

Application to Commit Energy
Efficiency/Peak Demand
Reduction Programs
(Mercantile Customers Only)

Case No.: <u>13-0887 -E</u>L-EEC

Mercantile Customer: Department of Veterans Affairs - Veterans Hospital

Electric Utility: **Duke Energy** 

Program Title or

**HVAC and VFDs** 

Description:

Rule 4901:1-39-05(F), Ohio Administrative Code (O.A.C.), permits a mercantile customer to file, either individually or jointly with an electric utility, an application to commit the customer's existing demand reduction, demand response, and energy efficiency programs for integration with the electric utility's programs. The following application form is to be used by mercantile customers, either individually or jointly with their electric utility, to apply for commitment of such programs in accordance with the Commission's pilot program established in Case No. 10-834-EL-POR

Completed applications requesting the cash rebate reasonable arrangement option (Option 1) in lieu of an exemption from the electric utility's energy efficiency and demand reduction (EEDR) rider will be automatically approved on the sixty-first calendar day after filing, unless the Commission, or an attorney examiner, suspends or denies the application prior to that time. Completed applications requesting the exemption from the EEDR rider (Option 2) will also qualify for the 60-day automatic approval so long as the exemption period does not exceed 24 months. Rider exemptions for periods of more than 24 months will be reviewed by the Commission Staff and are only approved up the issuance of a Commission order.

Complete a separate application for each customer program. Projects undertaken by a customer as a single program at a single location or at various locations within the same service territory should be submitted together as a single program filing, when possible. Check all boxes that are applicable to your program. For each box checked, be sure to complete all subparts of the question, and provide all requested additional information. Submittal of incomplete applications may result in a suspension of the automatic approval process or denial of the application.

Any confidential or trade secret information may be submitted to Staff on disc or via email at <u>ee-pdr@puc.state.oh.us</u>.

#### **Section 1: Mercantile Customer Information**

Name: Department of Veterans Affairs

Principal address: 3200 Vine Street Cincinnati, Ohio 45220

Address of facility for which this energy efficiency program applies:

3200 Vine Street Cincinnati, Ohio 45220

Name and telephone number for responses to questions:

Grady Reid Jr, 513-287-1038

Electricity use by the customer (check the box(es) that apply):

- ✓ The customer uses more than seven hundred thousand kilowatt hours per year at the above facility. (Please attach documentation.)
- ☐ The customer is part of a national account involving multiple facilities in one or more states. (Please attach documentation.)

## **Section 2: Application Information**

- A) The customer is filing this application (choose which applies):
  - □ Individually, without electric utility participation.
  - ✓ Jointly with the electric utility.
- B) The electric utility is: **Duke Energy**
- C) The customer is offering to commit (check any that apply):
  - □ Energy savings from the customer's energy efficiency program. (Complete Sections 3, 5, 6, and 7.)
  - □ Capacity savings from the customer's demand response/demand reduction program. (Complete Sections 4, 5, 6, and 7.)
  - **✓** Both the energy savings and the capacity savings from the customer's energy efficiency program. (Complete all sections of the Application.)

## **Section 3: Energy Efficiency Programs**

- A) The customer's energy efficiency program involves (check those that apply):
  - Early replacement of fully functioning equipment with new equipment. (Provide the date on which the customer replaced fully functioning equipment, and the date on which the customer would have replaced such equipment if it had not been replaced early. Please include a brief explanation for how the customer determined this future replacement date (or, if not known, please explain why this is not known)).
  - ✓ Installation of new equipment to replace equipment that needed to be replaced The customer installed new equipment on the following date(s):

3 new chillers – 750 tons each, August 2009 (application received in 2012) 2 VFDs – 25 HP each, installed September 2012 4 VFDs – 50 HP each, installed August 2012

- ☐ Installation of new equipment for new construction or facility expansion. The customer installed new equipment on the following date(s):
- □ Behavioral or operational improvement.
- B) Energy savings achieved/to be achieved by the energy efficiency program:
  - 1) If you checked the box indicating that the project involves the early replacement of fully functioning equipment replaced with new equipment, then calculate the annual savings [(kWh used by the original equipment) (kWh used by new equipment) = (kWh per year saved)]. Please attach your calculations and record the results below:

Annual savings: \_\_\_\_\_kWh

2) If you checked the box indicating that the customer installed new equipment to replace equipment that needed to be replaced, then calculate the annual savings [(kWh used by less efficient new equipment) – (kWh used by the higher efficiency new equipment) = (kWh per year saved)]. Please attach your calculations and record the results below:

Annual savings: 1,128,794 kWh (See Attachment 1 - Appendix 2)

Please describe any less efficient new equipment that was rejected in favor of the more efficient new equipment.

3)	If you checked the box indicating that the project involves equipment for
	new construction or facility expansion, then calculate the annual savings
	[(kWh used by less efficient new equipment) - (kWh used by higher
	efficiency new equipment) = (kWh per year saved)]. Please attach your
	calculations and record the results below:

Annual	savings:	kWh

Please describe the less efficient new equipment that was rejected in favor of the more efficient new equipment.

4) If you checked the box indicating that the project involves behavioral or operational improvements, provide a description of how the annual savings were determined.

# Section 4: Demand Reduction/Demand Response Programs

- A) The customer's program involves (check the one that applies):
  - ✓ Coincident peak-demand savings from the customer's energy efficiency program.
  - Actual peak-demand reduction. (Attach a description and documentation of the peak-demand reduction.)
  - □ Potential peak-demand reduction (check the one that applies):
    - ☐ The customer's peak-demand reduction program meets the requirements to be counted as a capacity resource under a tariff of a regional transmission organization (RTO) approved by the Federal Energy Regulatory Commission.
    - ☐ The customer's peak-demand reduction program meets the requirements to be counted as a capacity resource under a program that is equivalent to an RTO program, which has been approved by the Public Utilities Commission of Ohio.
- B) On what date did the customer initiate its demand reduction program?

### August 2009, August 2012 and September 2012

C) What is the peak demand reduction achieved or capable of being achieved (show calculations through which this was determined):

251.5 KW (See Attachment 1 - Appendix 2)

# **Section 5: Request for Cash Rebate Reasonable** Arrangement (Option 1) or Exemption from Rider (Option 2)

Under this section, check the box that applies and fill in all blanks relating to that choice.

automatic asis by the

appı		All a		selected, the application will not qualify for the 60-day a ications, however, will be considered on a timely bas
A)	The	custom	ner is	s applying for:
	✓	Optio	n 1:	A cash rebate reasonable arrangement.
	OR			
		-		An exemption from the energy efficiency cost mimplemented by the electric utility.
	OR			
		Comn	nitm	ent payment
B)	The	value c	of the	e option that the customer is seeking is:
	-			ash rebate reasonable arrangement, which is the lesser show both amounts):
				A cash rebate of \$24,875.00 (See Attachment 1 - Appendix 3).
	Opti	on 2:		exemption from payment of the electric utility's rgy efficiency/peak demand reduction rider.
				An exemption from payment of the electric utility's energy efficiency/peak demand reduction rider for months (not to exceed 24 months). (Attach calculations showing how this time period was determined.)
			OR	
				A commitment payment valued at no more than \$ (Attach documentation and
				calculations showing how this payment amount was

determined.)

recovery

OR

Ongoing exemption from payment of the electric utility's energy efficiency/peak demand reduction rider for an initial period of 24 months because this program is part of the customer's ongoing efficiency program. (Attach documentation that establishes the ongoing nature of the program.) In order to continue the exemption beyond the initial 24 month period, the customer will need to provide a future application establishing additional energy savings and the continuance of the organization's energy efficiency program.)

#### **Section 6: Cost Effectiveness**

The program is cost effective because it has a benefit/cost ratio greater than 1 using the (choose which applies):

Total Resource Cost (TRC) Test.	The calculated TRC value is:	
(Continue to Subsection 1, then ski	ip Subsection 2)	

<b>√</b>	Utility Cost Test (UCT). The calculated UCT value is (See Attachment 1 -
	Appendix 4)

Subsection 1: TRC Test Used (please fill in all blanks).

The TRC value of the program is calculated by dividing the value of our avoided supply costs (generation capacity, energy, and any transmission or distribution) by the sum of our program overhead and installation costs and any incremental measure costs paid by either the customer or the electric utility.

The electric utility's avoided supply costs were	
Our program costs were	
<u> </u>	
The incremental measure costs were .	

## Subsection 2: UCT Used (please fill in all blanks).

We calculated the UCT value of our program by dividing the value of our avoided supply costs (capacity and energy) by the costs to our electric utility (including administrative costs and incentives paid or rider exemption costs) to obtain our commitment.

Our avoided supply costs were \$535,200 (See Attachment 1 - Appendix 5).

The utility's program costs were \$16,500(See Attachment 1 - Appendix 6).

The utility's incentive costs/rebate costs were \$24,875(See Attachment 1 - Appendix 3).

#### Section 7: Additional Information

Please attach the following supporting documentation to this application:

Narrative description of the program including, but not limited to, make, model, and year of any installed and replaced equipment.

A copy of the formal declaration or agreement that commits the program or measure to the electric utility, including:

- 1) any confidentiality requirements associated with the agreement;
- 2) a description of any consequences of noncompliance with the terms of the commitment;
- 3) a description of coordination requirements between the customer and the electric utility with regard to peak demand reduction;
- 4) permission by the customer to the electric utility and Commission staff and consultants to measure and verify energy savings and/or peak-demand reductions resulting from your program; and,
- 5) a commitment by the customer to provide an annual report on your energy savings and electric utility peak-demand reductions achieved.

#### Refer to Offer Letter following this application

A description of all methodologies, protocols, and practices used or proposed to be used in measuring and verifying program results. Additionally, identify and explain all deviations from any program measurement and verification guidelines that may be published by the Commission.



DUKE ENERGY
Mercantile Self Direct Program
139 East Fourth Street
Cincinnati, OH 45202
513 629 5572 fax

March 13, 2013

Mr. Kevin Henderson Veterans Administrative Hospital 539 3200 Vine Street Cincinnati, Ohio 41011

Subject: Your Application for a Duke Energy Mercantile Self-Direct Rebate

Dear Mr. Henderson:

Thank you for your Duke Energy Mercantile Self Direct rebate application. As noted in the Energy Conservation Measure (ECM) chart on page two, a total rebate of \$24,875.00 has been proposed for your HVAC and VFD projects completed in the 2009 and 2012 calendar years. All Self Direct Rebates are contingent upon approval by the Public Utilities Commission of Ohio (PUCO).

At your earliest convenience, please indicate if you accept this rebate by

- providing your signature on page two
- completing the PUCO-required affidavit on page three.

Please return the documents to my attention via fax at 513-629-5572 or e-mail to SelfDirect@Duke-Energy.com. Upon receipt, Duke Energy will submit the necessary documentation to PUCO. Following PUCO's approval, Duke Energy will remit payment.

At Duke Energy, we value your business and look forward to working with you on this and future energy efficiency projects. We hope you will consider our Smart \$aver® incentives, when applicable. Please contact me if you have any questions.

Sincerely,

CC:

Grady Reid, Jr Product Manager Mercantile Self Direct Rebates

> Mike Heath, Duke Energy Rob Jung, Ecova Mark Zimmerman, Shrudde and Zimmerman

Please indicate your resp	onse to this rebate offer with	hin 30 days of receipt.	
Rebate is accepted.	Rebate	is declined.	
integrate the energy effici	Veterans Administrative Ho ency projects listed on the f nd response and/or energy	following pages into Duke	
filings necessary to secur	ministrative Hospital also ag e approval of this arrangem rting requirements imposed	ent as required by PUCO	and to comply with
Energy pursuant to this rebut not be limited to, project	strative Hospital affirms that ebate offer is true and accur ect scope, equipment specif apletion dates, and the quan	rate. Information in questi fications, equipment opera	ion would include, ational details,
If rebate is accepted, will reduction projects?	you use the monies to fund	future energy efficiency a	and/or demand
YES NO			
If rebate is declined, plea	se indicate reason (optional	<b>):</b>	
Havin Hender	ron Kevin Hend	derson 3/15/1	3
Customer Signature	Printed Name	Date	

# Proposed Rebate Amounts

Measure ID	Energy Conservation Measure (ECM)	Proposed Rebate Amount
ECM-1	Water Cooled Chiller greater than 300 ton 0.58 kW ton with 0.41 kW ton IPLV	\$12,375.00
ECM-2	VFD HVAC Fan 1.5 – 50 HP (Qty 2)	\$2500.00
ECM-3	VFD HVAC Pumps 1.5 – 50 HP (Qty 4)	\$10,000.00
Total		\$24,875.00

# Ohio | Public Utilities Commission

Application to Commit Energy Efficiency/Peak Demand Reduction Programs (Mercantile Customers Only)

Case No.:EL-EEC
State of Ohio:
Kevin Henderson, Affiant, being duly sworn according to law, deposes and says that:
1. I am the duly authorized representative of:
Cincinnati Veterans Affairs Medical Center [insert customer or EDU company name and any applicable name(s) doing business as]
I have personally examined all the information contained in the foregoing application, including any exhibits and attachments. Based upon my examination and inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete.
I am aware of fines and penalties which may be imposed under Ohio Revised Code Sections 2921.11, 2921.31, 4903.02, 4903.03, and 4903.99 for submitting false information.
Revin Henderson, Energy Manager, 3/15/13 Signature of Affiant & Title
Signature of Afriant & Title
Sworn and subscribed before me this 15 day of MARCH, 2013 Month/Year
Karen S. Winstead Signature of official administering oath  KAREN S. WINSTEAD  Print Name and Title

My commission expires on January 19, 2014



Karen S. Winstead Notary Public, State of Ohio My Commission Expires 01-19-2014

#### Attachment 1 - Department of Veterans Affairs (Veterans Hospital)

Appendix 1 – Electric History

Appendix 1 Electric History		
Electric Meter# 108026018 - Rate DP02		
VETERANS ADMIN HOSP 539		
3200 VINE CINCINNATI, OH 45220		
Date	Days	Actual KWH
11/29/2012	31	1,376,340
10/29/2012	31	1,624,889
9/28/2012	30	1,855,042
8/29/2012	29	1,902,216
7/31/2012	32	2,265,554
6/29/2012	29	1,843,020
5/31/2012	30	1,827,708
5/1/2012	32	1,545,950
3/30/2012	29	1,485,662
3/1/2012	29	1,302,790
2/1/2012	29	1,281,146
1/3/2012	33	1,489,733
Total		19,800,050

