FEDERAL ENERGY REGULATORY COMMISSION WASHINGTON, DC

OMB Control # 1902-0075 Expiration 11/30/2022

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

1b Applicant street a 146 Alpine Dr			
1c City		1d State/prov	ince
Green Bay		Wi	
1e Postal code 54302	1f Country (if not United States)		1g Telephone number 920 393 4131
1h Has the instant fa	cility ever previously been certified as a C	QF? Yes X I	No
1i If yes, provide the	docket number of the last known QF filin	g pertaining to t	his facility: Q F14 - 99 - 002
1j Under which certi	fication process is the applicant making t	his filing?	
Notice of self-co	-	_	ommission certification (requires filing e" section on page 2)
QF status. A not notice of self-cer	elf-certification is a notice by the applican ice of self-certification does not establish tification to verify compliance. See the "V 4 for more information.	a proceeding, an	d the Commission does not review a
1k What type(s) of Q	F status is the applicant seeking for its fac	cility? (check all th	nat apply)
X Qualifying sma	ll power production facility status	Qualifying cogen	eration facility status
	se and expected effective date(s) of this f	_	
	cation; facility expected to be installed by		nd to begin operation on
'''	previously certified facility to be effective) of change(s) below, and describe chang		Innous saction starting on page 24\
	ge and/or other administrative change(s)	e(s) in the miscei	ianeous section starting on page 24/
☐ Change in o			
	ffecting plant equipment, fuel use, power	production capa	acity and/or cogeneration thermal outpu
	correction to a previous filing submitted		,
l ' <i>'</i>	applement or correction in the Miscellane		ing on page 24)
	wing three statements is true, check the sible, explaining any special circumstance		
The instant fa	cility complies with the Commission's QF anted by the Commission in an order date Miscellaneous section starting on page 24	requirements by ed	.
	cility would comply with the Commission with this application is granted	ı's QF requiremer	nts if a petition for waiver submitted
☐ employment	cility complies with the Commission's reg of unique or innovative technologies not ation of compliance via this form difficult	contemplated by	the structure of this form, that make

