Ohio | Public Utilities Commission

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

Case No.: 11-3918-EL-EEC

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 implemented during the prior three calendar years.

Completed applications requesting the cash rebate reasonable arrangement option (Option 1) in lieu of an exemption from the 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 electric utilities' energy efficiency rider option (Option 2) will not qualify for the 60-day automatic approval.

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.

If you consider some of the items requested in the application to be confidential or trade secret information, please file a copy of the application under seal, along with a motion for protective order pertaining to the material you believe to be confidential. Please also file a copy of the application in the public docket, with the information you believe to be confidential redacted.

Section 1: Company Information

Name: **Lakota, Wyandot Elementary**

Principal address: **5572 Princeton Road, Liberty Township, OH 45011**

Address of facility for which this energy efficiency program applies: **7667 Summerlin Blvd., Liberty Township, OH 45044**

Name and telephone number for responses to questions: **Carol Burwick, 513-313-8150**

Electricity use by our company (at least one must apply to your company—check the box or boxes that apply):

- ✓ **We use more than seven hundred thousand kilowatt hours per year at our facility. (Please attach documentation.)**
- □ We are part of a national account involving multiple facilities in one or more states. (Please attach documentation.)

Listed below is the monthly and total kWh usage for July, 2010 through June, 2011.

12-Month Billing History
21903636 01
LAKOTA LOCAL SCHOOLS-SUMMERLIN Electric meter number 106917377
7667 SUMMERLIN BLVD
MIDDLETOWN, OH 45044

Date	Days	Actual KWH	Bill KWH	Actual Demand
6/3/2011	30	75,687	75,687	368.6
5/4/2011	30	55,883	55,883	231.4
4/4/2011	31	55,212	55,212	227.5
3/4/2011	29	50,991	50,991	182.4
2/3/2011	29	49,752	49,752	170.9
1/5/2011	34	48,604	48,604	170.89
12/2/2010	31	54,358	54,358	226.6
11/1/2010	31	61,596	61,596	299.5
10/1/2010	30	84,573	84,573	364.8
9/1/2010	29	74,979	74,979	332.2
8/3/2010	32	81,246	81,246	171.8
7/2/2010	29	87,959	87,959	273.6

Total 780,840

Section 2: Application Information

A) We are filing this application (choose which applies):

□ Individually, on our own.

✓ **Jointly with our electric utility.**

B) Our electric utility is: **Duke Energy**

C) We are offering to commit (choose which applies):

□ Energy savings from our energy efficiency program. (Complete Sections 3, 5, 6, and 7.)

□ Demand reduction from our demand response/demand reduction program. (Complete Sections 4, 5, 6, and 7.)

✓ **Both the energy savings and the demand reduction from our energy efficiency program. (Complete all sections of the Application.)**

Section 3: Energy Efficiency Programs

A) Our energy efficiency program involves (choose whichever applies):

✓ Early replacement of fully functioning equipment with new equipment. (Provide the date on which you replaced your fully functioning equipment, and the date on which you would have replaced your equipment if you had not replaced it early. Please include a brief explanation for how you 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 We installed our new equipment on the following date(s): _____.

□ Installation of new equipment for new construction or facility expansion. We installed our new equipment on the following date(s): _____.

B) Energy savings achieved/to be achieved by your energy efficiency program:

a) If you checked the box indicating that your 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: *156,800* kWh

Source of energy savings assumptions is from Duke Energy Smart $aver Prescriptive program.

Measure	*Qty*	*kWh per measure*	*Total kWh savings*	*kW per measure*	*Total kW savings*
Occupancy Sensor Under 500 W	*117*	*525.15*	*61,443*	*0.11*	*12.87*
Occupancy Sensor Over 500 W	*57*	*1313.35*	*74,861*	*0.27*	*15.39*
5 HP VFD	*4*	*5,124*	*20,496*	*1.09*	*4.36*

b) If you checked the box indicating that you 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: _____kWh

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

c) If you checked the box indicating that your 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 you rejected in favor of the more efficient new equipment.

Section 4: Demand Reduction/Demand Response Programs

A) Our program involves (choose which applies):

✓ **Coincident peak-demand savings from our energy efficiency program.**

□ Actual peak-demand reduction. (Attach a description and documentation of the peak-demand reduction.)

□ Potential peak-demand reduction (choose which applies):

- Choose one or more of the following that applies:

  □ Our 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.

  □ Our 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) What is the date your peak demand reduction program was initiated? **July, *2007***

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

32.62 kW

Refer to table in section 3(B)(a) for coincident peak kW.

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.

Note: If Option 2 is selected, the application will not qualify for the 60-day automatic approval. All applications, however, will be considered on a timely basis by the Commission.

A) We are applying for:

✓ **Option 1: A cash rebate reasonable arrangement.**

OR

□ Option 2: An exemption from the cost recovery mechanism implemented by the electric utility.

B) The value of the option that we are seeking is:

Option 1: A cash rebate reasonable arrangement, which is the lesser of (show both amounts):

□ A cash rebate of $ **$2,710.00** . (Attach documentation showing the methodology used to determine the cash rebate value and calculations showing how this payment amount was determined.)