Appendix 2 – Annual kWh and KW savings

								Baseline	Baseline
				KW Gross				Annual	Annual
	Annual kWh		TOTAL	with				kWh	KW
	Gross with Savings Per	Measure	TOTAL Annual	Savings Per	Total KW			Savings Per	Savings Per
Measure	Measure	Amount	kWh Saved	Measure	Saved	Existing Equipment Assumptions	New Equipment Assumptions	Measure	Measure
						Existing Equipment / tocumptions	New efficiency is assumed to be		
							.58 kw/ton full load and .41		
						Base efficiency is assumed to be .58	kw/ton IPLV. Large Office		
						kW/ton full load and .55 kW/ton IPLV.	Building type is assumed. A		
Water-Cooled cent Chiller greater than						Large Office Building type is assumed.	market average of HVAC air		
300 ton 0.58 kW_ton with 0.41 kW_ton						A market average of HVAC air	distribution schemes are		
IPLV	133.92	2250 (Tons)	301320	0.05	112.5	distribution schemes are assumed.	assumed.	124.65	0.04
						Base efficiency is assumed to be	New efficiency is assumed to be		
						Variable Air Volume with inlet vane.	Variable Air Volume with VFD. A		
						A market average of building types	market average of building types		
						and HVAC air distribution schemes	and HVAC air distribution		
VFD HVAC Fans ONLY (1.5-50 HP)	1335.12	50 (HP)	66756	0.22	11	are assumed.	schemes are assumed.	1242.76	0.21
							N 60: 1 1 1		
							New efficiency is assumed to be a		
						Base efficiency is assumed to be a	variable volume pump with VFD.		
						constant volume pump. A market	A market average of building		
						average of building types and HVAC	types and HVAC air distrubition		
VFD HVAC Pumps ONLY (1.5-50 HP)	3803.59	200 (HP)	760718	0.64	128	air distribution schemes are assumed	schemes are assumed.	3540.46	0.60
Totals		2500	1,128,794		251.5	]			

Note: DSMore calculated the kW savings based on load shapes and energy savings. These values may also reflect minor DSMore software rounding error

Appendix 3 – Cash Rebate

Measure	Amount
Water-Cooled cent Chiller greater than 300 ton 0.58 kW_ton with 0.41 kW_ton	
IPLV	\$12,375.00
VFD HVAC Fans ONLY (1.5-50 HP)	\$2,500.00
VFD HVAC Pumps ONLY (1.5-50 HP)	\$10,000.00
Totals	\$24,875.00

Appendix 4 – Utility Cost Test

Measure	UCT
Water-Cooled cent Chiller greater than 300 ton 0.58 kW_ton with 0.41 kW_ton	
IPLV	11.1
VFD HVAC Fans ONLY (1.5-50 HP)	14.5
VFD HVAC Pumps ONLY (1.5-50 HP)	16.5

Appendix 5 - Avoided Supply Costs

Measure	T&D	Production	Capacity	Measure Amount	Total Avoided Costs
Water-Cooled cent Chiller greater than 300 ton 0.58 kW_ton with 0.41 kW_ton					
IPLV	\$11.00	\$57.00	\$35.00	2250 (Tons)	\$231,750
VFD HVAC Fans ONLY (1.5-50 HP)	\$32.00	\$358.00	\$99.00	50 (HP)	\$24,450
VFD HVAC Pumps ONLY (1.5-50 HP)	\$92.00	\$1,020.00	\$283.00	200 (HP)	\$279,000
Totals				2500	\$535,200

Appendix 6 - Utility Program Costs

Measure	Measure Amount	Admin Costs	Total Costs
Water-Cooled cent Chiller greater than 300 ton 0.58 kW_ton with 0.41 kW_ton			
IPLV	2250 (Tons)	\$4.00	\$9,000
VFD HVAC Fans ONLY (1.5-50 HP)	50 (HP)	\$14.00	\$700
VFD HVAC Pumps ONLY (1.5-50 HP)	200 (HP)	\$34.00	\$6,800
Totals	2500		\$16,500

## **Ohio Mercantile Self Direct Program**

Application Guide & Cover Sheet

Questions? Call 1-866-380-9580 or visit www.duke-energy.com.

Email this form along with completed Mercantile Self Direct Prescriptive or Custom applications, proof of payment, energy savings calculations and spec sheets to SelfDirect@Duke-Energy.com. You may also fax to 1-513-629-5572.

Mercantile customers, defined as using at least 700,000 kWh annually are eligible for the Mercantile Self Direct program. Please indicate mercantile qualification:

| Yellow | Direct program. Please indicate mercantile qualification:
| multiple accounts in Ohio (energy usage with other utilities may be counted toward the total)

Please list Duke Energy account numbers below (attach listing of multiple accounts and/or billing history for other utilities as required):

Account Number	Annual Usage	Account Number	Annual Usage
9180-0750-01-1	20,251,000 KWh		
		2.	

Self Direct rebates are available for completed Custom projects that have not previously received a Duke Energy Smart \$aver® Custom Incentive. Self Direct incentives are applicable to Prescriptive measures that were installed more than 90 days prior to submission to Duke Energy and have not previously received a Duke Energy Prescriptive rebate.

Self Direct Program requirements dictate that certain projects that may be Prescriptive in nature under the Smart \$aver program must be evaluated using the Custom process. Use the table on page two as a guide to determine which Self Direct program fits your project(s). Apply for Self Direct projects using the appropriate application forms in conjunction with this cover sheet. Where Mercantile Self Direct Prescriptive applications are listed, please refer to the measure list on that application. If your measure is not listed, you may be eligible for a Self Direct Custom rebate. Self Direct Custom applications, like Smart \$aver Custom applications, should include detailed analysis of pre-project and post-project energy usage and project costs. Please indicate which type of rebate applications are included in the table provided on page two.

Please check each box to indicate	e completion of the following progr	ram requirements:	<u> </u>
All sections of appropriate	✓ Proof of payment.*	Manufacturer's Spec sheets	☐ Energy model/calculations
application(s) are completed			and detailed inputs for
			Custom applications

<sup>\*</sup> If a single payment record is intended to demonstrate the costs of both Prescriptive & Custom projects, please include an additional document with an estimated breakout of costs for each Prescriptive and Custom energy conservation measure.

Application Type	Replaced equipment at end of lifetime or because equipment failed**	Replaced fully operational equipment to improve efficiency***	New Construction	
	NGD C - D - 4 1 [7]	MSD Prescriptive Lighting [	MSD Prescriptive Lighting	
Lighting	MSD Custom Part 1 Custom Lighting Worksheet	MSD Custom Part 1  Custom Lighting Worksheet	MSD Custom Part 1 ☐ Custom Lighting Worksheet ☐	
Heating & Cooling	MSD Custom Part 1	MSD Custom Part 1	MSD Prescriptive Heating & Cooling	
Heading & Cooming	MSD Custom General Worksheet	MSD Custom General Worksheet	MSD Custom Part 1 ☐ MSD Custom General Worksheet ☐	
Window Films,				
Programmable Thermostats, & Guest Room Energy Management Systems	MSD Custom Part 1 ☐  MSD Custom General and/or EMS  Worksheet(s) ☐	MSD Prescriptive Heating & Cooling	MSD Custom Part 1 ☐  MSD Custom General and/or EMS  Worksheet(s) ☐	
Chillers & Thermal	MSD Custom Part 1	MSD Custom Part 1	MSD Prescriptive Chillers & Thermal Storage	
Storage	MSD Custom General Worksheet	MSD Custom General Worksheet	MSD Custom Part 1 ☐ MSD Custom General Worksheet ☐	
Chiller Tune-ups	MSD Prescriptive Chiller Tune-ups	MSD Prescriptive Chiller Tune-ups	MSD Prescriptive Chiller Tune-ups	
Motors & Pumps	MSD Custom Part 1	MSD Custom Part 1	MSD Prescriptive Motors, Pumps & Drives □	
Motors & Fumps	MSD Custom General Worksheet	MSD Custom General Worksheet	MSD Custom Part 1  MSD Custom General Worksheet	
VFDs	Not Applicable	MSD Prescriptive Motors, Pumps & Drives	MSD Custom Part 1 ☐	
V F DS	Not Applicable	MSD Custom Part 1 ☐ MSD Custom VFD Worksheet ☐	MSD Custom VFD Worksheet	
	MSD Custom Part 1	MSD Custom Part 1	MSD Prescriptive Food Service	
Food Service	MSD Custom General Worksheet	MSD Custom General Worksheet	MSD Custom Part 1 ☐ MSD Custom General Worksheet ☐	
	MSD Custom Part 1	MSD Custom Part 1	MSD Prescriptive Process	
Air Compressors	MSD Custom Compressed Air Worksheet	MSD Custom Compressed Air Worksheet	MSD Custom Part 1 ☐ MSD Custom Compressed Air Worksheet ☐	
	MSD Custom Part 1	MSD Prescriptive Process	MSD Custom Part 1	
Process	MSD Custom General Worksheet	MSD Custom Part 1 ☐ MSD Custom General Worksheet ☐	MSD Custom General Worksheet	
Energy Management Systems	MSD Custom Part 1 ☐ MSD Custom EMS Worksheet ☐	MSD Custom Part 1 ☐ MSD Custom EMS Worksheet ☐	MSD Custom Part 1 ☐ MSD Custom EMS Worksheet ☐	
Behavioral*** & No/Low Cost		MSD Custom Part 1		

<sup>\*\*</sup> Under the Self Direct program, failed equipment and equipment at the end of its useful life are evaluated differently than early replacement of fully functioning equipment. All equipment replacements due to failure or old age will be evaluated via the Custom program.

<sup>\*\*\*</sup> Please ensure that you include the age of the replaced equipment for measures classified as "Early Replacement" in your application as well as the estimated date that you would have otherwise replaced the existing equipment if you had not chosen a more energy efficient option.

\*\*\*\* Behavioral energy efficiency and demand reduction projects must be both measurable and verifiable. Provide justification with your application.



# MERCANTILE SELF DIRECT Ohio Chillers / Thermal Storage Incentive Application

Questions? Call 1-866-380-958 Email the complete, signed app		all required documents to	SelfDirect@duk	e-energy.com	or fax to 5	13,629,5572	11 - Duke Ener
is this applica			<i>V b M√W&lt;⊿ ⊦</i> <b>EVISED</b> (change			DOT by	rebate team H
Bullding Type – Required (ch	NAME OF THE OWNER OWNER OF THE OWNER OWNE	(Original) Or	EVICED (Grange	a made to origin	iai applicatio	117	
☐ Data Centers		Full Service Resta	aurant		Office		
☐ Education/K-12		▼ Healthcare	W. 183 (1953)		Public As	sembly	P 100
☐ Education Other	340×350 GAA	Industrial				der/Safety	
☐ Elder Care/Nursing Home		☐ Lodging				Worship/Ch	urch
☐ Food Sales/Grocery		Retail (Small Box	V 200 100 100 100 100 100 100 100 100 100		] Service	vvoisiiip/Oi	iuion
☐ Fast Food Restaurant		Retail (Big Box)			] Warehou	00	
William Value and Company to the Company		C. (Dig Box)		<u> </u>	1 Waterloo	5 <b>6</b>	
Other:		Lastra a	F-14 885 3 3 44 3	Section 18			
How did you hear about the p			/	- 11 T	l milari ko		4
Duke Energy Representative		☐ Web Site			] Radio	en en Europe	
Contractor / Vendor	<u>,1980年</u>	Other	<u> </u>	<u> </u>			
Please check each box to indica	ate completi	on of the following program	requirements:		e e e e e e e e e e e e e e e e e e e		_
☑ All sections of application	<b>⊘</b> Inv	roice with make, model mber, quantity and uipment manufacturer	Tax ID num	nber for payee	X		vendor agree to Conditions
		1 Pris (22)					9
Customer Information		( / // / / / / / / / / / / / / / / / /			e de la companya de l	·/	11 /
Customer/Business		t. of Veteran's Affair					Henderson
Phone	513		Account Nu			9180	-0750-01-1
Street Address (Where incentive	e should be	mailed)	32.00	Vine St.			
City		cinnati	State	0 #	Z	ip Code	45220
Installation Street Address		00 Vine St.	·			· · · · · · · · · · · · · · · · · · ·	
City	Ci	ncinnati	State	OH	<u>,</u>   Z	ip Code	45220
E-mail Address	Ke	evin. Henderson	1 @ Va. 90	<b>~</b>			
*Failure to provide the account n	umber ássoc	iated with the location wher	re the installation	took place wil	l result in r	ejection of th	e application.
Vendor Information		144 St. 154	E	18. (18. ) 20. (18. )		-	42.00
Vendor	Shr	udde & Zimmerman	Contact			Mark Z	inmerman 31-8261
Phone	8	59 331-3160	> Fax 85	9 331-	8261	859 3	31-8261
Street Address	16	71 Park Rd	Ste.#11	_			
City	For	+ Wight	State	FU	Z	p Code	41011
E-mail Address	mi	Z@ Shrudde-	-Zinamern	han , com	1		1101
If Duke Energy has questions				X Custo	mer	☐ Vendo	or
Payment Information				- 4		512	92
Who should receive incentive p	avment?			☐ Vendor (	Customer	must sign b	elow)
I hereby authorize payment of in		Customer Signature (writ	ten signature)	Hovin	OL/	min	
directly to the vendor:	J .	Date	<u> </u>	12/15/		versu.	
Provide Tax ID Number for Pay		Customer Tax ID #		310542398			
riovide rux is ridiliser for ruy		Vendor Tax ID#		3.0	3 12 8	710	
		1					
Terms and Conditions	=						Edward Com
I have read and hereby agree to	the Terms	& Conditions and Program		<del></del>			·
Customer Signature			0.4	nturo I			
	aun ?	Linderson	Vendor Signa	ature			
Date	aun 2 2/151	Lenderson 12	Date	ature			
	2/151 nergy	Manager	Date Title				