	2a Name of contact person Thomas Mattson			2b Telephone number 920 393 4131			
	2c Which of the following describes	the contact person's re	Plationship to the app	l plicant? (check one)			
	Applicant (self) Employee, owner or partner of applicant authorized to represent the applicant						
on				ent the applicant on this matter			
ati	Lawyer, consultant, or other re						
Ľ.	2d Company or organization name			·			
Je		(oppredict sur main	and the contract of the	2 3 mp to mic 20/ [2]			
Contact Information	2e Street address (if same as Applica	ant check here and skir	n to line 3a)⊠				
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.uo							
Ŭ	2f City		2g State/provi	nca			
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	3a Facility name						
nc	Winner 3						
atic	3b Street address (if a street address	dous not axist for the f	facility chack hove as	ad skip to line 2010			
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utilities or holding companies, provide the percentage of equity interest in the facilidirect owners hold at least 10 percent equity interest in the facility, then provide the two direct owners with the largest equity interest in the facility.	vner is an electric ut mpany, as defined i (2) for owners which ity held by that own e required informati	n section n are elec er. If no
Full legal names of direct owners	Electric utility or holding	% equ
1) Thomas James Mattson	company	intere
2)	Yes No 🔀	1
3)	Yes No	<u> </u>
	Yes No	<u> </u>
4)	Yes No	
5)	Yes No	
6)	Yes No]
7)	Yes No	
8)	Yes No	
9)	Yes No]
10)	Yes 🔲 No 🗀	
defined in section 3(22) of the Federal Power Act (16 U.S.C. 796(22)), or holding com 1262(8) of the Public Utility Holding Company Act of 2005 (42 U.S.C. 16451(8)). Also equity interest in the facility held by such owners. (Note that, because upstream ow	provide the percent	tage of
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	ба	Describe	the primary energy input: (check one mai	in c	ategory and, if ap	plicable	, one subcat	egory)	
		Bioma	ass (specify)	⊠ Re	nev	vable resources (specify)	☐ Geo	thermal	
			Landfill gas			Hydro power - ri	ver	☐ Foss	il fuel (spe	cify)
			Manure digester gas			Hydro power - ti	dal] Coal (not	t waste)
			Municipal solid waste			Hydro power - w	ave] Fuel oil/d	diesel
			Sewage digester gas	l		Solar - photovolt	aic] Natural <u>c</u>	jas (not waste
			Wood	İ		Solar - thermal		_	Other for	ssil fuel
			Other biomass (describe or	n page 24)	\times	Wind		_	describe	e on page 24)
		☐ Waste	e (specify type below in line	6b) [Other renewable (describe on pag		e 🗌 Othe	er (describe	on page 24)
	6b	If you spe	ecified "waste" as the primar	y energy inpu	t in	line 6a, indicate	the type	of waste fue	l used: (ch	eck one)
		☐ Was	te fuel listed in 18 C.F.R. § 2	92.202(b) (spe	cify	one of the follow	ving)			
			Anthracite culm produced	d prior to July	23,	1985				
			Anthracite refuse that has ash content of 45 percent	an average h	eat	content of 6,000	Btu or le	ss per poun	d and has a	in average
			Bituminous coal refuse th average ash content of 25	at has an avera	age ore	heat content of	9,500 Bti	u per pound	or less and	l has an
Energy Input	:		Top or bottom subbitumi determined to be waste b (BLM) or that is located or the applicant shows that the applicant shows that the coal refuse produced on the substitute of t	y the United S non-Federal the latter coal	or r is a	es Department o non-Indian lands n extension of th	f the Inte outside o at deterr	erior's Bureau of BLM's juris mined by BLI	u of Land M sdiction, pr M to be wa	lanagement ovided that ste
nerg	Coal refuse produced on Federal lands or on Indian lands that has been determined to be w BLM or that is located on non-Federal or non-Indian lands outside of BLM's jurisdiction, pro- applicant shows that the latter is an extension of that determined by BLM to be waste							vaste by the ovided that		
Ш	Lignite produced in association with the production of montan wax and lignite that becomes as a result of such a mining operation								es exposed	
			Gaseous fuels (except nat	ural gas and sy	/ntł	netic gas from co	al) (desci	ribe on page	24)	
			Waste natural gas from ga C.F.R. § 2.400 for waste na compliance with 18 C.F.R.	tural gas; inclu	des ude	cribe on page 24 with your filing a	how the	e gas meets t erials necessa	the require ary to demo	ments of 18 onstrate
			Materials that a governme	ent agency has	ce	rtified for disposa	al by com	nbustion (de	scribe on p	age 24)
			Heat from exothermic read	ctions (describ	e o	n page 24)		Residual hea	at (describe	e on page 24)
			Used rubber tires [] Plastic mate	eria	ls □ R∈	efinery of	ff-gas	☐ Petro	oleum coke
	Other waste energy input that has little or no commercial value and exists in the absence of the qualifying facility industry (describe in the Miscellaneous section starting on page 24; include a discussion of the fuel lack of commercial value and existence in the absence of the qualifying facility industry)								the fuel's	
	6c	energy inp	e average energy input, calo outs, and provide the related). For any oil or natural gas	d percentage o	of tl	he total average a	annual ei	nergy input	ne followin to the facil	g fossil fuel ity (18 C.F.R. §
			Fuel			verage energy r specified fuel		Percentage annual ener		
			Natural gas			0	Btu/h		0 %	
			Oil-based fuels			0	Btu/h		0 %	
			Coal				Btu/h		C %	

14,650.J kW

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. **7a** The maximum gross power production capacity at the terminals of the individual generator(s) under the most favorable anticipated design conditions 15,000 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 nonpower 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. 0 **kW** 7c Electrical losses in interconnection transformers 350 kW 7d Electrical losses in AC/DC conversion equipment, if any 0 kW 7e 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 0 kW 7f Total deductions from gross power production capacity = 7b + 7c + 7d + 7e35).) kW **7g** Maximum net power production capacity = 7a - 7f

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 24.