Incentive calculated is 50% of the Smart $aver Prescriptive Incentive.

Measure	*Prescriptive Incentive per measure*	*Self Direct Incentive per measure*	*Total Incentive*
Occupancy Sensor Under 500 W	***$20.00***	***$10.00***	***$1,170***
Occupancy Sensor Over 500 W	***$40.00***	***$20.00***	***$1,140***
5 HP VFD	***$40.00***	***$20.00***	***$400***

OR

□ A cash rebate valued at no more than 50% of the total project cost, which is equal to $_____.

(Attach documentation and calculations showing how this payment amount was determined.)

Option 2: An exemption from payment of the electric utility's energy 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

□ 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 an ongoing efficiency program that is practiced by our organization. (Attach documentation that establishes your organization's ongoing efficiency program. In order to continue the exemption beyond the initial 24 month period your organization 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 skip Subsection 2)

✓ **Utility Cost Test (UCT) . The calculated UCT value is: TBD (Skip to Subsection 2.)**

Measure	*UCT*
Occupancy Sensor Under 500 W	***10.21***
Occupancy Sensor Over 500 W	***12.72***
5 HP VFD	***16.73***

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 (capacity and energy) by the sum of our program costs and our electric utility's administrative costs to implement the program.

Our avoided supply costs were. _____.

Our program costs were _____.

The utility's administrative 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 ____.

Note: all values are per UNIT

	T&D	*Prod*	*Cap*
Occupancy Sensor Under 500 W	***$17***	***$117***	***$39***
Occupancy Sensor Over 500 W	***$41***	***$293***	***$95***
5 HP VFD	***$54***	***$380***	***$130***

The utility's administrative costs were__.

Occupancy Sensor Under 500 W	***$6***
Occupancy Sensor Over 500 W	***$12***
5 HP VFD	***$12***

The utility's incentive costs/rebate costs were___.

Occupancy Sensor Under 500 W	***$10***
Occupancy Sensor Over 500 W	***$20***
5 HP VFD	***$20***

Section 7: Additional Information

Please attach the following supporting documentation to this application:

- Narrative description of your 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 your program 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 you and the electric utility with regard to peak demand reduction;
  4) permission by you 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 you to provide an annual report on your energy savings and electric utility peak-demand reductions achieved.
- 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.

Ohio | Public Utilities Commission

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

Case No.: ____-____-EL-EEC

State of _____ :

CHRISTOPHER T. PASSARELE, Affiant, being duly sworn according to law, deposes and says that:

1. I am the duly authorized representative of:

LAKOTA LOCAL SCHOOL DISTRICT
[insert customer or EDU company name and any applicable name(s) doing business as]

2. 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.

3. 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.

Signature of Affiant & Title EXECUTIVE DIRECTOR BUSINESS OPERATIONS

Sworn and subscribed before me this 24 day of JUNE, 2011 Month/Year

Signature of official administering oath

C.L. McMONIGLE, NOTARY
Print Name and Title

My commission expires on APRIL 11, 2014

C.L. McMONIGLE
Notary Public, State of Ohio
My Commission Expires April 11, 2014

DUKE ENERGY CORPORATION
Mercantile Self Direct Program
139 East Fourth Street
Cincinnati, OH 45202
513 419 5572 fax

8/29/2011

Lakota Local School District
Attn: Robert Fischer, Director Buildings & Grounds
6947 Yankee Rd
Liberty Township, OH 45044

Subject: Rebate Offer for Duke Energy Mercantile Self-Direct

Dear Mr. Fischer

Thank you for your Duke Energy Mercantile Self Direct rebate application. As noted in the Energy Conservation Measure (ECM) table on page three, a total rebate of $6088.50 has been proposed for your Lighting and VFD projects completed in the 2007 calendar year. All Self Direct Rebates are contingent upon approval by the Public Utilities Commission of Ohio (PUCO).

Please indicate on the following page if you accept or decline this rebate offer by checking the appropriate box (rebate accepted or rebate declined) and providing your signature where indicated.

Please return the documents to my attention via fax 513-419-5572 or email at SelfDirect@duke-energy.com. Upon receipt, Duke Energy will submit the necessary documentation to PUCO for approval. 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 view the Duke-Energy.com website for further review of programs or contact your local Duke representative if you have questions about our programs. Please contact me if you have any questions about this letter.

Sincerely,

Brien R. Krieger

Brien R. Krieger
Product Manager, Ohio Mercantile Self Direct
317-838-4256

cc: Mike Heath
Rob Jung
Lucas Dixon

Please indicate your response to this Duke rebate offer.

☑ Rebate is accepted. ☐ Rebate is declined.

By accepting this rebate, Lakota Local School District affirms their intention to commit and integrate the energy efficiency impacts from the projects listed on the following pages into Duke Energy's peak demand reduction, demand response and/or energy efficiency programs.