		See Page	4 of form	n for require	ed efficienc	y levels an	nd equipme	ent eligibility	,		
Air Cooled Chillers		110	4		1						
Make/Model # Scroll/Screw Type	379	# of Units	AHRI Tons/L	Jnit kW/to			PLV Ir /ton*	s/ton	Building Type	Date Installed & Operable	Total Incentive
			-							(mm/yy)	
			<u> </u>						24 14		•
Chiller performance	and IPLV m	ust be test	ed und	er AHRI co	nditions -	submit de	ocumenta	tion of con	nnliance		··········
	isting equipr	): [ nent or rep	] New E	Equipment /	New Cons	truction must apply	/ for Self D	irect Custo	m program.		
The Equipment below is Early replacement of exi Vater Cooled Chillers	isting equipr	): [ nent or rep	] New E	quipment / nt of failed ε	New Cons	truction must apply	/ for Self D	irect Custo	m program.		
arly replacement of exi	isting equipr	): [nent or rep	] New E	quipment / nt of failed ε	New Cons	truction must apply	/ for Self D	irect Custo	m program.	Date Installed & Operable (mm/yy)	Total Incentive
arly replacement of exi	Make/M	): [ment or rep	New Elacemer form	Equipment / nt of failed e n for require AHRI	New Consequipment of the consequence of the consequ	truction must apply y levels ar Incentive	/ for Self D nd equipme	irect Custonent eligibility	m program.	Installed & Operable (mm/yy)	1 '
Vater Cooled Chillers Description	sting equipr	): [ment or rep	New Elacement  of form  of Units	Equipment / nt of failed e n for require AHRI Tons/Unit	New Consequipment of the consequence of the consequ	truction must apply y levels ar incentive \$/ton	of for Self Dand equipment IPLV kW/ton*	irect Custorent eligibility Incentive \$/ton	Building Type	Installed & Operable (mm/yy)	1 '



#### **Thermal Storage Incentives**

Total Incentive (\$190/kW shifted)

Chiller Demand (kW)

Conventional System Specifications (For Comparison Purposes)
Chiller Plant Description (Manufacturer, type, tonnage, AHRI kW/ton

Annual Electrical Operating Cost with Conventional Cooling

☐ New Equipment / New Construction The Equipment below is (check one): Early replacement of existing equipment or replacement of failed equipment must apply for Self Direct Custom program. Thermal Storage System Specifications\* Manufacturer of Thermal Storage Equipment Type of Thermal Storage ☐ Chilled Water ☐ Ice Bank ☐ Ice Harvester Model Number Controls Manufacturer ☐Maximum Cooling Shift Control Strategy Demand Limiting Number of Thermal Storage Units Partial Storage ☐ Full Storage Partial or Full Storage Demand Shifted (kW)XX Storage Capacity (Ton Hours) Storage Capacity (Gallons If Applicable) Peak Cooling Load (Tons) Cooled Area (sq. ft.) Hours of Operations M-F Hours of Operations Sat Hours of Operations Sun Date Installed and Operable (mm/yy) Thermal Storage chiller Plant Description (Manufacturer, Tonnage, Ice Making kW/ton) Condenser Type ☐ Air Cooled ☐ Water Cooled Premium cost for Thermal Storage (Dollars) Annual Electrical Operating Cost with Storage (Dollars) Annual Savings as a result of Thermal Storage (Dollars) Simple Payback including Incentive (Years)

<sup>\*</sup>Thermal Storage Units with a >1MW load shift are not eligible for incentives under the Prescriptive Program but can be considered for custom incentives. The Custom application and process document are located on the Self Direct websites.

<sup>\*\*</sup> Average demand shifted during the peak demand timeframe of 10:00am to 6:00pm for summer months of May through September.



Equipment Requirements
Chillers Incentive Table & AHRI Rated Efficiency Requirements\*

R COOLED CHILLERS - All Size			
tal Incentive = Base + Additiona		all the second s	
	200.0		200
croll/Screw Type Chillers	100 miles		79570
Full load kW/ton – EER	Base Incentive \$/ton	Part Load IPLV kW/ton – EER	Additional Incentive \$/ton
1.230 - 9.80	\$4.00	1.130 - 10.60	
1.230 - 9.80	\$4.00	1.010 - 11.90	\$5.83
1.230 - 9.80	\$4.00	0.890 - 13.50	\$12.07
1.230 - 9.80	\$4.00	0.810 - 14.80	\$15.75
1.142 – 10.50	\$12.50	1.046 - 11.50	60.00
1.142 - 10.50	\$12.50	0.925 - 13.00	\$6.00
1.142 10.50	\$12.50	0.879 – 13.70	\$8.35
1.142 – 10.50	\$12.50	0.674 - 17.80	\$18.60
1.046 - 11.50	\$15.00	0.961 – 12.50	05.70
1.046 - 11.50	\$15.00	0.847 - 14.20	\$5.70
1.046 - 11.50	\$15.00	0.795 - 15.10	\$8.30
1.046 – 11.50	\$15.00	0.618 - 19.40	\$17.15
ATER COOLED CHILLERS – < 1			
ital Incentive = Base + Additions		er i "gar kansari ji ji ji ji ji ji ji	
the transfer of the second			191
rew/Scroll Type Chiller			
Full load kW/ton – EER	Base Incentive \$/ton	Part Load IPLV kW/ton – EER	Additional Incentive \$/ton
0.790 – 15.20	\$2.50	0.620 - 19.40	
0.790 – 15.20	\$2.50	0.590 - 20.30	\$1.50
0.790 - 15.20	\$2.50	0.550 - 21.80	\$3.50
0.790 - 15.20	\$2.50	0.510 - 23.50	\$5.50
0.790 – 15.20	\$2.50	0.470 – 25.50	\$7.50
0.710 - 16.90	\$7.50	0.630 - 19.00	
0.710 - 16.90	\$7.50	0.560 - 21.40	\$3.50
0.710 - 16.90	\$7.50	0.530 - 22.60	\$5.00
0.710 - 16.90	\$7.50	0.500 - 24.00	\$6.50
0.710 - 16.90	\$7.50	0.460 - 26.10	\$8.50
0.710 - 16.90	\$7.50	0.430 - 27.90	\$10.00
0.630 - 19.00	\$10.00	0.560 - 21.40	
0.630 - 19.00	\$10.00	0.500 - 24.00	\$3.00
0.630 - 19.00	\$10.00	0.470 - 25.50	\$4.50
0.630 - 19.00	\$10.00	0.440 - 27.30	\$6.00
0.630 – 19.00	\$10.00	0.410 - 29.30	\$7.50
0.630 – 19.00	\$10.00	0.380 - 31.60	\$9.00
entrifugal Type Chiller	SATISFACION STATES		
0.700 – 17.10	\$2.50	0.570 – 21.10	
0.700 – 17.10	\$2.50	0.530 - 22.60	\$2.00
0.700 – 17.10	\$2.50	0.500 - 24.00	\$3.50
0.700 – 17.10	\$2.50	0.420 - 28.60	\$7.50
0.630 - 19.00	\$7.50	0.600 - 20.00	
0.630 19.00	<b>\$7.50</b>	0.510 - 23.50	\$4.50
0.630 - 19.00	\$7.50	0.480 - 25.00	\$6.00
0.630 - 19.00	\$7.50	0.450 - 26.70	\$7.50
0.630 - 19.00	\$7.50	0:380 - 31.60	\$11.00.
0.560 - 21.40	\$10.00	0.530 - 22.60	
0.560 - 21.40	\$10.00	0.460 - 26.10	\$3.50
0.560 - 21.40	\$10.00	0.430 - 27.90	\$5.00
			\$6.50
0.560 - 21.40	\$10.00	0.400 - 30.00	Φ0.30

\*AHRI Standard 550/590
2003 Standard for Performance Rating of Water-Chilling Packages using the vapor compression cycle.



\$10.00

\$3,50

\$4.50

\$6.00

\$9.00

#### WATER COOLED CHILLERS - 150-300 tons Total Incentive = Base + Additional Screw/Scroll Type Chiller Full load kW/ton - EER Base Incentive \$/ton Part Load IPLV kW/ton - EER Additional Incentive \$/ton 0.720 - 16.700.570 - 21.10\$2.50 0.720 - 16.70\$2.50 0.540 - 22.20\$1.50 0.720 - 16.70\$2.50 0.500 - 24.00\$3.50 0.720 - 16.70 0.470 - 25.50\$2.50 \$5.00 0.720 - 16.700.430 - 27.90\$2.50 \$7.00 0.650 - 18.500.570 - 21.10 \$7,50 0.650 - 18.500.510 - 23.50 0.480 - 25.00 \$3.00 \$7.50 0.650 - 18.50\$7,50 \$4.50 0.650 - 18.50\$7.50 0.450 - 26.70\$6.00 0.650 - 18.50\$7.50 0.420 - 28.60\$7.50 0.650 - 18.50\$7.50 0.390 - 30.80\$9.00 0.570 - 21.10\$10.00 0.510 - 23.50\$3.00 0.570-21.10 \$10.00 0.450 - 26.700.430 - 27.90 0.400 - 30.00 0.570-21.10 \$10.00 \$4.00 0.570-21.10 \$5.50 \$10.00 0.570- 21.10 \$10.00 0.370 - 32.40\$7.00 0.570-21.10 \$10.00 0.340 - 35.30\$8.50 Centrifugal Type Chiller 0.630 - 19.00 \$2.50 0.510 - 23.500.630 - 19.000.480 - 25.00\$2.50 \$1.50 0.630 - 19.00\$2.50 0.450 - 26.70\$3.00 0.630 - 19.000.380 - 31.60\$2.50 \$6.50 0.570 - 21.10\$7.50 0.540 - 22.200.460 - 26.10 0.570 - 21.10\$4.00 \$7.50 0.570 - 21.10\$7.50 0.430 - 27.90\$5.50 0.570 - 21.10\$7.50 0.400 - 30.00\$7.00

0.340 - 35.30

0.480 - 25.00

0.410 - 29.30

0.390 - 30.80

0.360 - 33.30

0.300 - 40.00

0.570 - 21.10 0.510 - 23.50

0.510 - 23.50

0.510 - 23.50

0.510 - 23.50

0.510 - 23.50

2003 Standard for Performance Rating of Water-Chilling Packages using the vapor compression cycle.

\$7.50

\$10.00

\$10.00

\$10.00

\$10.00

\$10.00

<sup>\*</sup>AHRI Standard 550/590



# WATER COOLED CHILLERS -> 300 tons Total Incentive = Base + Additional

Screw/Scroll Type Chiller	The same was the same of the s		
Full load kW/ton – EER	Base Incentive \$/ton	Part Load IPLV kW/ton – EER	Additional Incentive \$/ton
0.640 - 18.75	\$2.50	0.510 - 23.50	
0.640 18.75	\$2.50	0.480 - 25.00	\$1.50
0.640 - 18.75	\$2.50	0.450 - 26.70	\$3.00
0.640 - 18.75	\$2.50	0.420 - 28.60	\$4.50
0.640 - 18.75	\$2.50	0.380 - 31.60	\$6.50
0.580 20.70	\$7.50	0.510 - 23.50	
0.580 - 20.70	\$7.50	0.450 - 26.70	\$3.00
0.580 - 20.70	\$7.50	0.430 - 27.90	\$4.00
0.580 – 20.70	\$7.50	0.400 - 30.00	\$5.50
0.580 20.70	\$7.50	0.370 - 32.40	\$7.00
0.580 - 20.70	\$7.50	0.350 - 34.30	\$8.00
0.510 - 23.50	\$10.00	0.460 - 26.10	
0.510 – 23.50	\$10.00	0.400 - 30.00	\$3.00
0.510 - 23.50	\$10.00	0.380 - 31.60	\$4.00
0.510 - 23.50	\$10.00	0.360 - 33.30	\$5.00
0.510 - 23.50	\$10.00	0.330 - 36.40	\$6.50
0.510 - 23.50	\$10.00	0.310 - 38.70	\$7.50
Centrifugal Type Chiller		SECURIOR SEE SEE	790
0.580 - 20.70	\$2.50	0.470 - 25.50	
0.580 - 20.70	\$2.50	0.440 - 27.30	\$1.50
0.580 - 20.70	\$2.50	0.410 - 29.30	\$3.00
0.580 - 20.70	\$2.50	0.350 - 34.30	\$6.00
0.520 - 23.10	\$7.50	0.490 - 24.50	
0.520 - 23.10	\$7.50	0.420 - 28.60	\$3.50
0.520 - 23.10	\$7.50	0.390 - 30.80	\$5.00
0.520 - 23.10	\$7.50	0.370 - 32.40	\$6.00
0.520 - 23.10	\$7.50	0.310 - 38.70	\$9.00
0.460 - 26.10	\$10.00	0.440 - 27.30	
0.460 - 26.10	\$10.00	0.370 - 32.40	\$3.50
0.460 - 26.10	\$10.00	0.350 - 34.30	\$4.50
0.460 - 26.10	\$10.00	0.330 - 36.40	\$5.50
0.460 - 26.10	\$10.00	0.280 - 42.90	\$8.00

\*AHRI Standard 550/590
2003 Standard for Performance Rating of Water-Chilling Packages using the vapor compression cycle.

Thermal Storage Incentives			100		-
	Incentive	 			
THERMAL STORAGE UNIT	\$95/kW shifted			1	



#### **Program Requirements**

## **Equipment Eligibility**

- Duke Energy will use the AHRI database for verifying equipment efficiencies for all the chillers. If the equipment or matched set is not in the
  AHRI database, the manufacturer's technical fact sheets must be provided showing the efficiency level tested under AHRI conditions as
  described in AHRI standard 550/590. Equipment capacity (size) and efficiency must be based on AHRI design conditions. Full load
  efficiency rating (FL) and Integrated Part load Value (IPLV) must be provided for all chillers.
- · Incentives for chillers will be paid based on the AHRI tons per unit.
- EER/COP and IPLV values shall include all connected loads, such as compressors, condenser fans, and control kW. Chiller components, such as motors and VFDs, are incented as part of the chiller package and are not independently eligible for prescriptive incentives during a chiller replacement
- Chiller incentives are only available for HVAC space cooling applications. All equipment installed must serve as a primary source of
  cooling for the facility. Industrial process cooling may qualify for a custom incentive.
- · Chillers purchased and installed for backup or redundant systems are not eligible.
- Thermal Storage Units with a >1MW load shift are not eligible for incentives under the Prescriptive Program but can be considered for
- · custom incentives.
- All equipment must be new to be eligible for incentives. Used equipment is not eligible for incentives.

