumed by the non-power production activities in your reported parasitic station power.	1.0	LAN.
To Floatistal bases in interescent action to the form of	7.0	KYV
7c Electrical losses in interconnection transformers	111 6	LAM
	111.6	KVV
7d Electrical losses in AC/DC conversion equipment, if any		Lasi
	0	kW
<b>7e</b> Other interconnection losses in power lines or facilities (other than transformers and AC/DC conversion equipment) between the terminals of the generator(s) and the point of interconnection		
with the utility	182.1	kW
7f Total deductions from gross power production capacity = 7b + 7c + 7d + 7e		
71 Total deductions from gross power production capacity = 72 + 72 + 72	303.7	kW
7g Maximum net power production capacity = 7a - 7f		
J Mazamam not post at production capacity	9,696.3	k٧
· · · · · · · · · · · · · · · · · · ·		

7h Description of facility and primary components: Describe the facility and its operation. Identify all boilers, heat recovery steam generators, prime movers (any mechanical equipment driving an electric generator), electrical generators, photovoltaic solar equipment, fuel cell equipment and/or other primary power generation equipment used in the facility. Descriptions of components should include (as applicable) specifications of the nominal capacities for mechanical output, electrical output, or steam generation of the identified equipment. For each piece of equipment identified, clearly indicate how many pieces of that type of equipment are included in the plant, and which components are normally operating or normally in standby mode. Provide a description of how the components operate as a system. Applicants for cogeneration facilities do not need to describe operations of systems that are clearly depicted on and easily understandable from a cogeneration facility's attached mass and heat balance diagram; however, such applicants should provide any necessary description needed to understand the sequential operation of the facility depicted in their mass and heat balance diagram. If additional space is needed, continue in the Miscellaneous section starting on page 19.

The wind-powered facility will consist of 4, 5 or 6 wind turbines with a combined nameplate rated capacity of 10 MW on monopole towers with concrete foundations.

Interconnection Facilities: The facility includes under or above ground feeders at 34.5 kV site voltage transformed to transmission voltage of 69 kV at an onsite substation jointly owned and shared on a prorated capacity basis with an unaffiliated QF. The project will then be interconnected to Idaho Power Company's system using a 69 kV interconnection line jointly owned and shared on a prorated capacity basis with the unaffiliated QF. The project also anticipates there being a related shared facilities agreement. The interconnection facilities are included in the self-certified QF.



## Information Required for Small Power Production Facility

If you indicated in line 1k that you are seeking qualifying small power production facility status for your facility, then you must respond to the items on this page. Otherwise, skip page 10.