Additionally, Lakota Local School District agrees to serve as joint applicant in any future filings necessary to secure approval of this Mercantile Self Direct project arrangement as required by PUCO. Lakota Local School District agrees to comply with information and reporting requirements imposed by PUCO rule as part of the PUCO approval process relating to these rebate requests.

Finally, Lakota Local School District affirms that all application information submitted to Duke Energy pursuant to this rebate offer is true and accurate. Said application information includes, but is not limited to, project scope, equipment specifications, equipment operational details, project costs, project completion dates, and the quantity of energy conservation measures installed.

Signature:

Robert Fischer ROBERT FISCHER 8/31/11

Customer Signature Printed Name Date

If rebate is accepted, will you use the incentive dollars to fund future energy efficiency and/or demand reduction projects?

☑ YES ☐ NO

If declined, please share a reason here for your declination:

Table 1. ECM's with Proposed Rebate Amounts

ECM Number	ECM Description	Proposed Rebate
ECM-1	Endeavor, Under 500 W Occ. Sensor (Quantity 117)	$1,170
ECM-2	Endeavor, Over 500 W Occ. Sensor (Quantity 57)	$1,140
ECM-3	Endeavor, VFD 20 hp Process Pumping (Quantity 1)	$400
ECM-4	Wyandot, Under 500 W Occ. Sensor (Quantity 117)	$1,170
ECM-5	Wyandot, Over 500 W Occ. Sensor (Quantity 57)	$1,140
ECM-6	Wyandot, VFD 20hp Process Pumping (Quantity 1)	$400
ECM-7	Hopewell, T8 4ft. 4 lamp (Quantity 15)	$82.50
ECM-8	Hopewell, T8 4ft. 3 lamp (Quantity 98)	$441
ECM-9	Hopewell, T8 4ft. 2 lamp (Quantity 40)	$80
ECM-10	Hopewell, LED Exit Signs (Quantity 13)	$65
Total Rebate		**$6088.50**

Ohio Lighting Incentive Application

Questions? Call 1-866-380-9580 or visit www.duke-energy.com.
Email the complete, signed application with all required documents to PrescriptiveIncentives@duke-energy.com, mail to: Duke Energy • 431 Charmany Drive • Madison, WI 53719 or fax to 1-866-908-4921

Is this application: ☒ **NEW** (original) or ☐ **REVISED** (changes made to original application)

Building Type - Required (check one)

☐ Data Centers	☐ Full Service Restaurant	☐ Office
☒ Education/K-12	☐ Healthcare	☐ 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	☐ Invoice with make, model number, quantity and equipment manufacturer	☐ Tax ID number for payee	☐ Customer/vendor agree to Terms and Conditions

Customer Information

Customer/Business	Wyandot Efementary	Contact		Robert Fischer	
Phone	513-777-3316	Account Number		2190-3636-01	
Street Address (Where incentive should be mailed)		6947 Yankee Rd			
City	Liberty Township	State	Ohio	Zip Code	45044
Installation Street Address	7667 Summerlin Blvd.				
City	Liberty Township	State	Ohio	Zip Code	45044
E-mail Address	robert.fischer@lakotaonline.com				

**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	Plug Smart	Contact		Lucas Dixon	
Phone	614-580-3352	Fax		614-453-5743	
Street Address	1275 Kinnear Road, Suite 229				
City	Columbus	State	Ohio	Zip Code	43212
E-mail Address	lucas.dixon@plugsmart.com				

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 directly to the vendor:	Customer Signature (written signature)	
	Date	
Provide Tax ID Number for Payee	Customer Tax ID #	31-6000897
	Vendor Tax ID #	262368277

Terms and Conditions

I have read and hereby agree to the Terms & Conditions and Program Requirements.

Customer Signature	Robert Fischer	Vendor Signature	
Date	6/20/11	Date	6/14/2011
Title	DIR. BLDGS & GRDS	Title	[illegible]

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.

NOTE: All Fixtures must be installed indoors, with the exception of Traffic and Pedestrian Signals and where otherwise noted.