#### Incentive Eligibility

- Incentives are only available to customers on a Duke Energy Ohio non-residential rate.
- Duke Energy Customers who purchase electric generation from an alternative supplier are eligible to participate.
- Incentive will not be paid until eligible equipment has been installed, is available to operate, and verification has been completed by Duke Energy staff as noted in the Term & Conditions stated below.
- Duke Energy reserves the right to revise incentive levels and/or qualifying efficiency levels at any time.
- Customer may assign the incentive to the vendor who installed/supplied the equipment. The customer's signature is required in the
  Payment Information section on page 1 of this form to assign the incentive to the vendor. Customer agrees that such an action constitutes
  an irrevocable assignment of the incentive. This assigned incentive must reduce the purchase price paid for the equipment by an
  equivalent amount.
- Leased equipment is eligible for incentives providing the equipment meets the program requirements and the customer provides the
  required documentation noted on the Incentive Application Process page of this application.
- Any equipment which, either separately or as part of a project, has or will receive an incentive from any other Duke Energy program
  is ineligible.
- In no case will Duke Energy pay an incentive above the actual cost of the new equipment.
- Incentive recipient assumes all responsibilities for any tax consequences resulting from Duke Energy incentive payment.
- To qualify for Duke Energy incentives, applicants who provide their social security number as their federal tax identification number for tax purposes must sign and return the "Customer consent to release personal information" form ("Consent Form") along with the application. Incentive applications are processed by a 3<sup>rd</sup> party vendor. The 3<sup>rd</sup> party vendor is responsible for mailing the 1099 form at the end of the calendar year for tax filing. Duke Energy and the 3<sup>rd</sup> party vendor have signed a confidentiality agreement to protect your personal information. If your social security number is your federal tax ID number and you elect not to sign the Consent Form, please do not send Duke Energy the application, as you will not be qualified to participate in the incentive program.

#### **Terms and Conditions**

I certify that this premise is served by Duke Energy (or an affiliate of Duke Energy), that the information provided herein is accurate and complete, and that I have purchased and installed the high efficiency equipment (indicated herein) for the business facility listed herein and not for resale. Attached is an itemized invoice for the indicated installed equipment. In understand that the proposed incentive payment from Duke Energy is subject to change based on verification and Duke Energy approval. I agree to Duke Energy verification of both the sales transaction and equipment installation which may include a site inspection from a Duke Energy representative or Duke Energy agent. I understand that I am not allowed to receive more than one incentive from Duke Energy on any piece of equipment. I also understand that my participation in the program may be taxable and that my company is solely responsible for paying all such taxes. I hereby agree to indemnify, hold harmless and release Duke Energy and it's affiliates from any actions or claims in regards to the installation, operation and disposal of equipment (and related materials) covered herein including liability from an incidental or consequential damages. Duke Energy does not endorse any particular manufacturer, product or system design within these programs; does not expressly or implicitly warrant the performance of installed equipment (Contact your contractor for details regarding equipment warranties), and is not liable for any damage caused by the installation of the equipment nor for any damage caused by the malfunction of the installed equipment.



### **Incentive Application Instructions**

#### IMPORTANT NOTICE

Delays in processing incentive payments will occur if required documentation is not included with completed application(s).

- 1. Contact Duke Energy toll free at 866-380-9580 to confirm customer eligibility. Applications are available for download at <a href="https://www.duke-energy.com">www.duke-energy.com</a>.
- 2. Review program and equipment requirements on the incentive application. (Page 7)
- 3. Purchase and install eligible energy-efficient equipment.
- 4. The following items must be included to verify projects. If they are not included, it will delay payment of incentive.
  - A. Itemized invoice for all equipment installed to include:
    - a. Equipment cost
    - b. Quantity per equipment type installed
    - c. Model # for each equipment type
    - d. Manufacturer's data sheet for each equipment model #.
  - B. Make sure the account number provided on the cover page (customer information section) is associated with the location where the equipment was installed. If the account # does not match the address where the equipment was installed, the application will be rejected as ineligible.
  - C. Provide required tax ID# for payee.
  - D. Customer must sign and date the application after reviewing the Terms and Conditions. If customer wishes to assign payment of the incentive directly to the vendor, the customer should circle the appropriate payee in the Payment Information section of the application and sign their name to authorize payment.
- 5. Duke Energy may require site verification of projects that have been self-installed, prior to payment of incentive.
- 6. Email the complete, signed application with all required documents to SelfDirect@duke-energy.com or fax to 513-629-5572.
- 7. A percentage of equipment installations will be site verified for quality assurance purposes. Once selected, a Duke Energy representative will contact the customer to arrange for the inspection. All incentive payments related to the project will be withheld until site verification is complete. There is no charge to the customer for these inspections.



# **Evergreen Chiller Performance Outputs**

Project Name: KLH - Geiler VA Chillers Sales Office: CAC Distributing 12/5/08 02:22 PM

#### Tag Name: CH-1 NPLV

Chiller	· · · · · · · · · · · · · · · · · · ·
Chiller Model	19XRV6566465LEH64
Starter / VFD	19XRV6566465LEH64 VFD - Unit Mounted
Refrigerant Type	2R-134a
Cooler	
Size	65
	Nozzle-in-Head, 150 psi
Passes	
Tubing	Super E2 (SUPE2), .025 in, Copper
Fluid Type	Fresh Water
Fouling Factor (I	hr-sqft-F)/BTU0.00010
Compressor	
Size	465
Flow Controls	
Float Valve Size	
Flasc Orifice	
. 19	

Weights	
Total Rigging Weight241	32 lb
Total Operating Weight274	15 lb
Refrigerant Weight15	
Condenser	
Size	66
Waterbox Type Nozzie-in-Head, 150 p	
Passes	.2
TubingSpike Fin III (SPK3), .025 in, Copp	er
Fluid Type Fresh Wat	
Fouling Factor (hr-sqft-F)/BTU 0.000	25
Motor	
SizeL	H
Line Voltage/Hertz469-3-	60

			the second second	
Output Type	Full Load	Part Load	Part Load	Part Load
Percent Load	100.00	75.00	50.00	25.00
Chiller Capacity	750 Tons	563 Tons	375 Tons	188 Tons
Chiller Input kW	422 kW	236 kW	115 kW	76 kW
Chiller Input Power	0.562 kW/Ton	0.420 kW/Ton	0.308 kW/Ton	0.406 kW/Ton
IPLV	0.360 kW/Ton	N/A	N/A	N/A
Cooler'				
Entering Temp.	53.97 F	51.48 F	48.99 F	46.49 F
Leaving Temp.	44.00 F	44.00 F	44.00 F	44.00 F
Flow Rate	1800.0 gpm	1800.0 gpm	1800.0 gpm	1800.0 gpm
Pressure Drop	23.2 ft wg	23.3 ft wg	23.4 ft wg	23.5 ft wg
Condenser				
Leaving Temp.	94.27 F	81.71 F	69.33 F	67.22 F
Entering Temp.	85.00 F	75.00 F	65.00 F	65.00 F
Flow Rate	2250.0 gpm	2250.0 gpm	2250,0 gpm	2250.0 gpm
Pressure Drop	21.9 ft wg	22.5 ft wg	23.1 ft wg	23,1 ft wg
Motor			***************************************	
Motor Rated Load Amps	642	429	280	217
Chiller Rated Line Amps	584	346	. 192	139
Chiller Inrush Amps	584			
Max Fuse/CB Amps	900			
Min Circuit Ampacity	730			1. ·
		-		-

#### Messages:

(1) Certified in accordance with the ARI Water-Chilling Packages using the Vapor Compression Cycle Certification Program, which is based on ARI Standard 550/590-2008.

Page 1 of 1

activities of the comment of the com HABEGGE 2/04/09 2/04/09 74584302 THE HABEGGER CORPORATION 11413 ENTERPRISE PARK DRIVE CINCINNATI, OHIO 45241 PERI CINCINNATI, OHIO 45241 PH: (613) 612-4700 FAX: (615) 612-4701 745843-02 N 2/25/09 24200-VA VA MEDICAL - 18669 adding a mid \*\* DO NOT MAIL INVOICE \*\* GIVE TO MACKAY SHIP 051081 TINA DAVIS FOR MANUAL BILLING !! SPECIAL RESIDUES Cust omer GEILER COMPANY PAGE BILL TO 5561 CLENWAY AVENUE FLEASE REMIT TO: CINCINNATI, OH 45211 THE HABEGGER CORPORATION Subcontractor to Shrudde & Zimmermon P.O. BOX 23128 CINCINNATI, DH 45223-0128

		TO THE REPORT OF THE PROPERTY	
1	1		
•		BUBHITALS, MANUALS, JOBSITE, MISC EA	5
3	3		
·		EVERGREEN 750 TON CHILLER EA	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
		**	
	,	DO NOT MAIL INVOICE - PLEASE GIVE TO TIMA DAVIS FOR MANUAL BILLING !!	
		A THE THE SECRET SHE SECRET SHE SECRET SHE SECRET SHE SECRET SHE	
			; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;
			* .
			·
			•

TERMS: 1% 10TH PROX NET 11TH, 11/1/% PER MONTH SERVICE CHARGE ON ALL PAST DUE AMOUNTS (18% ANNUAL RATE)

IF PAYMENT IS MADE WITHIN OUR TERMS YOU MAY DEDUCT

\$15.00 MINIMUM BILLING 10% RESTOCKING CHARGE ON RETURNS 20% ON SPECIAL ORDERS. TAX

PLEASE PAY THIS AMOUNT

\$ 413,007.00

# SCHRUDDE & ZIMMERMAN, INC.

#### GENERAL CONTRACTOR

1671 Park Road, Suite #11 Fort Wright, Kentucky 41011

Telephone #: 859-331-3160 Fax #: 859-331-8261

DATE: February 26, 2009

TO: Financial Service Conter

ATEN: Prompt Payment

RE: Install New Chillers

539-C-80528 VA250-C-0242

NUMBER OF PAGES BEING FAXED INCLUDING THIS PAGE: 5

Very Truly Yours,

Paula Carrall Schrudde & Zimmerman, Inc. Line 16 on page 3 shows payment of chillers.

# @AIA Document G702 $^{-}$ – 1992

## Application and Certificate for Payment

TO OWNER:	PROJECT: Install New Chillers	APPLICATION NO: Four (4)	Distribution to:
Department of Veterans Affairs	539-C-80528	PERIOD TO: 26-Feb-09	OWNER []
3200 Vine Street	VA-250-C-0242	CONTRACT FOR: General Construction	ARCHITECT [
FROM CONTRACTOR:	VIA ARCHITECT:	CONTRACT DATE:	CONTRACTOR [
Schrudde & Zimmerman, Inc. 1671 Park Road, Suite #11		PROJECT NOS: VA-250-C-0242,	FIELD ()
Ft. Wright KY 41011			OTHER []

10,11 000		N.
Ft: Wright, KY 41011		
CONTRACTOR'S APPLICATION'FO	R PAYMENT	
Application is made for payment, as shown below, in	connection with the C	Contract.
Continuation Sheet, AIA Document G703, is attached	<b>d</b> .	
1, ORIGINAL CONTRACT SUM	\$3	,579,932.00
2. Net change by Change Orders	\$_	0.00
3. CONTRACT SUM TO DATE (Line   ± 2)		579.932.00
4. TOTAL COMPLETED & STORED TO DATE (Column	G on G703) \$ 2	329,483.00
5. RETAINAGE:		
a. % of Completed Work		*
(Column D + E on G703)	\$0.00	
b % of Stored Material		0.00
(Column F on G703)	` \$	0.00
Total Retainage (Lines 5a + 5b or Total in Colum	n I of G703) \$_	0.00
6. TOTAL EARNED LESS RETAINAGE	\$ ·	2,329,483.00
(Line 4 Less Line 5 Total)	-	<u> </u>
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT	,. \$	601,187.00
(Line 6 from prior Certificate)	-	
8. CURRENT PAYMENT DUE	\$	1.728.286.00
9. BALANCE TO FINISH, INCLUDING RETAINAGE		73.4
(Line 3 less Line 6)	\$1,26	0,449.00
CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Total changes approved in previous months by Own	ier \$	5

	*1 <del>,2</del> 5	0,449.00	Application and on the Continuation Sheet that are changed to
CHANGE ORDER SUMMARY.	ADDITIONS	DEDUCTIONS	ARCHITECT:
Total changes approved in previous months by Owner	\$	5	By:
Total approved this Month	\$	\$	This Certificate is not negotiable. The AMOUNT CERTIFIED
TOTALS	\$	\$	named herein. Issuance, payment and acceptance of payment as
NET CHANGES by Change Order	\$	0.00	the Owner or Contractor under this Contract
CAUTION: You should sign an original AIA Contract	Document, on whi	ch this text appears in	RED. An original assures that changes will not be obscured.