14,650 KW net capacity, eight 5.6 MW wind turbines will be installed. The wind farm output will be collected and stepped up to 32Kv at the wind farms own substation, where 5 miles of 32Kv run to Prelude Colome 1 QF14-90-000 wind farm, and stepped up to 115Kv, where 2 miles of 115Kv run to RoseBud Electric Cooperatives Colome 115 Kv substation.

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 pages 11 through 15.

Pursuant to 18 C.F.R. § 292.204(a), the power production capacity of any small power production facility, together with the power production capacity of any other small power production facilities that use the same energy resource, are owned by the same person(s) or its affiliates, and are located at the same site, may not exceed 80 megawatts. To demonstrate compliance with this size limitation, or to demonstrate that your facility is exempt from this size limitation under the Solar, Wind, Waste, and Geothermal Power Production Incentives Act of 1990 (Pub. L. 101-575, 104 Stat. 2834 (1990) as amended by Pub. L. 102-46, 105 Stat. 249 (1991)), respond to lines 8a through 8f below (as applicable).

Electric Generating Equipment

Electrical generating equipment will refer to all boilers, heat recovery steam generators, prime movers (any mechanical equipment driving an electric generator), electrical generators, photovoltaic solar panels, inverters, fuel cell equipment and/or other primary power generation equipment used in the facility, excluding equipment for gathering energy to be used in the facility. Each wind turbine on a wind farm and each solar panel in a solar facility is considered electrical generating equipment because each wind turbine and each solar panel is independently capable of producing electric energy.

Distance

The distance between two facilities is to be measured from the edge of the closest electrical generating equipment for which qualification or recertification is sought to the edge of the nearest electrical generating equipment of the other affiliated small power production qualifying facility using the same energy resource. An affiliated small power production QF located one mile or less from the instant facility is irrebuttably presumed to be at the same site. An affiliated small power production QF located more than one mile and less than 10 miles from the instant facility is rebuttably presumed to be at a separate site. An affiliated small power production QF located 10 miles or more from the instant facility is irrebuttably presumed to be located at a separate site.

8a Identify affiliated small power production QFs located less than 10 miles from the electrical generating equipment of the instant facility that use the same energy resource and are held (with at least a 5 percent equity interest) by any of the entities identified in lines 5a or 5b or their affiliates. Specify the latitude and longitude coordinates for both the applicant and the affiliate small power production QF based on the nearest electrical generating equipment for each facility. Report coordinates in degrees (to three decimal places) as a positive number for east and north or a negative number for west and south. Use the following formula to convert to decimal degrees from degrees, minutes and seconds: decimal degrees = degrees + (minutes/60) + (seconds/3600). See the "Geographic Coordinates" section on page 5 for help obtaining coordinates. The distances for each facility listed below will be automatically calculated from the reported coordinates. See www.ferc.gov/QF for more information on how this form calculates distance.

Check here if no such facilities exist.

Facility loc (city or count		Root docket # (if any)	Maximum net power production capacity	Common owner(s)
South Dakota		QF 15 - 1025	9,900 kW	Prelude LLC
Coordinates (in deg	,	,	facility	
Closest electrical ge	neruting equipm	ient for applicant 3	racinty.	
Latitude 43.330	North (+)	Longitude 99.3	743 West (-)	