	Pursuant to 18 C.F.R. § 292.204(a), the with the power production capacity resource, are owned by the same per megawatts. To demonstrate complifrom this size limitation under the Sci (Pub. L. 101-575, 104 Stat. 2834 (1990) through 8e below (as applicable).	of any other small pow rson(s) or its affiliates, a ance with this size limit olar, Wind, Waste, and C O) as amended by Pub. L	er production facilities that use nd are located at the same site, ation, or to demonstrate that yo leothermal Power Production Ir 102-46, 105 Stat. 249 (1991)), r	the same energy may not exceed 80 our facility is exempt ncentives Act of 1990 respond to lines 8a
	8a Identify any facilities with electri equipment of the instant facility, and at least a 5 percent equity interest.	d for which any of the e		
JCe	Check here if no such facilities exist.	$\boxtimes$		
Certification of Compliance with Size Limitations	Facility location (city or county, state)	Root docket # (if any)	Common owner(s)	Maximum net power production capacity
om itati	1)	QF		kW
of C im	2)	QF		kW
in Sel	3)	QF		kW
itio Siz	Check here and continue in the	Miscellaneous section	starting on page 19 if additiona	space is needed
Cert	exemption from the size limitations. Are you seeking exemption from the  Yes (continue at line 8c below  8c Was the original notice of self-ce before December 31, 1994? Yes	e size limitations in 18 Coow) ertification or applicatio	.F.R. § 292.204(a) by virtue of th  No (skip lines 8c through 8c n for Commission certification c	e Incentives Act? e)
	8d Did construction of the facility of	ommence on or before	December 31, 1999? Yes	No _
	<b>8e</b> If you answered No in line 8d, in the facility, taking into account all fa a brief narrative explanation in the N particular, describe why construction toward completion of the facility.	ctors relevant to constr liscellaneous section st	uction? Yes  No file if you arting on page 19 of the constru	u answered Yes, provide uction timeline (in
Certification of Compliance with Fuel Use Requirements	Pursuant to 18 C.F.R. § 292.204(b), quamounts, for only the following purp prevention of unanticipated equipm the public health, safety, or welfare, used for these purposes may not exception beginning with the date the form	poses: Ignition; start-up ent outages; and allevi which would result fror eed 25 percent of the t	e; testing; flame stabilization; col ation or prevention of emergen n electric power outages. The a cotal energy input of the facility	ntrol use; alleviation or cies, directly affecting imount of fossil fuels during the 12-month
e Re	9a Certification of compliance with	18 C.F.R. § 292.204(b) v	ith respect to uses of fossil fuel	
ion c Use		acility will use fossil fuel	s exclusively for the purposes lis	ted above.
cat	9b Certification of compliance with	18 C.F.R. § 292.204(b) v	vith respect to amount of fossil (	fuel used annually:
Certifi with Fu	egate, exceed 25 ing with the date the			

## Information Required for Cogeneration Facility

If you indicated in line 1k that you are seeking qualifying cogeneration facility status for your facility, then you must respond to the items on pages 11 through 13. Otherwise, skip pages 11 through 13.

	energy (such as heat or suse of energy. Pursuant cycle cogeneration facilithermal application or possible 292.205(a); or (2) for a boapplication or process for a What type(s) of cog	22.202(c), a cogeneration facility produces electric energy and forms of useful thermal team) used for industrial, commercial, heating, or cooling purposes, through the sequential to 18 C.F.R. § 292.202(s), "sequential use" of energy means the following: (1) for a toppingty, the use of reject heat from a power production process in sufficient amounts in a rocess to conform to the requirements of the operating standard contained in 18 C.F.R. § obtoming-cycle cogeneration facility, the use of at least some reject heat from a thermal or power production.  The energy means the facility represent? (check all that apply)  Example 1. Sequential that apply 1. Sequential that apply 2. Sequential 2. Sequential 2. Sequential 3. Seq
	other requirements balance diagram de meet certain requir	te the sequential operation of the cogeneration process, and to support compliance with such as the operating and efficiency standards, include with your filing a mass and heat epicting average annual operating conditions. This diagram must include certain items and ements, as described below. You must check next to the description of each requirement it you have complied with these requirements.
	Check to certify	
	compliance with indicated requirement	Requirement
ration n		Diagram must show orientation within system piping and/or ducts of all prime movers, heat recovery steam generators, boilers, electric generators, and condensers (as applicable), as well as any other primary equipment relevant to the cogeneration process.
gene		Any average annual values required to be reported in lines 10b, 12a, 13a, 13b, 13d, 13f, 14a, 15b, 15d and/or 15f must be computed over the anticipated hours of operation.
General Cogeneration Information		Diagram must specify all fuel inputs by fuel type and average annual rate in Btu/h. Fuel for supplementary firing should be specified separately and clearly labeled. All specifications of fuel inputs should use lower heating values.
en(	7	Diagram must specify average gross electric output in kW or MW for each generator.
· U		Diagram must specify average mechanical output (that is, any mechanical energy taken off of the shaft of the prime movers for purposes not directly related to electric power generation) in horsepower, if any. Typically, a cogeneration facility has no mechanical output.
		At each point for which working fluid flow conditions are required to be specified (see below), such flow condition data must include mass flow rate (in lb/h or kg/s), temperature (in °F, R, °C or K), absolute pressure (in psia or kPa) and enthalpy (in Btu/lb or kJ/kg). Exception: For systems where the working fluid is <i>liquid only</i> (no vapor at any point in the cycle) and where the type of liquid and specific heat of that liquid are clearly indicated on the diagram or in the Miscellaneous section starting on page 19, only mass flow rate and temperature (not pressure and enthalpy) need be specified. For reference, specific heat at standard conditions for pure liquid water is approximately 1.002 Btu/(lb*R) or 4.195 kJ/(kg*K).
		Diagram must specify working fluid flow conditions at input to and output from each steam turbine or other expansion turbine or back-pressure turbine.
		Diagram must specify working fluid flow conditions at delivery to and return from each thermal application.
	Contraction of the Contraction o	Diagram must specify working fluid flow conditions at make-up water inputs.