Fixtures = Lamps + Ballast Retrofit (fixture replacement 1:1 ratio (except where otherwise indicated) [illegible]	Incentive per fixture [illegible]	Qty [illegible]	Actual operating Hours (minimum [illegible])	Equipment cost [illegible]	Date installed or operable (mm/yy)	[illegible]
T-12 fixtures replaced by T8 – (T8 U tube lamps apply [illegible] only [illegible])						
T8 8ft 2 lamp replacing T12 8ft 2 lamp (retrofit only)	$7.00		Hrs.			
T8 8ft 1 lamp replacing T12 8ft 1 lamp (retrofit only)	$5.00		Hrs.			
T8 4ft 4 lamp replacing T12 4ft 4 lamp (retrofit only)	$11.00		Hrs.			
T8 4ft 3 lamp replacing T12 4ft 3 lamp (retrofit only)	$9.00		Hrs.			
T8 4ft 2 lamp replacing T12 4ft 2 lamp (retrofit only)	$4.00		Hrs.			
T8 4ft 1 lamp replacing T12 4ft 1 lamp (retrofit only)	$3.00		Hrs.			
T8 3ft 4 lamp replacing T12 3ft 4 lamp (retrofit only)	$10.00		Hrs.			
T8 3ft 3 lamp replacing T12 3ft 3 lamp (retrofit only)	$6.50		Hrs.			
T8 3ft 2 lamp replacing T12 3ft 2 lamp (retrofit only)	$4.00		Hrs.			
T8 3ft 1 lamp replacing T12 3ft 1 lamp (retrofit only)	$3.00		Hrs.			
T8 2ft 4 lamp replacing T12 2ft 4 lamp (retrofit only)	$6.00		Hrs.			
T8 2ft 3 lamp replacing T12 2ft 3 lamp (retrofit only)	$4.20		Hrs.			
T8 2ft 2 lamp replacing T12 2ft 2 lamp (retrofit only)	$4.00		Hrs.			
T8 2ft 1 lamp replacing T12 2ft 1 lamp (retrofit only)	$3.00		Hrs.			
T8 HO 8ft 1 lamp replacing T12 HO 8ft 1 lamp (retrofit only)	$10.00		Hrs.			
T8 HO 8ft 2 lamp replacing T12 HO 8ft 2 lamp (retrofit only)	$14.00		Hrs.			
T8 HB 4ft 3L replacing 150-249W HID(retrofit only)	$30.00		Hrs.			
T8 HB 4ft 4L a replacing 250-399W HID(retrofit only)	$40.00		Hrs.			
T8 HB 4ft 6L replacing 400-999W HID (retrofit only)	$50.00		Hrs.			
T8 HB 4ft 8L replacing a 400-999W HID(retrofit only)	$40.00		Hrs.			
2 fixtures – T8 HB 4ft 8 Lamp (32W) replacing 1,000 W HID (2 for 1 replacement (retrofit only)	$120.00		Hrs.			

- Replacement must result in energy savings to qualify.
- All equipment must be **new** to be eligible for incentives. Used equipment is ***not*** eligible for incentives.
- All fixtures must operate a minimum of 1,800 hours to be eligible.
- All fluorescent fixtures shall utilize electronic ballast and T-8 lamps.
- Ballasts shall have a power factor greater than 90%.
- Ballasts, harmonic distortion shall not exceed 20%. For 8-foot fluorescent ballasts, the total harmonic distortion shall not exceed 30%.
- Lighting circuits should be installed with a neutral wire that has the same size conductor as the line load.
- All fixtures shall be installed indoors (heated and cooled enclosed space).
- All fixtures, lamps and ballasts must be UL certified and meet all applicable codes and regulations.
- High lumen lamp and low ballast factor ballast combinations are expected.
- Eligible T8 High Bays must have specular/mirror like or white reflectors and fixture efficiency must be >90%.
- *Manufacturers spec sheet is required and must indicate that it is a High Bay fixture and the fixture efficiency is > than 90%. If spec sheet does not list efficiency, a photometric report will be required that indicates total fixture (Luminaire) efficiency rating or the 0-180 degree of lamp rating included in the zonal lumen summary chart.*
- Incentive capped at 50% of the equipment cost.

T8 8ft 1 lamp replacing T12 8 ft 2 lamp (retrofit only)*	$10.00		Hrs.			
T8 4ft 2 lamp replacing T12 4ft 3 lamp (retrofit only)*	$5.00		Hrs.			
T8 4ft 1 lamp replacing T12 4ft 2 lamp (retrofit only)*	$5.00		Hrs.			
T8 3ft 3 lamp replacing T12 3ft 4 lamp (retrofit only)*	$4.00		Hrs.			
T8 3ft 2 lamp replacing T12 3 ft 3 lamp (retrofit only)*	$4.00		Hrs.			
T8 3ft 1 lamp replacing T12 3 ft 2 lamp (retrofit only)*	$4.00		Hrs.			
T8 2ft 3 lamp replacing T12 2 ft 4 lamp (retrofit only)*	$3.00		Hrs.			
T8 2ft 2 lamp replacing T12 2 ft 3 lamp (retrofit only)*	$3.00		Hrs.			
T8 2ft 1 lamp replacing T12 2ft 2 lamp (retrofit only)*	$3.00		Hrs.			

- Replacement must result in energy savings to qualify.
- All equipment must be **new** to be eligible for incentives. Used equipment is ***not*** eligible for incentives.
- All fixtures must operate a minimum of 1,800 hours to be eligible.
- All fluorescent fixtures shall utilize electronic ballast and T-8 lamps .
- Ballasts shall have a power factor greater than 90%.
- Ballasts, harmonic distortion shall not exceed 20%. For 8-foot fluorescent ballasts, the total harmonic distortion shall not exceed 30%.
- Lighting circuits should be installed with a neutral wire that has the same size conductor as the line load.
- All fixtures shall be installed indoors.
- All fixtures, lamps and ballasts must be UL certified and meet all applicable codes and regulations.
- Incentive capped at 50% of the equipment cost.