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR: Schrudde + Zimmerman, Inc. But Mal. N. Zimmerman Date: 2.27.09 Subscribed and sworm to before Paula B

Tebroon acon Notary Public: Taulab Can My Commission expires: 5-27-09

PAULA B. CARROLL
ROTARY PUBLIC - KENTUCKY
STATE AT LARGE
My Comm. Expires 5 101 K

#### ARCHITECT'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising this application, the Architect certifies to the Owner that to the best of the Architect's knowledge, and best of the Work has propressed as indicated, the quality of the Work is in information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the

AMOUNT	CERTIFIED	 	 والمنازية	 \$	
					figures on this
					amount certified

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor

named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract

AlA Document 6702\*\* - 1992. Copyright © 1953, 1965, 1971, 1978, 1983 and 1992 by The American Institute of Architects. All rights reserved. WARNING: This AlA\* Document is protected by U.S. Copyright Law and International Treaties. Unauthorized reproduction or distribution of this AlA\* Document, or any portion of it, may result in severe civil and oriminal penalties, and will be prosecuted to the maximum extent possible under the law. Purchasers are permitted to reproduce ten (10) copies of this document when completed. To report copyright violations of AtA Contract Documents, e-stail The American Institute of Architects' legal possible under the law. Purchasers a counsel, copyright@aia.org.

roj	ject: VA / Install New Chille	rs - 539-C-	80528 / VA	-250-C-024	2			
8A	88	BC	8D		8F	, , , , , , , , , , , , , , , , , , , ,	8G	8H
EM								
10.	DESCRIPTION	Total Value	Value in Place	Materials Stored	<u>Value in current</u>	Total Value to	Percent Commission	Balance
		64.075.00	1 000 00	Off Site	period	Date	Complete	Remainin
	General Conditions Labor	51,975.00		0.00	3,500.00 10,000.00	7,520.00 58,741.00	14% 46%	\$44,45 \$67,76
View 200 7 16	General Conditions Material	126,505.00					67%	\$50.71
_	MEP Fees	153,714.00	93,000.00	0,00	10,000.00	103,000.00	64%	\$9,64
	Structural Fees	27,143.00	12,500.00 0.00	0.00	5,000.00	17,500.00	0%	\$38,00
	Seismic Allowance	38,000.00		0.00	0.00	0.00		\$30,00 \$10.00
	Abatement Test Allowance	10,000.00	P. C. William at the confidence of the second contract of the second	0.00	0.00	0.00	0% 10%	
	Commissioning Allowance	20,000.00		0.00	2,000.00	2,000.00		\$18,00
	Carpentry/Demo/Concrete Labor	47,431.00		0.00	10,200.00	17,700.00		\$29,73
	Carpentry/Demo/Concrete Material	38,806.00		0.00	11,200.00	15,700.00		\$23,10
)	Structural Steel Labor	2,183.00		0.00	0.00	0,00		\$2,18
	Structural Steel Material	4,054.00		0.00	0.00	0.00	0%	\$4,05
?	Roofing Labor	6,791.00		0.00	0.00	0.00		\$6,79
}	Roofing Material	12,613.00		0.00	0.00	0.00		\$12,61
ļ.,,,,,	Painting Labor	6,727.00		0.00		0.00		\$6,72
5	Painting Material	3,621.00	0.00	0.00	0.00	0.00		\$3,62
}	Chillers Equipment	585,578.00	0.00	0.00	585,578.00	585,578.00		5
•	Chillers Labor:	53,130.00		0,00	40,379.00	45,008.00		\$8,12
}	Pumps-Equipment	144,375.00	12,500.00	0.00	131,875.00	144,375.00	100%	\$
<b>.</b>	Pumps Labor	52,091.00	4,519.00	0.00	21,357.00	25,876.00	50%	\$26,21
)	VFD's Equipment	74,036.00	0.00	0.00	0.00	0.00	0%	\$74,03
1	VFD's Labor	17,614.00	0,00	0.00	881.00	881.00	5%	\$16,73
2	Water Specialties Material	63,525.00	2,750.00	0.00	48,279.00	51,029.00	80%	\$12,49
3	Water Specialties Labor	17,325.00	750.00	0.00	7,970.00	8,720.00		\$8,60
	Piping Materials	479,325.00	230,000.00	0.00	249,325.00	479,325.00	100%	\$
5	Piping Labor	600,600.00	104,000.00	0.00	288,288.00	392,288.00		\$208,31
}	Controls	300,300.00	2,990.00	0.00	57,057.00	60,047.00	20%	\$240,25
4	Insulation	143,798.00		0.00		0.00		\$143,79
)	Rigging	8,663.00				6,931.00		\$1,73
) )	Misc. Subs	36,094.00				26,943.00		\$9,16
)	Rentals	9,240.00		0.00		6,896.00		\$2,34
i	Mobilization	34,650.00			8,650.00	34,650.00		4
?	Electric Mobilization Labor	3,465.00				3,465.00		
}	Electric Mobilization Material	2,310.00				2,310.00		
	Demo Labor	17,325.00				11,000.00		\$6,32
5	Demo Material	11,550.00						\$2,35
3	High Voltage Transformer Labor	2,310.00				0.00		\$2,3
	High Voltage Transformer Material	20,790.00				20,790.00		φ2,0
-	TOTAL	3,227,657.00	***		1,548,786.00		2001	\$1,090,18
	Contractor hereby certifies that information	UIGET (UUT, UU	000,007,00	Ψ.00	Approved:	#11VIJTIVIV	VO 70	ψ-15020, R
	provided herein is a true and accurate			] .	A.beca.r.m.			
	detailed breakdown for the work.				l			
	1.00	1						
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								
	2							
	Contractor		Date		Associate	: "		Date

Proj	ect: VA / Install Ne	w Chillers	539-C-80528 / VA-250-C-0242				<b>,</b>	
8A	88	8C	8D	8E	8F	8G	8H	81
ITEM		A SANCE OF THE SAN						
NO.	DESCRIPTION	<u>Total Value</u>	<u>Value in Place</u>	Materials Stored Off Site	Value in Current Period	Total ValueTo Date	Percent Complete	Balance remaining
36	From Sheet 1 of 2	3,227,657.00	588,687.00	0.00	1,548,786.00	2,137,473.00	66%	1,090,184.00
37	High Voltage Cable Labor	3,465.00	0.00	0.00	2,000.00	2,000.00	58%	1,465.00
38	High Voltage Cable Material	8,085.00	0.00	0.00	5,000.00	5,000.00	62%	3,085.00
39	Excavate Labor	1,733.00	0.00	0.00	1,733.00	1,733.00	100%	0,00
40	Excavate Material	577.00	0.00	0.00	577.00	577.00	100%	0.00
41	Dist. Equipment Labor	34,650.00	0.00	0.00	17,250.00	17,250.00	50%	17,400.00
42	Dist. Equipment Material	173,250.00	12,500.00	0.00	103,500.00	116,000.00	67%	57,250.00
43	Conduit Labor	46,200.00	0.00	0.00	11,500.00	11,500.00	25%	34,700.00
44	Conduit Material	11,550.00	0.00	0.00	5,750.00	5,750.00	50%	5,800.00
45	Wire Labor	28,875.00	0.00		5,750.00	5,750.00	20%	23,125.00
46	Wire Materials	34,650.00	0.00		23,000.00	23,000.00	66%	11,650.00
47	Hook-Up Labor	1,733.00	0.00	0.00	0.00	0.00	0%	1,733.00
48	Hook-Up Materials	1,732.00	0.00	0.00	0.00	0.00	0%	1,732.00
49	Miscellaneous Labor	2,888.00	0.00		1,725.00	1,725.00	60%	1,163.00
50	Miscellaneous Material	2,887.00	0.00	0.00	1,725.00	1,725.00	60%	1,162.00
. 61.5-12		0.00 0.00	0.00	0.00	0.00	0.00	***	0.00
and a ward of company		0.00	0.00		0.00	0.00	#DIV/0!	
		00.0	0.00		0.00 0.00	0.00		0.00
					0.00	0.00		0.00
		0.00	0.00			0.00		0.00
		0.00	0.00		0.00	0.00		0.00
-	The state of the s	0.00			0.00	0.00	#DIV/0!	0.00
	~~	0.00	0.00			0.00		0.00
		0.00	0.00			0.00		0.00
		0.00	0.00			0.00		0.00 0.00
		0.00	0.00			0.00		0.00
		0.00	0.00			0.00		0.00
	to the second to	0.00	0.00		0.00	0.00		0.00
		0.00	0.00	The second secon	W(#====================================	0.00		0.00
	1	0.00	0.00			0.00		0.00
		0.00	0.00			0.00		0.00
amedical as the part		0.00	0.00			0.00		0.00
		0.00	0.00			0.00		0.00
		0.00	0.00	0.00	0.00	0.00		0.00
		0.00	0.00			0.00		0.00
		0.00						
l							#DIV/0!	0,00
		0.00			***************************************		#DIV/0!	0.00
		0.00				0.00		0.00
ļ		0.00				0,00	The state of the s	0.00
		0.00	0.00			0.00	THE MENT OF MANY SECTIONS AND ASSESSED.	0.00
	,	0.00	0.00		themes are rich Mridinglist Versemme	0.00		0.00
	management received at 1 - 20 Mps at 41 10 (6.8 %) according to present region in principal contract of the co	0.00			The second secon	0.00		0.00
		0.00	0.00			0.00		0.00
		0.00	0.00	0.00	0.00	0.00	#DIV/01	0.00
			<u>'</u>					
	TOTAL	3,579,932.00	601,187.00	0.00		2,329,483.00	65%	1,250,449,00
	Contractor hereby certifies that information provided herein is a true and accurate detailed breakdown for the work.				Approved:			
• •	promotes a service service of the last of the service community	******		<u> </u>	abancalings (42 pt 12 pt 12)	Marie alecteristical	a es a stade medallamente	
	Contractor		Date		Associate			Date

# CONTRACTOR CERTIFICATION PROMPT PAYMENT

rrole	CE Mallie Turcatt was cultified
Loca	tionVA Hospital - Cincinnati, Ohio
Cont	ract No: VA250-C-0242
I here	eby certify, to the best of my knowledge and belief, that -
(1)	The amounts requested are only for performance in accordance with the Specifications, terms and conditions of the contract;
(2) the finance of the column	Payments to subcontractors and suppliers have been made from previous payments received under the contract, and timely payments will be made from the proceeds of the payment covered by this certification, in accordance with subcontractor agreements and the requirements of Chapter 39 of Title 31, United States Code; and
(3)	This request for progress payments does not include any amount which the prime contractor intends to withhold or retain from a subcontractor or supplier in accordance with the terms and conditions of the subcontract.  Schrudde & Zimmerman, Inc.
	(Contractor Name)
	Mark N. Zimmerman Mack N. Zimmerman
* * * * * * * * * * * * * * * * * * *	(Typed Name and Signature) (Individual Authorized By Above Firm To Make Certification)
Vi	ice President 2.27.09
	(Title) (Date)



# Mercantile Self Direct Incentive Program Requirements for Vendor Participation

#### **Program Overview**

- Duke Energy offers it's eligible non-residential customers the opportunity to increase profitability through energy cost savings and contribute to a cleaner environment by participating in our Mercantile Self Direct Incentive Program.
- Under the Duke Energy Mercantile Self Direct Incentive Program, Vendor is defined as any third party who:
  - Promotes the sale and installation of the high efficiency equipment for the customer. The Vendor will ensure that the eligible equipment is installed and operating before submitting the application or assisting the customer in completing the application.
  - Is responsible for the product sale only and is not required to ensure installation of the eligible equipment.
- All license requirements, if any, are solely the Vendor's
  responsibility. Participating Vendors include equipment
  contractors, equipment Vendors, equipment manufacturers and
  distributors, energy service companies, etc. The typical Vendor
  role is to contact/solicit eligible customers building new or
  retrofitting existing facilities and encourage the installation of
  the energy-efficient equipment offered in Duke Energy's
  program.
- Incentives are paid directly to customers unless the customer assigns the incentive to the Vendor. The assigned incentive must reduce the purchase price paid for the equipment by an equivalent amount. Incentives are taxable to the entity who receives the rebate check. Rebates greater than \$600 will be reported to the IRS unless documentation of tax exempt status is provided.
- Vendors can sign up to be on Duke Energy's Web site as a participating Vendor and be added to Duke Energy's e-mail distribution by faxing the Vendor Participation Agreement (VPA) to 513-629-5572 or emailing to SelfDirect@dukeenergy.com.

#### **Guidelines for Vendor Activities**

 Vendors shall sign and return the attached VPA to Duke Energy prior to soliciting customer participation or when submitting an application. Rebate payments will not be released to a Vendor unless a signed VPA is on file.

Vendors shall not misrepresent the nature of their role in the program. In particular, Vendors shall not state or imply to customers, or any persons, that the Vendor is employed by or working on Duke Energy's behalf.

- Vendors may not represent to customers that Duke Energy endorses their specific products or services. Duke Energy does not endorse specific products, services, or companies – only energy-efficient technologies.
- Vendors may advise customers of their option to have Duke Energy make their rebate check(s) payable to the Vendor if the customer's rebate amount is being deducted from the total sale price in advance. The customer must complete and sign the Payment Release Authorization section of the Mercantile Self Direct Incentive Program Application.
- Vendors may use the words "Duke Energy's Mercantile Self Direct Incentive Program" in promotional materials or advertisements. Vendors may use the name Duke Energy in a text format to describe the Mercantile Self Direct Incentive Program, but are not permitted to use Duke Energy's logos.
- For Vendors who properly install the qualifying equipment, the
  equipment shall be installed and operating prior to an
  application being submitted. A percentage of each Vendor's
  installations will be subject to inspection by Duke Energy for
  verifying that the equipment is installed and operating. Vendors
  demonstrating high failure rates (based on a statistically
  significant sample) will have 100% of subsequent jobs
  inspected or may have their participation in the Mercantile Self
  Direct Incentive Program revoked by Duke Energy in it's sole
  discretion.
- Vendors shall provide customers with applicable equipment warranty information for all measures installed. Vendors shall provide the required documentation for customers to apply for the rebate (invoices with model numbers and quantities, specification sheets for installed equipment, etc.) and assist customers in filling out the application.
- Vendors shall comply with all applicable local, state, and federal laws and codes when performing installation and related functions.
- Duke Energy reserves the right to revoke a Vendor's participation in Mercantile Self Direct Incentive Program if, in Duke Energy's sole judgment, the Vendor fails to comply with the program's guidelines and requirements.
- Mercantile Self Direct Incentive Program offerings may be modified or terminated without prior notice. Check Duke Energy's Web site for current program status.

For more information, call **1-866.380.9580** or visit <u>www.duke-energy.com</u>.



# MERCANTILE SELF DIRECT Ohio Premium Motor/Pump/VFD Incentive Application

Questions? Call 1-866-380-9580 or visit www.duke-energy.com.