	EPAct 2005 cogeneration facilities: The Energy Policy Act of 2005 (EPAct 2005) established a new section 210(n) of the Public Utility Regulatory Policies Act of 1978 (PURPA), 16 USC 824a-3(n), with additional requirements for any qualifying cogeneration facility that (1) is seeking to sell electric energy pursuant to section 210 of PURPA and (2) was either not a cogeneration facility on August 8, 2005, or had not filed a self-certification or application for Commission certification of QF status on or before February 1, 2006. These requirements were implemented by the Commission in 18 C.F.R. § 292.205(d). Complete the lines below, carefully following the instructions, to demonstrate whether these additional requirements apply to your cogeneration facility and, if so, whether your facility complies with such requirements.	
	11a Was your facility operating as a qualifying cogeneration facility on or before August 8, 2005? Yes No	
	<b>11b</b> Was the initial filing seeking certification of your facility (whether a notice of self-certification or an application for Commission certification) filed on or before February 1, 2006? Yes No	Ū
a v	If the answer to either line 11a or 11b is Yes, then continue at line 11c below. Otherwise, if the answers to both lines 11a and 11b are No, skip to line 11e below.	
ntal Us acilitie	11c With respect to the design and operation of the facility, have any changes been implemented on or after February 2, 2006 that affect general plant operation, affect use of thermal output, and/or increase net power production capacity from the plant's capacity on February 1, 2006?	٥
n Fá	Yes (continue at line 11d below)	
Fundal Ieratio	No. Your facility is not subject to the requirements of 18 C.F.R. § 292.205(d) at this time. However, it may be subject to to these requirements in the future if changes are made to the facility. At such time, the applicant would need to recertify the facility to determine eligibility. Skip lines 11d through 11j.	
for oger	11d Does the applicant contend that the changes identified in line 11c are not so significant as to make the facility a "new" cogeneration facility that would be subject to the 18 C.F.R. § 292.205(d) cogeneration requirements?	
ement from C	Yes. Provide in the Miscellaneous section starting on page 19 a description of any relevant changes made to the facility (including the purpose of the changes) and a discussion of why the facility should not be considered a "new" cogeneration facility in light of these changes. Skip lines 11e through 11j.	
PAct 2005 Requirements for Fundamental Use of Energy Output from Cogeneration Facilities	No. Applicant stipulates to the fact that it is a "new" cogeneration facility (for purposes of determining the applicability of the requirements of 18 C.F.R. § 292.205(d)) by virtue of modifications to the facility that were initiated on or after February 2, 2006. Continue below at line 11e.	
05 I 3 O	11e Will electric energy from the facility be sold pursuant to section 210 of PURPA?	
t 20 nerg	Yes. The facility is an EPAct 2005 cogeneration facility. You must demonstrate compliance with 18 C.F.R. § 292.205(d)(2) by continuing at line 11f below.	
EPAc of E	No. Applicant certifies that energy will <i>not</i> be sold pursuant to section 210 of PURPA. Applicant also certifies its understanding that it must recertify its facility in order to determine compliance with the requirements of 18 C.F.R. § 292.205(d) <i>before</i> selling energy pursuant to section 210 of PURPA in the future. Skip lines 11f through 11j.	
	11f Is the net power production capacity of your cogeneration facility, as indicated in line 7g above, less than or equal to 5,000 kW?	<b>U</b>
	Yes, the net power production capacity is less than or equal to 5,000 kW. 18 C.F.R. § 292.205(d)(4) provides a rebuttable presumption that cogeneration facilities of 5,000 kW and smaller capacity comply with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2). Applicant certifies its understanding that, should the power production capacity of the facility increase above 5,000 kW, then the facility must be recertified to (among other things) demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Skip lines 11g through 11j.	
THE COLUMN TO SERVICE AND ADDRESS OF THE COLUMN	No, the net power production capacity is greater than 5,000 kW. Demonstrate compliance with the requirements for fundamental use of the facility's energy output in 18 C.F.R. § 292.205(d)(2) by continuing on the next page at line 11g.	