Fixtures = Lamps + Ballast Retrofit fixture replacement – 1:1 ratio (except where otherwise indicated)	Ballast and Model Numbers (see list)	Incentive per fixture	Qty	Annual Operating Hours (minimum of 1,800)	Equipment Cost per fixture	Labor per fixture	Total Incentive
T12 8ft and 4ft fixture replaced by T8 High Performance							
Replace standard T12 systems with T8 lamps and approved CEE ballast. In order to qualify for incentives, bulbs must be listed on CEE reduced wattage approved list. To view the CEE Reduced Wattage qualified products list, go to www.cee1.org. Note: Reduced wattage compatibility varies; consult manufacturer's literature before specifying products.							
High Performance T8 4ft 2 lamp fixture replacing T12 8ft 1 lamp fixture	Ballast model# Lamp model #	$10.00		Hrs.			
High Performance T8 4ft 4 lamp fixture replacing T12 8ft 2 lamp fixture	Ballast model# Lamp model #	$10.00		Hrs.			
High Performance T8 4ft 2 lamp fixture replacing T12 High Output 8ft 1 lamp fixture	Ballast model# Lamp model #	$20.00		Hrs.			
High Performance T8 4ft 4 lamp fixture replacing T12 High Output 8ft 2 lamp fixture	Ballast model# Lamp model #	$25.00		Hrs.			
High Performance T8 4ft 1 lamp fixture replacing T12 4ft 1 lamp	Ballast model# Lamp model #	$6.00		Hrs.			
High Performance T8 4ft 2 lamp fixture replacing T12 4ft 2 lamp	Ballast model# Lamp model #	$8.00		Hrs.			
High Performance T8 4ft 3 lamp fixture replacing T12 4 ft 3 lamp	Ballast model# Lamp model #	$12.00		Hrs.			
High Performance T8 4ft 4 lamp fixture replacing T12 4 ft 4 lamp	Ballast model# Lamp model #	$16.00		Hrs.			
T-12 4ft fixture replaced by Reduced Wattage T8 Lighting							
Replace standard T12 systems with 4' 25W lamps, 28W lamps, and approved CEE ballast. In order to qualify for incentives, bulbs must be listed on CEE reduced wattage approved list. To view the CEE Reduced Wattage qualified products list, go to www.cee1.org. Note: Reduced wattage compatibility varies; consult manufacturer's literature before specifying products.							
Reduced Wattage T8 4ft 1 lamp of 28W or less & ballast replacing standard T12 4ft 1 lamp – 34 W	Ballast model# Lamp model #	$8.00		Hrs.			
Reduced Wattage T8 4ft 2 lamp of 28 W or less & ballast replacing standard T12 4 ft 2 lamp – 34 W	Ballast model# Lamp model #	$10.00		Hrs.			
Reduced Wattage T8 4ft 3 lamp of 28 W or less & ballast replacing standard T12 4 ft 3 lamp – 34 W	Ballast model# Lamp model #	$14.00		Hrs.			
Reduced Wattage T8 4ft 4 lamp of 28 W or less & ballast replacing standard T12 4 ft 4 lamp – 34 W	Ballast model# Lamp model #	$18.00		Hrs.			

- Replacement must result in energy savings to qualify.
- All equipment must be new to be eligible for incentives. Used equipment is *not* eligible for incentives.
- All fixtures must operate a minimum of 1,800 hours to be eligible.
- All fluorescent fixtures shall utilize electronic ballast and T-8 lamps.
- Ballasts shall have a power factor greater than 90%.
- Ballasts, harmonic distortion shall not exceed 20%.
- Lighting circuits should be installed with a neutral wire that has the same size conductor as the line load.
- All fixtures shall be installed indoors except where specifically stated.
- All fixtures, lamps and ballasts must be UL certified and meet all applicable codes and regulations.
- Replacement must result in energy savings to qualify.
- High lumen lamp and low ballast factor ballast combinations are expected.
- Normal or low ballast factor ballasts must be utilized to be eligible.
- Reduced watt T8 lamps should not be used in dimming applications unless the lamp and ballast manufacturers have approved a specific application for dimming or frequent switching. May demonstrate dim light, spiraling, pulsing and other undesirable behavior in cooler temperature rooms and while warming up. System performance varies based on lamp or ballast components.
- Incentive capped at 50% of the equipment cost.