	- 111.			
	Facility location (city or county, state)	Root docket # (if any)	Maximum net power production capacity	Common owner(s)
	South Dakota	QF 14 - 87	19,400 kW	Prelude LLC
	Coordinates (in degrees) and Dista	nce (miles):		
2)	Closest electrical generating equip	ement for applicant's	facility:	
	Latitude 43.330 North (+)	Longitude 99.7	'43 West (-)	
	Closest electrical generating equip	ment for affiliate's fa	cility	
	Latitude 43.203 North (+)	Longitude 99.7	,	Distance mile
	Latitude 15.205		25 (************************************	8 . 9 2 mile
	Facility location (city or county, state)	Root docket # (if any)	Maximum net power production capacity	Common owner(s)
	South Dakota	QF14 - 95	14,600 kW	Prelude LLC
	Coordinates (in degrees) and Dista	nce (miles):		
3)	Closest electrical generating equip		facility:	
	Latitude 43.330 North (+)	Longitude 99.7	<u> </u>	
			<u></u>	
	Closest electrical generating equip			Distance
	Latitude 43.297 North (+)	Longitude 99.7	75 West (-)	2,34 mile
	Facility location	Root docket #	Maximum net power	
	(city or county, state)	(if any)	production capacity	Common owner(s)
	South Dakota	QF <u>14</u> - <u>90</u>	9,900 kW	Prelude LLC
	Coordinates (in degrees) and Dista	nce (miles):		
4)	Closest electrical generating equip	ment for applicant's f	acility:	
	Latitude 43.331 North (+)	Longitude 99.7	28 West (-)	
	Closest electrical generating equip	ment for affiliate's fac	ility:	Distance
	Latitude 43.280 North (+)	Longitude 99.6	69 West (-)	mile
	Facility location	Root docket #	Maximum net power	
	(city or county, state)	(if any)	production capacity	Common owner(s)
		QF	kW	
	Coordinates (in degrees) and Distai	nce (miles):		
5)	Closest electrical generating equip		acility:	
	Latitude Choose +/-	Longitude	Choose +/-	
	Closest electrical generating equip	ment for affiliate's fac	ility:	Distance

8a	Continued			
	Facility location (city or county, state)	Root docket # (if any) QF -	Maximum net power production capacity kW	Common owner(s)
	Coordinates (in degrees) and Dist			
6)	Closest electrical generating equi	pment for applicant's	facility:	
	Latitude Choose +		Choose +/-	
	Closest electrical generating equi	nmont for affiliate's fo		
	Latitude Choose +		Choose +/-	Distance
	Latitude	/- Longitude	CHOOSE +/-	C miles
	Facility location	Root docket #	Maximum net power	
	(city or county, state)	(if any) QF -	production capacity	Common owner(s)
			kW	
	Coordinates (in degrees) and Dist			
7)	Closest electrical generating equi			
	Latitude Choose +	/- Longitude	Choose +/-	
	Closest electrical generating equi	pment for affiliate's fa	acility:	Distance
	Latitude Choose +	/- Longitude	Choose +/-	0 miles
	Facility location	Root docket #	Maximum net power	,
	(city or county, state)	(if any)	production capacity	Common owner(s)
			kW	
	Coordinates (in degrees) and Dista			
8)	Closest electrical generating equip		·	
	Latitude Choose +,	/- Longitude	Choose +/-	
	Closest electrical generating equip	oment for affiliate's fa	cility:	Distance
	Latitude Choose +,	/- Longitude	Choose +/-	miles
	Facility location (city or county, state)	Root docket # (if any)	Maximum net power production capacity	Common owner(s)
				Common owner(s)
		(if any) QF	production capacity	Common owner(s)
9)	(city or county, state) Coordinates (in degrees) and Dista	(if any) QF ance (miles): pment for applicant's	production capacity kW	Common owner(s)
9)	(city or county, state) Coordinates (in degrees) and Dista	(if any) QF ance (miles): pment for applicant's	production capacity kW	Common owner(s)
9)	(city or county, state) Coordinates (in degrees) and Dista	(if any) QF ance (miles): oment for applicant's /- Longitude	production capacity kW facility: Choose +/-	Common owner(s) Distance

		location unty, state)	Root docket # (if any)	Maximum net power production capacity	Common owner(s)
			QF	kW	
	Coordinates (in c	degrees) and Distand	ce (miles):		
10)	Closest electrical	generating equipm	ent for applicant's	facility:	
	Latitude	Choose +/-	Longitude	Choose +/-	
	Closest electrical	generating equipm	ent for affiliate's fa	acility:	Distance
	Latitude	Choose +/-	Longitude	Choose +/-	0 m
pow deg Use deg cool	ver production QF rees (to three deci the following form rees + (minutes/60 rdinates. The dista	based on the neares mal places) as a pos nula to convert to de D) + (seconds/3600). nnces for each facility	st electrical genera itive number for ea ecimal degrees fro See the "Geograp y listed below will	rdinates for both the applica Iting equipment for each fac ast and north or a negative r in degrees, minutes and sec Ishic Coordinates" section on be automatically calculated in how this form calculates d	cility. Report coordinate number for west and sou onds: decimal degrees = page 5 for help obtainin from the reported
(Closest electrical go Latitude	enerating equipmer Choose +/-	nt for applicant's fa	cility (degrees): Choose +/-	
(losest electrical g	enerating equipmer	nt for affiliate's faci	lity (degrees):	Distance
	Latitude	Choose +/-	Longitude	Choose +/-	ni