# EPAct 2005 Requirements for Fundamental Use of Energy Output from Cogeneration Facilities (continued)

Lines 11g through 11k below guide the applicant through the process of demonstrating compliance with the requirements for "fundamental use" of the facility's energy output. 18 C.F.R. § 292.205(d)(2). Only respond to the lines on this page if the instructions on the previous page direct you to do so. Otherwise, skip this page.

18 C.F.R. § 292.205(d)(2) requires that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility. If you were directed on the previous page to respond to the items on this page, then your facility is an EPAct 2005 cogeneration facility that is subject to this "fundamental use" requirement.

The Commission's regulations provide a two-pronged approach to demonstrating compliance with the requirements for fundamental use of the facility's energy output. First, the Commission has established in 18 C.F.R. § 292.205(d)(3) a "fundamental use test" that can be used to demonstrate compliance with 18 C.F.R. § 292.205(d)(2). Under the fundamental use test, a facility is considered to comply with 18 C.F.R. § 292.205(d)(2) if at least 50 percent of the facility's total annual energy output (including electrical, thermal, chemical and mechanical energy output) is used for industrial, commercial, residential or institutional purposes.

Second, an applicant for a facility that does not pass the fundamental use test may provide a narrative explanation of and support for its contention that the facility nonetheless meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a qualifying facility to its host facility.

Complete lines 11g through 11j below to determine compliance with the fundamental use test in 18 C.F.R. § 292.205(d)(3). Complete lines 11g through 11j even if you do not intend to rely upon the fundamental use test to demonstrate compliance with 18 C.F.R. § 292.205(d)(2).

11g Amount of electrical, thermal, chemical and mechanical energy output (net of internal generation plant losses and parasitic loads) expected to be used annually for industrial,	
commercial, residential or institutional purposes and not sold to an electric utility	MWh
<b>11h</b> Total amount of electrical, thermal, chemical and mechanical energy expected to be sold to an electric utility	MWh
11i Percentage of total annual energy output expected to be used for industrial, commercial, residential or institutional purposes and not sold to a utility = 100 * 11g /(11g + 11h)	0 %

11i Is the response in line 11i greater than or equal to 50 percent?

Yes. Your facility complies with 18 C.F.R. § 292.205(d)(2) by virtue of passing the fundamental use test provided in 18 C.F.R. § 292.205(d)(3). Applicant certifies its understanding that, if it is to rely upon passing the fundamental use test as a basis for complying with 18 C.F.R. § 292.205(d)(2), then the facility must comply with the fundamental use test both in the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years.