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]						
T5 4ft (28 watt) 1 lamp replacing T12 4ft 1 lamp (retrofit only)	$5.00		Hrs.			
T5 4ft (28 watt) 2 lamp replacing T12 4ft 2 lamp (retrofit only)	$8.00		Hrs.			
T5 4ft (28 watt) 3 lamp replacing T12 4ft 3 lamp (retrofit only)	$10.00		Hrs.			
T5 4ft (28 watt) 4 lamp replacing T12 4ft 4 lamp (retrofit only)	$12.00		Hrs.			
T5 HO 4ft 1 (54 watt) lamp replacing 34W T12 4ft 2 lamp (retrofit only)	$6.00		Hrs.			
T5 HO 4ft 2 (54 watt) lamp replacing 34W T12 4ft 4 lamp (retrofit only)	$9.00		Hrs.			
T5 HO 4ft 2 (54 watt) lamp replacing 60W T12 8 ft 2 lamp (retrofit only)	$9.00		Hrs.			
T5 HO 4ft 3 (54 watt) lamp replacing 95W T12 HO 8ft 2 lamp (retrofit only)	$11.00		Hrs.			
T5 HO 4ft 4 (54 watt) lamp replacing 60W T12 8ft 4 lamp (retrofit only)	$13.00		Hrs.			
T5 HO 4ft 4 (54 watt) lamp replacing 95W T12 VHO 8ft 2 lamp (retrofit only)	$13.00		Hrs.			
T5 HO HB 2L replacing 150-249W HID (retrofit only) Fixture efficiency Model Number	$30.00		Hrs.			
T5 HO HB 3L replacing 250-399W HID(retrofit only) Fixture efficiency Model Number	$40.00		Hrs.			
T5 HO HB 4L replacing 400-999W HID(retrofit only) Fixture efficiency Model Number	$50.00		Hrs.			
T5 HO HB 6L replacing 400-999W HID (retrofit only) Fixture efficiency Model Number	$40.00		Hrs.			
T5 HO HB 8L replacing 750-999W HID (retrofit only) Fixture efficiency Model Number	$75.00		Hrs.			
2 fixtures – T5 HO HB 6 Lamp replacing 1,000 W HID (2 for 1 replacement retrofit only) Fixture efficiency Model Number	$120.00		Hrs.			

- Replacement must result in energy savings to qualify.
- All equipment must be **new** to be eligible for incentives. Used equipment is **not** eligible for incentives.
- All fixtures must operate a minimum of 1,800 hours to be eligible.
- All fluorescent fixtures shall utilize electronic ballast and T-5 lamps.
- Ballasts shall have a power factor greater than 90%.
- Ballasts, harmonic distortion shall not exceed 20%.
- Lighting circuits should be installed with a neutral wire that has the same size conductor as the line load.
- All fixtures shall be installed indoors
- All fixtures, lamps and ballasts must be UL certified and meet all applicable codes and regulations.
- Replacement must result in energy savings to qualify.
- Eligible T5 High Bays must have specular/mirror like or white reflectors and fixture efficiency must be >90%. *Manufacturers spec sheet is required and must indicate that it is a High Bay fixture and the fixture efficiency is > than 90%. If spec sheet does not list efficiency, a photometric report will be required that indicates total fixture (Luminaire) efficiency rating or the 0-180 degree of lamp rating included in the zonal lumen summary chart.*
- Incentive capped at 50% of the equipment cost.

21" Tubular Skylight/Light Tube (at least one light fixture per light tube must be controlled by a "daylight" sensor (no additional daylight sensor incentive applies) Check One ** ☐R ☐NC ☐FE	$75.00 / fixture					
LED Exit Signs (replacing or retrofitting existing incandescent or compact fluorescent exit sign)	$10.00 / fixture					
LED Lighting in Reach-in Freezer or Cooler Case (replacing or in lieu of fluorescent fixtures) check one ** ☐R ☐NC ☐FE	$50.00 / door					
LED Case Lighting Sensor Controls ** ☐R ☐NC ☐FE	$10.00 / sensor					
Under 500 W connected to sensor check one ** ☒R ☐NC ☐FE	$20.00 / sensor	117	2860	$10,530.00	08/07	$2,340.00
Over 500 W connected to sensor check one ** ☒R ☐NC ☐FE	$40.00 / sensor	57	2860	$5,130.00	08/07	$2,280.00

- Replacement must result in energy savings to qualify
- All equipment must be **new** to be eligible for incentives. Used equipment is **not** eligible for incentives.
- Lighting circuits should be installed with a neutral wire that has the same size conductor as the line load.
- All fixtures shall be installed indoors except where specifically stated.
- All fixtures, lamps and ballasts must be UL certified and meet all applicable codes and regulations.
- All fixtures must operate a minimum of 1,800 hours to be eligible.
- Tubular Skylight requires at least one light fixture per light tube that must be controlled by a "daylight" sensor (no additional daylight sensor incentive applies)
- LED exit signs shall use 5 watts or less including the battery charger when active. They must meet State Fire Marshal codes and be UL rated.
- Occupancy Sensors (under and over 500) must be either wall, ceiling, or fixture mounted. Rapid or programmed start ballasts are recommended for fluorescent fixtures.
- Occupancy Sensors (under 500W) installed on or built into High Bay fixtures are eligible for incentives.
- LED Lighting in Reach-in Freezer or Cooler Case: Must install a LED lighting system and replace (or in lieu of) a fluorescent lighting system for reach-in refrigerated display case.
- Fluorescent magnetic ballasts cannot be used to power the LED case lighting system. Existing fluorescent fixture end connectors and ballasts must be removed.
- LED case lighting system must be a permanently installed luminaire. LED lamps that install into fluorescent lamp sockets are not eligible for incentives.
- LED Case Lighting Sensor Controls may only be installed with LED lighting systems. End of aisle and individual case sensors qualify.
- Incentive capped at 50% of the equipment cost.