ERC F	orm 556	Page 15 - Small Power Production
	8b Continued	
		ion, placed into service within 12 months of an affiliated small on date as specified in the power sales agreement, or sharing
	exemption from the size limitations in 18 C.F.R. § 292	Production Incentives Act of 1990 (Incentives Act) provides 2.204(a) for certain facilities that were certified prior to 1995. in 18 C.F.R. § 292.204(a) by virtue of the Incentives Act?
	Yes (continue at line 8d below)	No (skip lines 8d through 8f)
	8d Was the original notice of self-certification or ap before December 31, 1994? Yes No	plication for Commission certification of the facility filed on or
	8e Did construction of the facility commence on or	before December 31, 1999? Yes No
	8f If you answered No in line 8e, indicate whether rethe facility, taking into account all factors relevant to	easonable diligence was exercised toward the completion of construction? Yes No
		nation in the Miscellaneous section starting on page 24 of the instruction started so long after the facility was certified) and the v.
Fuel Use Requirements	amounts, for only the following purposes: ignition; sprevention of unanticipated equipment outages; and the public health, safety, or welfare, which would res	ower production facilities may use fossil fuels, in minimal start-up; testing; flame stabilization; control use; alleviation or d alleviation or prevention of emergencies, directly affecting sult from electric power outages. The amount of fossil fuels of the total energy input of the facility during the 12-month uces electric energy or any calendar year thereafter.
Ř	9a Certification of compliance with 18 C.F.R. § 292.2	04(b) with respect to uses of fossil fuel:
Use	Applicant certifies that the facility will use for	ssil fuels exclusively for the purposes listed above.
<u>le</u>	9b Certification of compliance with 18 C.F.R. § 292.2	04(b) with respect to amount of fossil fuel used annually:
ヹ	Applicant certifies that the amount of fossil f	uel used at the facility will not in aggregate, exceed 25

percent of the total energy input of the facility during the 12-month period beginning with the date the

facility first produces electric energy or any calendar year thereafter.

General Cogeneration Information

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 16 through 18. Otherwise, skip pages 16 through 18.

Pursuant to 18 C.F.R. § 292.202(c), a cogeneration facility produces electric energy and forms of useful thermal energy (such as heat or steam) used for industrial, commercial, heating, or cooling purposes, through the sequential use of energy. Pursuant to 18 C.F.R. § 292.202(s), "sequential use" of energy means the following: (1) for a topping-cycle cogeneration facility, the use of reject heat from a power production process in sufficient amounts in a thermal application or process to conform to the requirements of the operating standard contained in 18 C.F.R. § 292.205(a); or (2) for a bottoming-cycle cogeneration facility, the use of at least some reject heat from a thermal application or process for power production.

10a What type(s) of cogeneration technology does the facility represent? (check all that apply)

Topping-cycle cogeneration

Bottoming-cycle cogeneration

10b To help demonstrate the sequential operation of the cogeneration process, and to support compliance with other requirements such as the operating and efficiency standards, include with your filing a mass and heat balance diagram depicting average annual operating conditions. This diagram must include certain items and meet certain requirements, as described below. You must check next to the description of each requirement below to certify that you have complied with these requirements.

Check to certify compliance with indicated requirement

Requirement

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.

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.

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.

Diagram must specify average gross electric output in kW or MW for each generator.

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 *liquid only* (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 24, 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.

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

11b 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

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.

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?

Yes (continue at line 11d below)

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 11i.

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?

Yes. Provide in the Miscellaneous section starting on page 24 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.