Email the complete, signed application with all required documents to SelfDirect@duke-energy.com or fax to 513-629-5572. Is this application: NEW (original) or REVISED (changes made to original application) Building Type - Required (check one) ☐ Data Centers ☐ Full Service Restaurant ☐ Education/K-12 ☐ Public Assembly ☐ Education Other ☐ Industrial ☐ Public Order/Safety ☐ Elder Care/Nursing Home Lodging ☐ Religious Worship/Church ☐ Food Sales/Grocery ☐ Retail (Small Box) ☐ Service ☐ Fast Food Restaurant Retail (Big Box) ☐ Warehouse ☐ Other: How did you hear about the program? (check one) ☐ Duke Energy Representative ☐ Web Site □ Radio Contractor / Vendor ☐ Other Please check each box to indicate completion of the following program requirements: All sections of application 冈 Invoice with make, model ☐ Tax ID number for payee Customer/vendor agree to number, quantity and **Terms and Conditions** equipment manufacturer Customer Information Customer/Business Department of Veterans Affairs Kevin Henderson Phone 513 487-6698 **Account Number** 9180-0750-01-1 Street Address (Where incentive should be mailed) 3200 Vine St Cincinnati State OH Zip Code 45220 Installation Street Address 3200 Vine St City Cincinnati State OH Zip Code 45220 E-mail Address \*Failure to provide the account number associated with the location where the installation took place will result in rejection of the application. Vendor Information Vendor Shrudde & Zimmerman Contact Mark Zimmerman 859-331-3160 859 331-8261 Phone Fax 1671 Park Rd Ste. #11 Street Address 41011 **Fort Wright** KY City State Zip Code mnz@shrudde-zmmerman.com E-mail Address If Duke Energy has questions about this application, who should we contact? Customer ☐ Vendor Payment Information Who should receive incentive payment? □ Customer Vendor (Customer must sign below) I hereby authorize payment of incentive Customer Signature (written signature) directly to the vendor: 12/15/2012 Date Provide Tax ID Number for Payee Customer Tax ID # 310542398 Vendor Tax ID # Terms and Conditions I have read and hereby agree to the Terms & Conditions and Program Requirements. Customer Signature Vendor Signature Date 12/15/2012 Date Title **Energy Manager** 

Incentives are subject to change and may be discontinued at the sole discretion of Duke Energy. Equipment must be installed and operable to be eligible for incentives. As Federal Energy Policy Law changes, equipment efficiency requirements are subject to change.



Motor incentives will be removed from the Prescriptive Program effective March 31, 2011. To qualify for the current incentives, motors must be purchased by March 31, 2011 and installed by June 30, 2011. Applications must be received by September 30, 2011.

Certain motors will still be eligible for incentives using the custom program. Please refer to the Duke Energy Mercantile Self Direct website for further detail.

The Equipment below is (check one):	☐ New Equipment / New Construction			
Early replacement of existing equipment or r	eplacement of failed equipment must app	ly for Self Direct Custom p	rogram.	

Motor	FF 65 2 125 125 125 125 125 125 125 125 125		100		+19			72			
Motor	Make/Model or Catalog #	Quantity	Туре	RPM	Incentive	HP	Installed Nominal Efficiency*	Annual Operating Hrs (Minimum of 2000)	Equipment Cost	Date Installed and Operable (mm/yy)	Total Incentiv
1-5 HP			☐ OPEN ☐ TEFC	☐ 1200 ☐ 1800 ☐ 3600	1	НР	%	- Hrs			
7.5-20 HP			OPEN TEFC	☐ 1200 ☐ 1800 ☐ 3600		HP	%	Hrs			
25-100 HP			☐ OPEN ☐ TEFC	☐ 1200 ☐ 1800 ☐ 3600		HP	%	Hrs			
125 – 250 HP			OPEN TEFC	☐ 1200 ☐ 1800 ☐ 3600		HP	%	Hrs			

See page four for required efficiency levels for motors.

- Qualifying motors must be three-phase open drip (ODP) or totally enclosed fan cooled (TEFC) units with nominal speeds of 1200, 1800, or 3600 RPM.
- Efficiencies are to be full-load nominal efficiencies tested in accordance with IEE Standards 112, Method B. Please refer to attached table
  to determine qualifying efficiencies.
- Installed equipment must be new. Used, rebuilt or rewound equipment is not eligible.
- Motor shall be squirrel cage design and conform to NEMA Premium design A, B or C torque characteristics.
- Motor/pump load must be served by Duke Energy and installed in customer's facility.
- Replaced motors shall be disposed of or recycled (not to be resold or rewound).
- Motor(s) and pump(s) must operate a minimum of 2000 hours annually to be eligible.

<sup>\*</sup>Incentive capped at 50% of project cost (equipment and external labor).



The Equipment below is (check one): ☐ New Equipment / New Construction

Early replacement of existing equipment or replacement of failed equipment must apply for Self Direct Custom program.

High Efficier	ncy Pumps	2006 47 2007		1427	15/rg. 31		
Pump	Make/Model or Catalog #	Quantity	Incentive	Installed Nominal Efficiency* (pump curve)	Annual Operating Hrs (Minimum of 2000)	Equipment Cost	Date Installed and Total Operable (mm/yy) Incentive
1.5 HP			\$61.00/PUMP	%	Hrs		
2 HP			\$87.50.00/PUMP	%	Hrs		
3 HP			\$87.50/PUMP	%	Hrs		
5 HP	1		\$85.00./PUMP	%	Hrs		
7.5 HP	1		\$124.50/PUMP	%	Hrs		
10 HP			\$82.50.00/PUMP	%	Hrs		
15 HP			\$145.00/PUMP	%	Hrs		
20 HP			\$200.00/PUMP	%	Hrs		

<sup>\*</sup> See on page four for required efficiency levels for pumps. Pump curves are required. \*Incentive capped at 50% of project cost (equipment and external labor).

- Installed equipment must be new. Used, rebuilt or rewound equipment is not eligible.
- Motor/pump load must be served by Duke Energy and installed in customer's facility.
- Pump efficiency is based on the design point on the pump curve. Documentation of the pump curve is required to receive an incentive.
- The pump efficiency at the design point on the pump curve must meet nominal efficiencies as stated in table on page 4.
- Duplicative to the first bullet point.



The Equipment below is (checklone):	☐ Retrofit
-------------------------------------	------------

Replacement of failed equipment or new construction is not eligible for incentives.

# Variable Frequency Drives (VFDs) – For Process Fluid Pumping Only (Retrofit\* Application only)

Process pumping does not include HVAC or swimming pool fluid pumping systems

9988	cess Pumping Application		1	North Control of the	T		
VFD**	Make/Model or Catalog #	Quantity	Incentive***	Annual Operating Hrs (Minimum of 2000)	Project Cost	Date Installed and Operable (mm/yy)	Total Incentive
5 HP			\$20.00/HP	Hrs			
7.5 HP		,	\$20.00/HP	Hrs			
10 HP			\$20.00/HP	Hrs			
15 HP		1 /	\$20.00/HP	Hrs		,	
20 HP			\$20.00/HP	Hrs			
25 HP			\$20.00/HP	Hrs			
30 HP			\$20.00/HP	Hrs			
40 HP			\$20.00/HP	Hrs		-	1

\*Retrofit only – incentives are only available for new VFDs installed on existing fluid process pump systems.

\$20.00/HP

Hrs

\*\*\*Incentives are capped at 50% of project cost (equipment and external labor).

- Installed equipment must be new. Used, rebuilt or rewound equipment is not eligible.
- Variable Frequency Drive Fans & Pumps qualifying equipment must have 2000 annual run hours or more.
- A 3% impedance reactor on the AC input to the VSD is recommended to prevent damage to the VSD due to overvoltage from power factor
  correction and should be properly sized by your supplier. A 5% reactor may be recommended if there is additional harmonic distortion on
  the AC input lines due to other plant-specific causes.
- VFDs on new equipment do not qualify under this program; but may qualify through the custom program. Please refer to the Custom
  website for guidance. Incentives will be paid for the installation of NEW VFDs on existing fan/pump systems and process equipment only.
- · Replacement of existing VFDs does not qualify for incentives.
- VFDs installed on redundant pumps do not qualify.
- VFDs installed in newly constructed facilities do not qualify for incentives.
- VFD speed must be automatically controlled by differential pressure, flow, temperature, or other variable signal.
- Existing throttling devices including inlet vanes, bypass dampers, and throttling valves must be removed or permanently disabled.
- . Duplicative to the first bullet point.

50 HP

<sup>\*\*</sup> VFDs over 50 HP and VFDs on new equipment are not eligible for prescriptive incentives, but may qualify through the custom program. Please refer to the custom webpage for guidance.



The Equipment below is (check one): Retrofit
Replacement of failed equipment or new construction is not eligible for incentives.

ערט אע	AC Applications (please	check one):	455	100					
Supp	lly Fan	10 7年 年	□ Cooling	Tower Fan	55 1.78 5000 7000	□ R€	turn Fan		
☐ Exha	ust Fan		Hg.		744				1919 1119 1119 1119
301	The Francisco Constitution of the Constitution				25		- 170		
VFD**	Make/Model or Catalog	ı#		Quantity	Incentive***	Annual Operating Hrs (Minimum of	Project Cost	Date Installed and Operable (mm/yy)	Total Incentive
	'e					2000)			
1.5 HP	\$2.50 \$4.50				\$50.00/HP	Hrs			
2 HP					\$50.00/HP	Hrs			
3 HP					\$50.00/HP	Hrs			-
5 HP	÷				\$50.00/HP	Hrs	1		
7.5 HP					\$50.00/HP	Hrs	*		
10 HP					\$50.00/HP	Hrs		1.	-
15 HP					\$50.00/HP	Hrs			
20 HP				,	\$50.00/HP	Hrs			
25 HP	Yasakawa E7LV-B0340	CGX		2	\$50.00/HP	6000Hrs	\$45,600. 00	09/12	\$2,500.00
30 HP			·	.,	\$50.00/HP	Hrs			-
40 HP					\$50.00/HP	Hrs			
50 HP					\$50.00/HP	Hrs			

- \*\*Incentives are capped at 50% of project cost (equipment and external labor).
- Installed equipment must be new. Used, rebuilt or rewound equipment is **not** eligible.

   Notice to a second secon
- · Variable Frequency Drive Fans & Pumps qualifying equipment must have 2000 annual run hours or more.
- A 3% impedance reactor on the AC input to the VSD is recommended to prevent damage to the VSD due to overvoltage from power factor
  correction and should be properly sized by your supplier. A 5% reactor may be recommended if there is additional harmonic distortion on
  the AC input lines due to other plant-specific causes.
- VFDs on new equipment do not qualify under this program; but may qualify through the custom program. Please refer to the Custom
  website for guidance. Incentives will be paid for the installation of NEW VFDs on existing fan/pump systems and process equipment only.
- Replacement of existing VFDs does not qualify for incentives.
- · VFDs installed on redundant pumps do not qualify.
- VFDs installed in newly constructed facilities do not qualify for incentives.
- VFD speed must be automatically controlled by differential pressure, flow, temperature, or other variable signal.
- Existing throttling devices including inlet vanes, bypass dampers, and throttling valves must be removed or permanently disabled.
- · Duplicative to the first bullet point.



\$10.000.00

The Equipment below is (check one): Retrofit Replacement of failed equipment or new construction is not eligible for incentives. Variable Frequency Drives (VFDs) - Applied to HVAC Pumps Only (Retrofit\* Application only) VFD HVAC Applications (please check one). ☑ Chilled Water Pump Condenser Pump ☐ Hot Water Pump VFD\*\* Make/Model or Catalog # Incentive\*\* Date Installed Quantity Annual Project Total Operating Hrs Cost and Operable Incentive (Minimum of (mm/yy) 2000) 1.5 HP \$50.00/HP Hrs 2 HP \$50.00/HP Hrs 3 HP \$50.00/HP Hrs 5 HP \$50.00/HP Hrs 7.5 HP \$50.00/HP Hrs 10 HP \$50.00/HP Hrs 15 HP \$50.00/HP Hrs 20 HP \$50.00/HP Hrs 25 HP \$50.00/HP Hrs

Retrofit only - incentives are only available for new VFDs installed on existing HVAC pumps systems.

\*\*Incentives are capped at 50% of project cost (equipment and external labor).

- Installed equipment must be new. Used, rebuilt or rewound equipment is not eligible.
- Variable Frequency Drive Fans & Pumps qualifying equipment must have 2000 annual run hours or more.
- A 3% impedance reactor on the AC input to the VSD is recommended to prevent damage to the VSD due to overvoltage from power factor
  correction and should be properly sized by your supplier. A 5% reactor may be recommended if there is additional harmonic distortion on
  the AC input lines due to other plant-specific causes.

\$50.00/HP

\$50.00/HP

\$50.00/HP

Hrs

Hrs

\$45,600, 08/12

8760Hrs

- VFDs on new equipment do not qualify under this program; but may qualify through the custom program. Please refer to the Custom
  website for guidance. Incentives will be paid for the installation of NEW VFDs on existing fan/pump systems and process equipment only.
- Replacement of existing VEDs does not qualify for incentives.
- VFDs installed on redundant pumps do not qualify.
- VFDs installed in newly constructed facilities do not qualify for incentives.
- VFD speed must be automatically controlled by differential pressure, flow, temperature, or other variable signal.
- · Existing throttling devices including inlet vanes, bypass dampers, and throttling valves must be removed or permanently disabled.
- Duplicative to the first bullet point.

Yasakawa E7LVB065C6

30 HP

40 HP

50 HP

<sup>\*\*</sup>VFDs over 50 HP and VFDs on new equipment are not eligible for prescriptive incentives, but may qualify through the custom program. Please refer to the custom webpage for guidance.



## Efficiencies for Premium Motor/Pump Measures

408	- Files	emium" Induction I	2000	1995	177	
	*	Open Drip Proo			Totally Enclosed Fan-	-Cooled
HP	1200 RPM	1800 RPM	3600 RPM	1200 RPM	1800 RPM	3600 RPM
1	82.5	85.5	77.0	82.5	85.5	77.0
1.5	86.5	86.5	84.0	87.5	86.5	84.0
2	87.5	86.5	85.5	88.5	86.5	85.5
3	88.5	89.5	85.5	89.5	89.5	86.5
5	89.5	89.5	86.5	89.5	89.5	88.5
7.5	90.2	91.0	88.5	91.0	91.7	89.5
10	91.7	91.7	89.5	91.0	91.7	90.2
15	91.7	93.0	90.2	91.7	92.4	91.0
20	92.4	93.0	91.0	91.7	93.0	91.0
25	93.0	93.6	91.7	93.0	93.6	91.7
30	93.6	94.1	91.7	93.0	93.6	91.7
40	94.1	94.1	92.4	94.1	94.1	92.4
50	94.1	94.5	93.0	94.1	94.5	93.0
60	94.5	95.0	93.6	94.5	95.0	93.6
75	94.5	95.0	93.6	94.5	95.4	93.6
100	95.0	95.4	93.6	95.0	95.4	94.1
125	95.0	95.4	94.1	95.0	95.4	95.0
150	95.4	95.8	94.1	95.8	95.8	95.0
200	95.4	95.8	95.0	95.8	96.2	95.4
250	95.4	95.8	95.0	95.8	96.2	95.8

Nominal Efficiencie	s for Pumps
HP	Efficiency
1.5	efficiency of 65% or more for system
2	efficiency of 65% or more for system
3	efficiency of 67% or more for system
5	efficiency of 70% or more for system
7.5	efficiency of 73% or more for system
10	efficiency of 75% or more for system
15	efficiency of 77% or more for system
20	efficiency of 77% or more for system



### **Program Requirements**

### Incentive Eligibility

Incentives are only available to customers on a Duke Energy Ohio non-residential rate.