No. Your facility does not pass the fundamental use test. Instead, you must provide in the Miscellaneous section starting on page 19 a narrative explanation of and support for why your facility meets the requirement that the electrical, thermal, chemical and mechanical output of an EPAct 2005 cogeneration facility is used fundamentally for industrial, commercial, residential or institutional purposes and is not intended fundamentally for sale to an electric utility, taking into account technological, efficiency, economic, and variable thermal energy requirements, as well as state laws applicable to sales of electric energy from a QF to its host facility. Applicants providing a narrative explanation of why their facility should be found to comply with 18 C.F.R. § 292.205(d)(2) in spite of non-compliance with the fundamental use test may want to review paragraphs 47 through 61 of Order No. 671 (accessible from the Commission's QF website at www.ferc.gov/QF), which provide discussion of the facts and circumstances that may support their explanation. Applicant should also note that the percentage reported above will establish the standard that that facility must comply with, both for the 12-month period beginning with the date the facility first produces electric energy, and in all subsequent calendar years. See Order No. 671 at paragraph 51. As such, the applicant should make sure that it reports appropriate values on lines 11g and 11h above to serve as the

relevant annual standard, taking into account expected variations in production conditions.

## the items on pages 14 and 15. Otherwise, skip pages 14 and 15.

Information Required for Topping-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents topping-cycle cogeneration technology, then you must respond to

The thermal energy output of a topping-cycle cogeneration facility is the net energy made available to an industrial or commercial process or used in a heating or cooling application. Pursuant to sections 292.202(c), (d) and (h) of the Commission's regulations (18 C.F.R. §§ 292.202(c), (d) and (h)), the thermal energy output of a qualifying toppingcycle cogeneration facility must be useful. In connection with this requirement, describe the thermal output of the topping-cycle cogeneration facility by responding to lines 12a and 12b below.

Btu/h

12a Identify and describe each thermal host, and specify the annual average rate of thermal output made available to each host for each use. For hosts with multiple uses of thermal output, provide the data for each use in separate rows. Average annual rate of thermal output attributable to use (net of Name of entity (thermal host) Thermal host's relationship to facility; heat contained in process taking thermal output Thermal host's use of thermal output return or make-up water) Select thermal host's relationship to facility 1) Select thermal host's use of thermal output Btu/h Select thermal host's relationship to facility 2) Select thermal host's use of thermal output Btu/h Select thermal host's relationship to facility 3) Select thermal host's use of thermal output Btu/h Select thermal host's relationship to facility 4) Select thermal host's use of thermal output Btu/h Select thermal host's relationship to facility 5) Select thermal host's use of thermal output Btu/h Select thermal host's relationship to facility 6)

Select thermal host's use of thermal output Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed

12b Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each use of the thermal output identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's use of thermal output is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific use of thermal output related to the instant facility, then you need only provide a brief description of that use and a reference by date and docket number to the order certifying your facility with the indicated use. Such exemption may not be used if any change creates a material deviation from the previously authorized use.) If additional space is needed, continue in the Miscellaneous section starting on page 19.

Usefulness of Topping-Cycle **Thermal Output** 

## Topping-Cycle Operating and Efficiency Value Calculation

If you indicated in line 10a that your facility represents *both* topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 13a through 13l below considering only the energy inputs and outputs attributable to the topping-cycle portion of your facility. Your mass and heat balance diagram must make clear which mass and energy flow values and system components are for which portion (topping or bottoming) of the cogeneration system.

cogeneration system.	
13a Indicate the annual average rate of useful thermal energy output made availab	le
to the host(s), net of any heat contained in condensate return or make-up water	Btu/h
13b Indicate the annual average rate of net electrical energy output	
	kW
13c Multiply line 13b by 3,412 to convert from kW to Btu/h	
	0 Btu/h
13d Indicate the annual average rate of mechanical energy output taken directly of	f
of the shaft of a prime mover for purposes not directly related to power production	
(this value is usually zero)	hp
13e Multiply line 13d by 2,544 to convert from hp to Btu/h	
	0 Btu/h
13f Indicate the annual average rate of energy input from natural gas and oil	
	Btu/h
<b>13g</b> Topping-cycle operating value = 100 * 13a / (13a + 13c + 13e)	
	0 %
<b>13h</b> Topping-cycle efficiency value = $100 * (0.5*13a + 13c + 13e) / 13f$	
	0 %
13i Compliance with operating standard: Is the operating value shown in line 13g of	greater than or equal to 5%?
Yes (complies with operating standard) No (does not comply	with operating standard)
13j Did installation of the facility in its current form commence on or after March 13	, 1980?
Yes. Your facility is subject to the efficiency requirements of 18 C.F.R. § 292.	205(a)(2). Demonstrate
compliance with the efficiency requirement by responding to line 13k or 13	l, as applicable, below.
	-1
No. Your facility is exempt from the efficiency standard. Skip lines 13k and 1	31.
13k Compliance with efficiency standard (for low operating value): If the operating than 15%, then indicate below whether the efficiency value shown in line 13h great	
Yes (complies with efficiency standard) No (does not comply	with efficiency standard)
<b>13I</b> Compliance with efficiency standard (for high operating value): If the operating greater than or equal to 15%, then indicate below whether the efficiency value show equal to 42.5%:	
Yes (complies with efficiency standard) No (does not comply	with efficiency standard)