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.

11e Will electric energy from the facility be sold pursuant to section 210 of PURPA?

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.

No. Applicant certifies that energy will *not* 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) *before* 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?

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.

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
11h 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)	.) 96

11j 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 24 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.

thermal output

Usefulness of Topping-Cycle Thermal Output

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 items on pages 19 and 20. Otherwise, skip pages 19 and 20.

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 topping-cycle 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.

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

Name of entity (thermal host) taking thermal output	Thermal host's relationship to facility; Thermal host's use of thermal output	attributable to use (net of heat contained in process return or make-up water)
1)	Select thermal host's relationship to facility	
	Select thermal host's use of thermal output	Btu/h
2)	Select thermal host's relationship to facility	
2)	Select thermal host's use of thermal output	Btu/h
3)	Select thermal host's relationship to facility	
3)	Select thermal host's use of thermal output	Btu/h
4)	Select thermal host's relationship to facility	
7)	Select thermal host's use of thermal output	Btu/h
5)	Select thermal host's relationship to facility	
<i>J</i>)	Select thermal host's use of thermal output	Btu/h
6)	Select thermal host's relationship to facility	
	Select thermal host's use of thermal output	Btu/h

Check here and continue in the Miscellaneous section starting on page 24 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 24.



Applicants for facilities representing topping-cycle technology must demonstrate compliance with the topping-cycle operating standard and, if applicable, efficiency standard. Section 292.205(a)(1) of the Commission's regulations (18 C.F.R. § 292.205(a)(1)) establishes the operating standard for topping-cycle cogeneration facilities: the useful thermal energy output must be no less than 5 percent of the total energy output. Section 292.205(a)(2) (18 C.F.R. § 292.205(a)(2)) establishes the efficiency standard for topping-cycle cogeneration facilities for which installation commenced on or after March 13, 1980: the useful power output of the facility plus one-half the useful thermal energy output must (A) be no less than 42.5 percent of the total energy input of natural gas and oil to the facility; and (B) if the useful thermal energy output is less than 15 percent of the total energy output of the facility, be no less than 45 percent of the total energy input of natural gas and oil to the facility. To demonstrate compliance with the topping-cycle operating and/or efficiency standards, or to demonstrate that your facility is exempt from the efficiency standard based on the date that installation commenced, respond to lines 13a through 13l below.

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.

13a Indicate the annual average rate of useful thermal energy output made available	
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	
	o Btu/h
13d 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
13e Multiply line 13d by 2,544 to convert from hp to Btu/h	
	⊜ Btu/h
13f Indicate the annual average rate of energy input from natural gas and oil	
	Btu/h
13g Topping-cycle operating value = 100 * 13a / (13a + 13c + 13e)	
	; °o
13h Topping-cycle efficiency value = 100 * (0.5*13a + 13c + 13e) / 13f	
	Ç 00

13i Compliance with operating standard: Is the operating value shown in line 13g 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 13l, as applicable, below.

No. Your facility is exempt from the efficiency standard. Skip lines 13k and 13l.

13k Compliance with efficiency standard (for low operating value): If the operating value shown in line 13g is less than 15%, then indicate below whether the efficiency value shown in line 13h greater than or equal to 45%:

Yes (complies with efficiency standard)

No (does not comply with efficiency standard)

13l Compliance with efficiency standard (for high operating value): If the operating value shown in line 13g is greater than or equal to 15%, then indicate below whether the efficiency value shown in line 13h is greater than or 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 21 and 22. Otherwise, skip pages 21 and 22.

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 bottoming-cycle 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*.

Name of entity (thermal host) performing the process from which at least some of the reject heat is used for power production

Thermal host's relationship to facility; Thermal host's process type Has the energy input to the thermal host been augmented for purposes of increasing power production capacity? (if Yes, describe on p. 24)

1)	Select thermal host's relationship to facility	Yes	No
	Select thermal host's process type		
2)	Select thermal host's relationship to facility	Yes	No
	Select thermal host's process type		
3)	Select thermal host's relationship to facility	Yes	No
	Select thermal host's process type		

Check here and continue in the Miscellaneous section starting on page 24 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 24.