Duke Energy Customers who purchase electric generation from an alternative supplier are eligible to participate.

 Incentive will not be paid until eligible equipment has been installed, is available to operate, and verification has been completed by Duke Energy staff as noted in the Term & Conditions stated below.

· Duke Energy reserves the right to revise incentive levels and/or qualifying efficiency levels at any time.

- Customer may assign the incentive to the vendor who installed/supplied the equipment. The customer's signature is required in the
  Payment Information section on page 1 of this form to assign the incentive to the vendor. Customer agrees that such an action constitutes
  an irrevocable assignment of the incentive. This assigned incentive must reduce the purchase price paid for the equipment by an
  equivalent amount.
- Leased equipment is eligible for incentives providing the equipment meets the program requirements and the customer provides the
  required documentation noted on the Incentive Application Process page of this application.
- Any equipment which, either separately or as part of a project, has or will receive an incentive from any other Duke Energy program
  is ineligible.

• In no case will Duke Energy pay an incentive above the actual cost of the new equipment.

Incentive recipient assumes all responsibilities for any tax consequences resulting from Duke Energy incentive payment.

• To qualify for Duke Energy incentives, applicants who provide their social security number as their federal tax identification number for tax purposes must sign and return the "Customer consent to release personal information" form ("Consent Form") along with the application. Incentive applications are processed by a 3<sup>rd</sup> party vendor. The 3<sup>rd</sup> party vendor is responsible for mailing the 1099 form at the end of the calendar year for tax filing. Duke Energy and the 3<sup>rd</sup> party vendor have signed a confidentiality agreement to protect your personal information. If your social security number is your federal tax ID number and you elect not to sign the Consent Form, please do not send Duke Energy the application, as you will not be qualified to participate in the incentive program.

#### **Terms and Conditions**

I certify that this premise is served by Duke Energy (or an affiliate of Duke Energy), that the information provided herein is accurate and complete, and that I have purchased and installed the high efficiency equipment (indicated herein) for the business facility listed herein and not for resale. Attached is an itemized invoice for the indicated installed equipment. In understand that the proposed incentive payment from Duke Energy is subject to change based on verification and Duke Energy approval. I agree to Duke Energy verification of both the sales transaction and equipment installation which may include a site inspection from a Duke Energy representative or Duke Energy agent. I understand that I am not allowed to receive more than one incentive from Duke Energy on any piece of equipment. I also understand that my participation in the program may be taxable and that my company is solely responsible for paying all such taxes. I hereby agree to indemnify, hold hamless and release Duke Energy and it's affiliates from any actions or claims in regards to the installation, operation and disposal of equipment (and related materials) covered herein including liability from an incidental or consequential damages. Duke Energy does not endorse any particular manufacturer, product or system design within these programs; does not expressly or implicitly warrant the performance of installed equipment (Contact your contractor for details regarding equipment warranties and is not liable for any damage caused by the installation of the equipment nor for any damage caused by the malfunction of the installed equipment.



### **Incentive Application Instructions**

#### IMPORTANT NOTICE

Delays in processing incentive payments will occur if required documentation is not included with completed application(s).

- Contact Duke Energy toll free at 866-380-9580 to confirm customer eligibility. Applications are available for download at www.duke-energy.com.
- 2. Review program and equipment requirements on the incentive application. (Page8)
- 3. Purchase and install eligible energy-efficient equipment.
- 4. The following items must be included to verify projects. If they are not included, it will delay payment of incentive.
  - A. Itemized invoice for all equipment installed to include:
    - a. Equipment cost
    - b. Quantity per equipment type installed
    - c. Model # for each equipment type
    - d. Manufacturer's data sheet for each equipment model #.
  - B. Make sure the account number provided on the cover page (customer information section) is associated with the location where the equipment was installed. If the account # does not match the address where the equipment was installed, the application will be rejected as ineligible.
  - C. Provide required tax ID# for payee.
  - D. Customer must sign and date the application after reviewing the Terms and Conditions. If customer wishes to assign payment of the incentive directly to the vendor, the customer should circle the appropriate payee in the Payment Information section of the application and sign their name to authorize payment.
- 5. Duke Energy may require site verification of projects that have been self-installed, prior to payment of incentive.
- 6. Email the complete, signed application with all required documents to SelfDirect@duke-energy.com or fax to 513-629-5572.
- 7. A percentage of equipment installations will be site verified for quality assurance purposes. Once selected, a Duke Energy representative will contact the customer to arrange for the inspection. All incentive payments related to the project will be withheld until site verification is complete. There is no charge to the customer for these inspections.



### Mercantile Self Direct Incentive Program Requirements for Vendor Participation

### **Program Overview**

- Duke Energy offers it's eligible non-residential customers the opportunity to increase profitability through energy cost savings and contribute to a cleaner environment by participating in our Mercantile Self Direct Incentive Program.
- Under the Duke Energy Mercantile Self Direct Incentive Program, Vendor is defined as any third party who:
  - Promotes the sale and installation of the high efficiency equipment for the customer. The Vendor will ensure that the eligible equipment is installed and operating before submitting the application or assisting the customer in completing the application.
  - Is responsible for the product sale only and is not required to ensure installation of the eligible equipment.
- All license requirements, if any, are solely the Vendor's responsibility. Participating Vendors include equipment contractors, equipment Vendors, equipment manufacturers and distributors, energy service companies, etc. The typical Vendor role is to contact/solicit eligible customers building new or retrofitting existing facilities and encourage the installation of the energy-efficient equipment offered in Duke Energy's program.
- Incentives are paid directly to customers unless the customer assigns the incentive to the Vendor. The assigned incentive must reduce the purchase price paid for the equipment by an equivalent amount. Incentives are taxable to the entity who receives the rebate check. Rebates greater than \$600 will be reported to the IRS unless documentation of tax exempt status is provided.

Vendors can sign up to be on Duke Energy's Web site as a participating Vendor and be added to Duke Energy's e-mail distribution by emailing the Vendor Participation Agreement (VPA) to SelfDirect@duke-energy.com or faxing to 513-629-5572.

### **Guidelines for Vendor Activities**

- Vendors shall sign and return the attached VPA to Duke Energy prior to soliciting customer participation or when submitting an application. Rebate payments will not be released to a Vendor unless a signed VPA is on file.
- Vendors shall not misrepresent the nature of their role in the program. In particular, Vendors shall not state or imply to customers, or any persons, that the Vendor is employed by or working on Duke Energy's behalf.

- Vendors may not represent to customers that Duke Energy endorses their specific products or services. Duke Energy does not endorse specific products, services, or companies - only energy-efficient technologies.
- Vendors may advise customers of their option to have Duke Energy make their rebate check(s) payable to the Vendor if the customer's rebate amount is being deducted from the total sale price in advance. The customer must complete and sign the Payment Release Authorization section of the Mercantile Self Direct Incentive Program Application.
- Vendors may use the words "Duke Energy's Mercantile Self Direct Incentive Program" in promotional materials or advertisements. Vendors may use the name Duke Energy in a text format to describe the Mercantile Self Direct Incentive Program, but are not permitted to use Duke Energy's logos.
- For Vendors who properly install the qualifying equipment, the equipment shall be installed and operating prior to an application being submitted. A percentage of each Vendor's installations will be subject to inspection by Duke Energy for verifying that the equipment is installed and operating. Vendors demonstrating high failure rates (based on a statistically significant sample) will have 100% of subsequent jobs inspected or may have their participation in the Mercantile Self Direct Incentive Program revoked by Duke Energy in it's sole discretion.
- Vendors shall provide customers with applicable equipment warranty information for all measures installed. Vendors shall provide the required documentation for customers to apply for the rebate (invoices with model numbers and quantities, specification sheets for installed equipment, etc.) and assist customers in filling out the application.
- Vendors shall comply with all applicable local, state, and federal laws and codes when performing installation and related functions.
- Duke Energy reserves the right to revoke a Vendor's participation in Mercantile Self Direct Incentive Program if, in Duke Energy's sole judgment, the Vendor fails to comply with the program's guidelines and requirements.
- Mercantile Self Direct Incentive Program offerings may be modified or terminated without prior notice. Check Duke Energy's Web site for current program status.

For more information, call 1-866.380.9580 or visit www.duke-energy.com.

### Invoice 11020801

Page

### **Customer GEI01**

Stoermer-Anderson, Inc. 3818 Red Bank Road Cincinnati, OH 45227

Telephone: 513/527-2300

Bill To:

The Geiler Company P O Box 11324 Cincinnati, OH 45211-0324 REMIT TO: Stoermer-Anderson, Inc. P.O. Box 706135 Cincinnati, OH 45270-6135

Ship To:

The Geiler Company 6561 Glenway Avenue Cincinnati, OH 45211

		hip Via	F.O.B.	V N	s et 30 Dav	/8		Temton	
Order Numb		Job Description	Order Date	Sales	person				r Number
Quentity			Description 01/25/09		H	Loc	Tax	Unit Price	020801 Amount
		YEAFE7I V-B034CG	Variable Frequency Drive				N	0.00	0.0
l	1		1		,				0.0
			1				N.		0.0
1	1		Price on Above			100	N	45600.00	45600.0
			·						٠
			1 hoom	117					
		•	111/08/1/5	5-74			-		
			0 42 46	EQ			de de la companya de	- preventen jenjeplich de de jen	
			I YM ALS	~~*L	Ŋ.			## Table 1	
			1 1/71 1/9	Juna	e /			1	
,				)	A				
			lay c	MAR	ナし	1	la	8 1	
			/						
					•				
		and the state of t	A STATE OF THE STA		<del>.</del>	<u> </u>	<u> </u>		
•	. iv								
•									
								-	
s-1-12/% Ser Past 30 Days	vice Cha of Billing	rge on all						al	45600.0 0.0
	*	•							0.0
	24201 Quantity Ship 2 4 2 1	Order Number 24201  Guantity 5.G 9  4 9 2 0 1 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Pick Up Order Number 24201  Guentity Ship B.G.  Pick Up Gincinnati VA C Cincinnati VA C Cincin	Pick Up Practory Order Number Job Pestificion Order Date 24201 Cincinnati VA Chillers 01/25/09  Quantity Ship B.G. VEAEE7LV-B034CG Variable Frequency Drive 4 0 YEAEE7LV-B065CG Variable Frequency Drive 2 0 YEAEE7BV-B240T Variable Frequency Drive 1 0 YEAEPRICE Price on Above  WARRED A Chillers O1/25/09  WARRED	Pick Up	Order Number Job Perciption.  Chickingti VA Chillers O1/25/09 LH  Gushilv  Ship B.O.  YEAEE7LV-B034CG Variable Frequency Drive  YEAEE7LV-B055CG Variable Frequency Drive  YEAEE7LV-B054OT Variable Frequency Drive  YEAEPRICE Price on Above  JOS	Pick Up	Order Number Job Pestriktion Order Date Salesbroom Cardot Variable Frequency Drive Variable Freq	Pick Up

**Customer Original** 

# VA Medical Center YASKAWA VARIABLE SPEED DRIVES

TAG#	MODEL#	HP	MAXIMUM AMPS	DRIVE/MOTOR VOLTAGE
PT-1	E7BV-B240T	200	240	460/3
PT-2	E7BV-B240T	200	240	460/3
PE-1	E7LV-B065CG	50	65	460/3
PE-2	E7LV-B065CG	50	65	460/3
PE-3	E7LV-B065CG	50	65	460/3
PE-4	E7LV-B065CG	50	65	460/3
CT	E7LV-B034CGX	25	34	460/3
CT_	E7LV-B034CGX	25	34	460/3

### Performance Features

- > Overload capacity: 110% for 60 sec (150% peak)
- > Starting torque: 100% at 3 Hz
- > DC injection braking: at start or stop, adjustable, current limited (anti-windmilling)
- Motor preheat function
- > Adjustable accel/decel: 0.1 to 6000 sec.
- > Controlled speed range: 40:1
- > Critical frequency rejection: 3 selectable, adjustable bands
- > Torque limiting: 30-180%
- > Energy saving control
- > Torque boost: full range, auto
- > Power loss ride-thru: 2 sec
- Inertia ride-thru
- > Auto restart after power loss or resettable fault, selectable, programmable
- > Feedback signal loss detection
- > Serial communications loss detection
- > "Up/Down" floating point control capability
- > Stationary motor auto-tuning
- > Customizable monitor display
- > Sleep function
- > Run permissive input
- > Ramp-to-stop or coast-to-stop selection
- > Runtime changes in control and display
- > Project-spécific parameter reinitialization

### **Protective Features**

- Current limited stall prevention
- > Heat sink over-temperature, speed fold-back
- > Cooling fan operating hours recorded
- > Bi-directional start into rotating motor at synchronized speed
- > DC bus charge indicator
- > Current limiting DC bus fuse
- > Optically-Isolated controls
- > Short circuit protection: Phase-phase and phase-neutral
- Ground fault protection
- Short circuit withstand rating: 65K RMS, 100K RMS with bus reactor
- > Electronic motor overload: UL
- > Current and torque limit
- > Fault display: last 10 faults
- > Fault circuit: OC, OV, OT
- > Over torque and under torque protection
- > Program security code
- > "Hunting" prevention logic
- > Reverse prohibit selectability

## SCHRUDDE & ZIMMERMAN, INC.

### GENERAL CONTRACTOR

1671 Park Road, Suite #11 Fort Wright, Kentucky 41011

Telephone #: 859-331-3160 Fax #: 859-331-8261

DATE: October 8, 2010

TO: Fire cial Serico Center

ATIN: Prompt Payment

RE: Install New Chillers

5396-80628

NUMBER OF PAGES BEING FAXED INCLUDING THIS PAGE: 5

Very Truly Yours,

toula Carrell

Schrudde & Zimmerman, Inc.