## Usefulness of Bottoming-Cycle Thermal Output

## Information Required for Bottoming-Cycle Cogeneration Facility

If you indicated in line 10a that your facility represents bottoming-cycle cogeneration technology, then you must respond to the items on pages 16 and 17. Otherwise, skip pages 16 and 17.

The thermal energy output of a bottoming-cycle cogeneration facility is the energy related to the process(es) from which at least some of the reject heat is then used for power production. Pursuant to sections 292,202(c) and (e) of the Commission's regulations (18 C.F.R. § 292.202(c) and (e)), the thermal energy output of a qualifying bottomingcycle cogeneration facility must be useful. In connection with this requirement, describe the process(es) from which at least some of the reject heat is used for power production by responding to lines 14a and 14b below, 14a Identify and describe each thermal host and each bottoming-cycle cogeneration process engaged in by each host. For hosts with multiple bottoming-cycle cogeneration processes, provide the data for each process in separate rows. Has the energy input to Name of entity (thermal host) the thermal host been performing the process from augmented for purposes which at least some of the of increasing power reject heat is used for power Thermal host's relationship to facility; production capacity? production Thermal host's process type (if Yes, describe on p. 19) Select thermal host's relationship to facility Yes No 1) Select thermal host's process type Select thermal host's relationship to facility No 🗍 2) Select thermal host's process type Select thermal host's relationship to facility Yes [ No 🗀 3) Thermal Output Select thermal host's process type Check here and continue in the Miscellaneous section starting on page 19 if additional space is needed 14b Demonstration of usefulness of thermal output: At a minimum, provide a brief description of each process identified above. In some cases, this brief description is sufficient to demonstrate usefulness. However, if your facility's process is not common, and/or if the usefulness of such thermal output is not reasonably clear, then you must provide additional details as necessary to demonstrate usefulness. Your application may be rejected and/or additional information may be required if an insufficient showing of usefulness is made. (Exception: If you have previously received a Commission certification approving a specific bottoming-cycle process related to the instant facility, then you need only provide a brief description of that process and a reference by date and docket number to the order certifying your facility with the indicated process. Such exemption may not be used if any material changes to the process have been made.) If additional space is needed, continue in the Miscellaneous section starting on page 19.



## Bottoming-Cycle Operating and Efficiency Value Calculation

than or equal to 45%:

Yes (complies with efficiency standard)