Applicants for facilities representing bottoming-cycle technology and for which installation commenced on or after March 13, 1990 must demonstrate compliance with the bottoming-cycle efficiency standards. Section 292.205(b) of the Commission's regulations (18 C.F.R. § 292.205(b)) establishes the efficiency standard for bottoming-cycle cogeneration facilities: the useful power output of the facility must be no less than 45 percent of the energy input of natural gas and oil for supplementary firing. To demonstrate compliance with the bottoming-cycle efficiency standard (if applicable), or to demonstrate that your facility is exempt from this standard based on the date that installation of the facility began, respond to lines 15a through 15h below.

If you indicated in line 10a that your facility represents *both* topping-cycle and bottoming-cycle cogeneration technology, then respond to lines 15a through 15h below considering only the energy inputs and outputs attributable to the bottoming-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 of the cogeneration system (topping or bottoming).

15a Did installation of the facility in its current form commence on or after March 13, 1980?

Yes. Your facility is subject to the efficiency requirement of 18 C.F.R. § 292.205(b). Demonstrate compliance 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 22.

		- 1
15b Indicate the annual average rate of net electrical energy output		-
	kW	
15c Multiply line 15b by 3,412 to convert from kW to Btu/h		٦.,
	⊜ Btu/h	1
15d 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	1
15e Multiply line 15d by 2,544 to convert from hp to Btu/h		٦,
	:) Btu/h	
15f Indicate the annual average rate of supplementary energy input from natural gas		7
or oil	Btu/h	
15g Bottoming-cycle efficiency value = 100 * (15c + 15e) / 15f		
	$c = 0_{\Omega}^{+}$	1

15h Compliance with efficiency standard: Indicate below whether the efficiency value shown in line 15g is greater than or equal to 45%:

Yes (complies with efficiency standard)

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.

Signer identified below certifies the following: (check all items and applicable subitems)

signer identified below certifies th	e following. (check all items and applicable sub-	items)
He or she has read the filing, in mass and heat balance diagraknows its contents.	ncluding any information contained in any attaons, and any information contained in the Misce	ched documents, such as cogeneration ellaneous section starting on page 24, and
He or she has provided all of the to the best of his or her knowledge.	he required information for certification, and the	e provided information is true as stated,
He or she possess full power a Practice and Procedure (18 C.F	nd authority to sign the filing; as required by Ru F.R. § 385.2005(a)(3)), he or she is one of the follo	rle 2005(a)(3) of the Commission's Rules of owing: (check one)
☐ An officer of the corpo	ration, trust, association, or other organized gro	oup on behalf of which the filing is made
An officer, agent, or en filing is made	nploye of the governmental authority, agency, o	or instrumentality on behalf of which the
A representative quality Practice and Procedure	fied to practice before the Commission under Ri e (18 C.F.R. § 385.2101) and who possesses auth	ule 2101 of the Commission's Rules of ority to sign
He or she has reviewed all auto Miscellaneous section starting	omatic calculations and agrees with their results on page 24.	s, unless otherwise noted in the
interconnect and transact (see facility and those utilities resid page 4 for more information.	of this Form 556 and all attachments to the util lines 4a through 4d), as well as to the regulator e. See the Required Notice to Public Utilities an d signature date below. Rule 2005(c) of the Con	y authorities of the states in which the d State Regulatory Authorities section on
Procedure (18 C.F.R. § 385.2005(c))	provides that persons filing their documents ele n the filed documents. A person filing this docu	ectronically may use typed characters
Your Signature	Your address	Date
Thomas Mattson	146 Alpine Dr. Green Bay, Wi. 54302	. 0. 24 [2023
Audit Notes		
Commission Staff Use Only:		

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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.

Changed turbine from 1.5 MW to 5.6 MW, reducing the number of turbines from 22 to six 5.6 MW turbines. The six 5.6 turbines will have their nameplate reduced to a max total of 33MW. Insuring that the nameplate total has not changed from the 22 1.5 MW turbine nameplate of 33MW. Net capacity production has not changed.