NET CHANGES by Change Order

# WAIA Document G702" - 1992

# Application and Certificate for Payment

	La. Marie and Ma	・
TO OWNER: Department of Veterans Affairs Pr	OJECT: Install New Chillers APPLICAT	ION NO Ten (10) Distribution to:
3200 Vine Street	539-C-60528 PERIOD T	N 30-Sep-10 OWNER
Cincinneti Ohio 45220	VA-259-C-0242 CONTRAL	Tenp. General Construction
		·····································
FROM CONTRACTOR Schrudde & Zimmerman, Ins. VI	ARCHITEUT:	T DATE: CONTRACTOR D.
1871 Park Road, Suite #11	PROJECT	NOS:
FL Wright KY 4101		
A TOTAL CONTRACTOR OF THE PARTY		OTHERWICH

.: ::	Tideplana iz Zistokoniji	Ft Wi	ght, KY 4	ida 🐃					c.
	ONTRACTO	D'C ADI	HICATI	ON EO	DAVI	AE NIT	under in	acinda . Malaksi iroda	
								(i):	, <u>111</u> 1.
AD.	plication is made A Document 67	e for paymen 637M Contin	unden Shee	t. is attach	ed.	igain nic		• •	
	ORIGINAL CONTE		4.7.			:: <u>#</u>	3,579	932.00	. :
	NET CHANGE E	and the same of the same of the same of	ORDERS.		arii.		···· 99	791.00	· .
200	CONTRACT SUM			32 E	mpi, . udosanico	\$	3.679	723.00	
	TOTAL COMPLET		712 714 N 4	******	7 7 7 7			387.00	
	RETAINAGE:			. a. dou			· · · · · · · · ·		
;	2. 0% % of C	amploted W	ork.	1 7 4	i graji m	Ĺ	. 4		i
5. 5.2" .	(Columns P		reference with	: . <del>:</del>	delegant	0,0	0 -		hrechill ir nird
	b. ProfS		a <b>f</b>		a ver medici	PHE M	0.00	rea Transcription File Supplier	:: "#" : :: ##: 1
 5.	(Column F or	n G703)	Atalysis in the		n trivering. Light	janaturu. Sarahira	<u>:</u>		randi Tandii
pi) - u	Total Retainage	(Lines Sa +	5b, or Total	in Colum	1 of 670.	\$		0.00	, Au
្វារ បំ <b>ទើ</b> ៗ	OTAL EARNED	FOR DETAIL	IVOR		n een skriji Li	anglige vi Brabilitæ	3 668	387,00	. ;:20. L ::::::::::::::::::::::::::::::::::::
٠,٠	(Line 4 minus		A THE TANK				mews.	4 77 774.1	
7.1	ESS PREVIOUS	CERTIFICAT	ES FOR PAY	MENT	 		3,558	670.00	ir Li
	Line 6 from					1 3 41.7			ģ!
8.0	URRENT PAYMI	ENT DUE			(fig.). HTWalii	8	109	717.00	
	BALANCE TO FIN		1.30 E 1	AGE				King /	- Ho
	(Line 3 minu		Stands W.			11/	336.00		. r
	4			·'.		12 T 17 T	, w	W. Walar	
	TANGE ORDER				***********		211201	EXCTION	8
****	ital changes appr	own or the state of the state o	ious month	by Owne		Marija, iroz		White the	
To	ital approved the	month	- 174 pi 1277 -	¥			\$	<u>r kondertin</u> General	
:+-··	W. A. Harris		September 1997	TOTAL	\$	## - F	*	Mint hays I	

The undersigned Contractor definites that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Phyment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which provious Certificates for Payment were issued and payments received from the Owner, and that current payment shown been is now due.

CONTRACTOR: Schrudde & Zimmerman. Inc.

By:

Date:

Date:

Date:

PAULA B. GAMINGLE

Notary Public

My Commission expires: May 27. 201

### ARCHITECT'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Debuments, based on on-site observations and the data comprising this application, the Architect's knowledge, information and better the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contract is cottled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED \$\_

(Attach explanation of amount certified differ from the amount applied. Initial all figures on this. Application and on the Cantinuation Sheet that are changed to conform with the amount vertified.)

ARCHITECT

By:

Date:

This Certificate is a type grainble. The AMOUNT CERTIFIED is payable only to the Contractor named hereing surface; payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

CAUTION You should sign an original AIA Contract Document, on which this text appears in RED. An original assures that changes will not be obscured.

AIA Document 0702 m - 1992. Copyright © 1993, 1993, 1995, 1997, 1993 and 1992 by The American Institute of Architects, All rights reserved, WARNING: This AIA® Document is protected by U.S. Copyright Law and international Treates. Unguitherized reproduction or distribution of this AIA® Document, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law. Purchasers are penaltied to reproduce ten (10) copies of this document when completed. To report copyright violations of AIA Contract Documents, e-mail The American Institute of Architects legal courses, copyright@ela.org.

# CONTRACTOR CERTIFICATION PROMPT PAYMENT

Ртојес	Name Install New Chillers
Locati	ion VA Hospital - Cincinnati, Ohio
Contr	act No: VA250-C-0242
I herel	by certify, to the best of my knowledge and belief, that -
(1) j	The amounts requested are only for performance in accordance with the Specifications, terms and conditions of the contract;
(2)	Payments to subcontractors and suppliers have been made from previous payments received under the contract, and timely payments will be made from the proceeds of the payment covered by this certification, in accordance with subcontractor agreements and the requirements of Chapter 39 of Title 31, United States Code; and
(3)	This request for progress payments does not include any amount which the prime contractor intends to withhold or retain from a subcontractor or supplier in accordance with the terms and conditions of the subcontract.
	Schrudde & Zimmerman, Inc.
\	(Contractor Name)
	Mark N. Zimmerman Mak N. Zu
	(Typed Name and Signature) (Individual Authorized By Above Firm To Make Certification)
Vi	ce President 10.5.10
	(Title) (Date)

v. 14.

Proj	ect: VA / Install New Chille	rs - 539 <b>-</b> C-	80528 / VA	-250-C-024	2			1 1172
8A	8B	8C	8D	8E	8F		8G	8H
ITEM								
<u>NO.</u>	DESCRIPTION	Total Value	<u>Value in Place</u>	Materials Stored Off Site	Value in current period	Total Value to Date	Percent Complete	<u>Balance</u> Remaining
1	General Conditions Labor	51,975.00	51,975.00	0.00	0.00	- 51,975.00	100%	\$0.00
2	General Conditions Material	126,505.00	126,505.00	0.00	0.00	126,505.00	100%	\$0.00
3	MEP Fees	153,714.00	153,714.00	0.00	0.00	153,714.00		\$0.00
4	Structural Fees	27,143.00	27,143.00	0.00	0.00	27,143.00	100%	\$0.00
5	Seismic Allowance	38,000.00	38,000.00	0.00	0.00	38,000.00	100%	\$0.00
6	Abatement Test Allowance	10,000.00	1,562.00	0.00	8,438.00	10,000.00	100%	\$0.00
7	Commissioning Allowance	20,000.00	13,833,00	0.00	6,167.00	20,000.00	100%	\$0.00
8	Carpentry/Demo/Concrete Labor	47,431.00	47,431.00		0.00	47,431.00	100%	\$0.00
9	Carpentry/Demo/Concrete Material	38,806.00	38,806.00		0.00	38,806.00		\$0.00
10	Structural Steel Labor	2,183.00	2,183.00		0.00	2,183.00		\$0.00
11	Structural Steel Material	4,054.00	4,054.00		0.00	4,054.00		\$0.00
12	Roofing Labor	6,791.00	6,791.00		0.00	6,791.00	100%	\$0.00
13	Roofing Material	12,613.00	12,613.00		0.00	12,613.00		\$0.00
14	Painting Labor	6,727.00	6,727.00		0.00	6,727.00	100%	\$0.00
15	Painting Material	3,621.00	3,621.00	0.00	0.00	3,621.00	100%	\$0.00
16	Chillers Equipment	585,578.00	585,578.00		0.00	585,578-00	100%	\$0.00
17	Chillers Labor	53,130.00	53,130.00		0.00	53,130.00		. \$0.00
18	Pumps-Equipment	144,375.00	144,375.00	0,00	0.00	144,375.00		\$0.00
19	Pumps Labor	52,091.00	52,091.00		0.00	52,091,00		\$0.00
20	VFD's Equipment	74,036.00	74,036.00		0.00	74,036.00		\$0.00
21	VFD's Labor	17,614.00	17,614.00		0.00	17,614.00		\$0.00
22	Water Specialties Material	63,525.00	63,525.00		0.00	63,525.00		\$0.00
23	Water Specialties Labor	17,325.00	17,325.00		0.00	17,325.00		\$0.00
24	Piping Materials	479,325.00	479,325.00		0.00	479,325.00		\$0.00
25	Piping Labor	600,600.00	600,600.00		0.00	600,600.00		\$0.00
26	Controls	300,300.00	300,300.00		0.00	300,300.00		\$0.00
27.	Insulation	143,798.00	143,798.00		0.00	143,798.00		\$0.00
28	Rigging	8,663.00	8,663.00		0.00	8;663.00		\$0.00
29	Misc. Subs	36,094.00	36,094.00		0.00	36,094,00		\$0.00
30	Rentals	9,240.00	9,240.00		0.00	9,240.00		\$0.00
31	Mobilization	34,650.00	34,650.00		0.00	34,650.00		\$0.00
32	Electric Mobilization Labor	3,465.00	3,465.00		0.00	3,465.00		\$0.00
33	Electric Mobilization Material	2,310.00	2,310.00	0.00	0.00	2,310.00	100%	\$0.00
34	Demo Labor	17,325.00	17,325.00		0.00	17,325.00		\$0.00
35	Demo Material	11,560.00	11,550.00		0.00	11,550.00		\$0.00
36	High Voltage Transformer Labor	2,310.00	2,310.00		0.00			\$0.00
37	High Voltage Transformer Material	20,790.00			0.00	20,790.00	100%	\$0.00
	TOTAL	3,227,657.00			14,605.00	3,227,657.00	100%	\$0.00
,	Contractor hereby certifies that information provided herein is a true and accurate detailed breakdown for the work.		·		Approved:			-
	Contractor		Date		Associate		1	Date

Proj	ect: VA / Install Ne	w Chillers	- 539-C-80	528 / VA-25	0-C-0242			
8A	88	8C	8D	8E	8F	8G	8H	81
ITEM			(	Materials Stored	Venture in Comment	Total ValueTo	Percent	
NO.	DESCRIPTION	Total Value	Value in Place	Off Site	Period	Date	Complete	Balance remaining
36	From Sheet 1 of 2	3,227,657.00	3,213,052.00	0.00	14,605.00	3,227,657.00	100%	0.00
	High Voltage Cable Labor	3,465.00	3,465.00	0.00	0.00	3,465.00	100%	0.00
	High Voltage Cable Material	8,085.00	8,085.00	0.00	0.00	8,085.00	100%	
	Excavate Labor	1,733.00	1,733.00	0.00	0,00	1,733.00		
	Excavate Material	577.00	577.00	0.00	0.00	577.00		
	Dist. Equipment Labor Dist. Equipment Material	34,650.00 173,250.00	34,650.00 173,250.00	0,00	0.00	34,650.00 173,250.00	100% 100%	
	Conduit Labor	46,200.00	46,200.00	0.00	0.00	46,200.00		
	Conduit Material	11,550.00		0.00	0.00	11,550.00		
	Wire Labor	28,875.00	28,875.00	0.00	0.00	28,875.00		
46	Wire Materials	34,650.00	34,650.00	0.00	0.00	34,650.D0	100%	0.00
	Hook-Up Labor	1,733.00	1,733.00		0:00	1,733.00		
48	Hook-Up Materials	1,732.00	1,732.00			1,732.00		
49	Miscellaneous Labor	2,888.00	2,888.00	0.00	0.00	2,888.00		
50	Miscellaneous Material	2,887.00	2,887.00			2,887.00		
51	Change Order#1	99,791.00	0.00	0.00	88,455.00	88,455.00	89%	11,336.00
			· · · · · · · · · · · · · · · · · · ·				<u> </u>	
	74. 14. 14.	, , , , , , , , , , , , , , , , , , , ,		1.0				
·				,				
				<u> </u>				
	, <u>iĝ</u>						ļ	
								~
	i C	·		<u> </u>			<u> </u>	1
-ev						,,v,v,		
	-	· · · · · · · · · · · · · · · · · · ·	·					
			`					
	114						<u> </u>	
	<u> </u>							
							I	
	<u>.</u>	<u> </u>				<u> </u>		
	1	<b>.</b>	<b> </b>	<u> </u>		<del>-                                    </del>	<u> </u>	<del> </del>
		<b>-</b>	<u> </u>	I		<u> </u>	<del> </del>	
	<u> </u>				<b>-</b>		<del> </del>	
			<u> </u>	1			1	
	<u> </u>				<u> </u>		<b>†</b>	1
		· · · · · · · · · · · · · · · · · · ·		1	1 ·	1	1	
-			·				<b></b>	
	TOTAL	3,679,723.00	3,565,327.00	0.00	103,060.00	3,668,387.00	100%	11,336.00
	Contractor hereby certifies that information provided herein is a true and accurate detailed breekdown for the work.				Approved:			
								max
	4							
	Contractor		Date		Associate			Date



### Department of Veterans Affairs Medical Center

3200 Vine Street Cincinnati, Ohio 45220-2251

In Reply Refer To: 539/138

DATE: Feb 27, 2012

RE: Cincinnati V.A. Medical Center Confirmation Cost Information for Variable Frequency Drives and Chillers For MSD Prescriptive Rebate Application

To Whom It May Concern:

This letter is to confirm that for the Cincinnati VAMC Chiller Plant work back in 2009 for the MSD Prescriptive rebate application, the individual material costs for each Variable Frequency drive were obtained from the supplier, Stoermer Anderson, and are listed below. Installation costs were shown in the original MSD application.

Description/Model#	Quantity	Price/Fixture	Total Amount
E7BVB240T	2	\$18,885	\$37,770.00
E7LVB065CG	4	\$5,045	\$20,180.00
E7LVB034CG	2	\$3,183	\$6,366.00
		TOTAL LIST COST:	\$64,316.00

In terms of the chillers, the original invoice from Habagger showed the cost of the three chillers at \$413,007 so the breakdown for material costs for the chillers would be as follows:

Description/Model#	Quantity	Price/Fixture	Total Amount
19XRV6566465LEH64	3	\$137,669.00	\$413,007.00
		TOTAL LIST COST:	\$413,007.00

Sincerely,

Terry Brothers

Chief of Engineering