rage 17 - Bottoming	g-cycle cogeneration racinties
Applicants for facilities representing bottoming-cycle technology and for which instal March 13, 1990 must demonstrate compliance with the bottoming-cycle efficiency stathe Commission's regulations (18 C.F.R. § 292.205(b)) establishes the efficiency standa cogeneration facilities: the useful power output of the facility must be no less than 45 of natural gas and oil for supplementary firing. To demonstrate compliance with the standard (if applicable), or to demonstrate that your facility is exempt from this standard installation of the facility began, respond to lines 15a through 15h below.	andards. Section 292,205(b) of rd for bottoming-cycle percent of the energy input pottoming-cycle efficiency
If you indicated in line 10a that your facility represents both topping-cycle and bottom technology, then respond to lines 15a through 15h below considering only the energy attributable to the bottoming-cycle portion of your facility. Your mass and heat balan which mass and energy flow values and system components are for which portion of topping or bottoming).	y inputs and outputs ce diagram must make clear
15a Did installation of the facility in its current form commence on or after March 13,  Yes. Your facility is subject to the efficiency requirement of 18 C.F.R. § 292.205 with the efficiency requirement by responding to lines 15b through 15h below  No. Your facility is exempt from the efficiency standard. Skip the rest of page	i(b). Demonstrate compliance v.
15b Indicate the annual average rate of net electrical energy output	kW
<b>15c</b> Multiply line 15b by 3,412 to convert from kW to Btu/h	0 Btu/h
<b>15d</b> Indicate the annual average rate of mechanical energy output taken directly off of the shaft of a prime mover for purposes not directly related to power production (this value is usually zero)	hp
<b>15e</b> Multiply line 15d by 2,544 to convert from hp to Btu/h	0 Btu/h
<b>15f</b> Indicate the annual average rate of supplementary energy input from natural gas or oil	
15g Bottoming-cycle efficiency value = 100 * (15c + 15e) / 15f	0.04

15h Compliance with efficiency standard: Indicate below whether the efficiency value shown in line 15g is greater

No (does not comply with efficiency standard)

## Certificate of Completeness, Accuracy and Authority

Applicant must certify compliance with and understanding of filing requirements by checking next to each item below and signing at the bottom of this section. Forms with incomplete Certificates of Completeness, Accuracy and Authority will be rejected by the Secretary of the Commission.

rejected by the Secretary of the Commission.	•	•		
Signer identified below certifies the following:	(check all items and ap	plicable subitems)		

$\boxtimes$	He or she has read the filing, including any information contained in any attached documents, such as cogeneration mass and heat balance diagrams, and any information contained in the Miscellaneous section starting on page 19, and knows its contents.
X	He or she has provided all of the required information for certification, and the provided information is true as stated, to the best of his or her knowledge and belief.
X	He or she possess full power and authority to sign the filing; as required by Rule 2005(a)(3) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(a)(3)), he or she is one of the following: (check one)
	The person on whose behalf the filing is made
	An officer of the corporation, trust, association, or other organized group on behalf of which the filing is made
	An officer, agent, or employe of the governmental authority, agency, or instrumentality on behalf of which the filing is made
	A representative qualified to practice before the Commission under Rule 2101 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2101) and who possesses authority to sign
$\boxtimes$	He or she has reviewed all automatic calculations and agrees with their results, unless otherwise noted in the Miscellaneous section starting on page 19.
	He or she has provided a copy of this Form 556 and all attachments to the utilities with which the facility will

He or she has provided a copy of this Form 556 and all attachments to the utilities with which the facility will interconnect and transact (see lines 4a through 4d), as well as to the regulatory authorities of the states in which the facility and those utilities reside. See the Required Notice to Public Utilities and State Regulatory Authorities section on page 3 for more information.

Provide your signature, address and signature date below. Rule 2005(c) of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2005(c)) provides that persons filing their documents electronically may use typed characters representing his or her name to sign the filed documents. A person filing this document electronically should sign (by typing his or her name) in the space provided below.

Your Signature	Your address	Date
Robert Jans	Two Waterview Road, Suite E-11 West Chester, PA 19380	2/19/2013
Audit Notes		
Commission Staff Use Only		

FERC Form 556 Page 19 - All Facilities

## Miscellaneous

Use this space to provide any information for which there was not sufficient space in the previous sections of the form to provide. For each such item of information *clearly identify the line number that the information belongs to*. You may also use this space to provide any additional information you believe is relevant to the certification of your facility.

Your response below is not limited to one page. Additional page(s) will automatically be inserted into this form if the length of your response exceeds the space on this page. Use as many pages as you require.

This amendment is to change the location of the facility. The geographic coordinates in Section 3c are changed from the original certification.