Exterior LED or Induction fixture replacing up to 175W HID Model Number	$40 / fixture					
Exterior LED or Induction fixture replacing 176W – 250W HID Model Number	$50 / fixture					
Exterior LED or Induction fixture replacing 251W – 400W HID Model Number	$80 / fixture					
Exterior LED or Induction fixture replacing > 400 W HID Model Number	$150 / fixture					
Garage LED or Induction fixture replacing up to 175 W HID Model Number	$100 / fixture					
Garage LED or Induction fixture replacing 176W – 250W HID Model Number	$150 / fixture					
Garage LED or Induction fixture replacing 251W – 400 W HID Model Number	$250 / fixture					
Garage LED or Induction fixture replacing > 400 W HID Model Number	$400 / fixture					
LED Auto Traffic Signals (replacing incandescent) Model Number	$12.50 / lamp					
LED Pedestrian Signals (replacing incandescent) Model Number	$25.00 / signal					

- Replacement must result in energy savings to qualify
- All fixtures, lamps and ballasts must be UL certified and meet all applicable codes and regulations.
- All fixtures must operate a minimum of 1,800 hours to be eligible.
- All equipment must be **new** to be eligible for incentives. Used equipment is ***not*** eligible for incentives.
- Outdoor and garage **LED** and induction lighting must result in a total power ***reduction*** of 40% or more.
- Outdoor and garage **LEDs** should be listed on either the Energy Star or **Design Lights** consortium qualifying products lists:
    1. http://www.energystar.gov/index.cfm?fuseaction=ssl.display_products_com_pdf
    2. http://www.designlights.org/documents/NEEPDLCQPL.xls
- Traffic and pedestrian signals using **LED** lights must replace conventional Incandescent signals.
- Incentive capped at 50% of the equipment cost.

Incentive Application Instructions

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

1. Review program and equipment requirements on the incentive application. (Page 6)
2. Purchase and install eligible energy-efficient equipment.
3. Complete and submit application within 90 days **after** equipment has been installed and is operational.
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 PrescriptiveIncentives@duke-energy.com or fax to 1-866-908-4921 or mail to the following address:

   Duke Energy
   Smart $aver® Incentive Program
   431 Charmany Drive
   Madison, WI 53719

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.

Ben Aring

From: Veronica Gayotin [veronica.gayotin@lakotaonline.com]
Sent: Thursday, July 07, 2011 7:58 AM
To: Robert Fischer
Subject: RE: Duke Question - READ FIRST

Bob, I grouped the query based on acct # do you know the building numbers (the last two digits followed by a zero)?

The account number will start with 004 (shown at the top of the report)

07 Wyandot (Summerlin)
08 Endeavor (Smith)
12 Hopewell
31 West Freshman
32 West
33 East
34 East Freshman

Acct # 003 is LWC
06 New Union

Let me know if this helps. I believe I can break the report down further by adding a line in the query for each building, would you prefer that?

Veronica Gayotin
Lakota Local Schools - Business Operations
5572 Princeton Road
Liberty Township, OH 45011
513.644.1172 or Ext 22021
513.644.1183 Fax

From: Robert Fischer [mailto:robert.fischer@lakotaonline.com]
Sent: Thursday, July 07, 2011 7:18 AM
To: Veronica Gayotin
Subject: RE: Duke Question - READ FIRST

Wyandot PoP → #07

(#1)

ION

LAKOTA LOCAL SCHOOLS, BUTLER COUNTY, OH
VENDOR PAYMENT HISTORY

IA: ((((transact.vend_no = "011547")) AND ((transact.key_orgn MATCHES "004*")) AND ((transact.ck_date >= "2006-12

DOR----------	INVOICE PURCHASE OR	1099 P/F	CHECK NO DATE	BUDGET UNIT #2 PROJECT	------DESCRIPTION------- CONTROL	SALES TAX	AMOUNT
	1 EH	N	119190	0042005550000330-620	10C BID PACKAGES - PLU	0.00	32029.52
HANICAL INC.	07005757	P	01/25/07		AEG0125		
	1 WH	N	119190	0042005550000320-620	10C BID PACKAGES - PLUM	0.00	32029.52
HANICAL INC.	07005760	P	01/25/07		AEG0125		
	7 SM	N	119190	0042005550000070-620	3.3A HVAC PACKAGE	0.00	141770.00
HANICAL INC.	06008223	P	01/25/07		AEG0125		
	7 SU	N	119190	0042005550000080-620	3.3B HVAC PACKAGE	0.00	191486.42
HANICAL INC.	06008224	P	01/25/07		AEG0125		
	2 EH	N	120659	0042005550000330-620	10C BID PACKAGES - PLU	0.00	46267.73
HANICAL INC.	07005757	P	02/27/07		AEG0228		
	2 WH	N	120659	0042005550000320-620	10C BID PACKAGES - PLUM	0.00	6749.12
HANICAL INC.	07005760	P	02/27/07		AEG0228		
	8 SM	N	120659	0042005550000070-620	3.3A HVAC PACKAGE	0.00	21866.00
HANICAL INC.	06008223	P	02/27/07		AEG0228		
	8 SU	N	120659	0042005550000080-620	3.3B HVAC PACKAGE	0.00	47715.85
HANICAL INC.	06008224	P	02/27/07		AEG0228		
	3 EH	N	121998	0042005550000330-620	10C BID PACKAGES - PLU	0.00	36738.80
HANICAL INC.	07005757	P	03/30/07		AEG0329		
	3 WH	N	121998	0042005550000320-620	10C BID PACKAGES - PLUM	0.00	92181.98
HANICAL INC.	07005760	P	03/30/07		AEG0329		
	9 SM	N	121998	0042005550000070-620	3.3A HVAC PACKAGE	0.00	30666.00
HANICAL INC.	06008223	P	03/30/07		AEG0329		
	9 SU	N	121998	0042005550000080-620	3.3B HVAC PACKAGE	0.00	40313.00
HANICAL INC.	06008224	P	03/30/07		AEG0329		
	10 SM	N	123044	0042005550000070-620	3.3A HVAC PACKAGE	0.00	20628.00
HANICAL INC.	06008223	P	04/26/07		AEG0426		
	10 SU	N	123044	0042005550000080-620	3.3B HVAC PACKAGE	0.00	33424.00
HANICAL INC.	06008224	P	04/26/07		AEG0426		
	4 EH	N	123044	0042005550000330-620	10C BID PACKAGES - PLU	0.00	211556.53
HANICAL INC.	07005757	P	04/26/07		AEG0426		
	4 WH	N	123044	0042005550000320-620	10C BID PACKAGES - PLUM	0.00	206118.54
HANICAL INC.	07005760	P	04/26/07		AEG0426		
	11 SM	N	124448	0042005550000070-620	3.3A HVAC PACKAGE	0.00	16232.00
HANICAL INC.	06008223	P	05/29/07		AEG0529		
	11 SU	N	124448	0042005550000080-620	3.3B HVAC PACKAGE	0.00	15492.00
HANICAL INC.	06008224	P	05/29/07		AEG0529		
	5 EH	N	124448	0042005550000330-620	10C BID PACKAGES - PLU	0.00	189791.96
HANICAL INC.	07005757	P	05/29/07		AEG0529		
	5 WH	N	124448	0042005550000320-620	10C BID PACKAGES - PLUM	0.00	179955.49
HANICAL INC.	07005760	P	05/29/07		AEG0529		
	12 SM	N	125742	0042005550000070-620	3.3A HVAC PACKAGE	0.00	51600.00
HANICAL INC.	06008223	P	06/21/07		AEG0621		
	12 SU	N	125742	0042005550000080-620	3.3B HVAC PACKAGE	0.00	6187.00
HANICAL INC.	06008224	P	06/21/07		AEG0621		
	6 EH	N	125742	0042005550000330-620	10C BID PACKAGES - PLU	0.00	60264.03
HANICAL INC.	07005757	P	06/21/07		AEG0621		
	6 WH	N	125742	0042005550000320-620	10C BID PACKAGES - PLUM	0.00	54454.21
HANICAL INC.	07005760	P	06/21/07		AEG0621		
	13 SM	N	126586	0042005550000070-620	3.3A HVAC PACKAGE	0.00	12315.00
HANICAL INC.	06008223	P	07/31/07		AEG0731		

Wyandot P.O.P #07

(#2)

ION

PAGE NUMBER: 1
ACCTPA31

LAKOTA LOCAL SCHOOLS, BUTLER COUNTY, OH
VENDOR PAYMENT HISTORY

IA: ((((transact.vend_no = "7106")) AND ((transact.key_orgn MATCHES "004*")) AND ((transact.ck_date >= "2006-12-3

DOR	INVOICE PURCHASE	1099 OR P/F	CHECK NO DATE	BUDGET UNIT #2 PROJECT	-------DESCRIPTION------ CONTROL	SALES TAX	AMOUNT
	2 SM TEMP CO	N	119203	0042005550000070-620	SMITH RD. STATE TERM CO	0.00	25420.53
	06008060	P	01/25/07		AEG0125		
	[redacted]	N	[redacted]03	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	P	[redacted]		[redacted]		
	3 SM	N	120661	0042005550000070-620	SMITH RD. STATE TERM CO	0.00	34653.97
	06008060	P	02/27/07		AEG0228		
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]			AEG0228		
	4 SM	N	122005	0042005550000070-620	SMITH RD. STATE TERM CO	0.00	53275.82
	06008060	P	03/30/07		AEG0329		
	[redacted]	N	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	06008062	P	03/30/07		AEG0329		
	033107	N	123051	0042005550000330-620	HVAC & RELATED EQUIPMEN	0.00	26112.27
	07007475	P	04/26/07		AEG0426		
	1 WH	N	123051	0042005550000320-620	HVAC & RELATED EQUIPMEN	0.00	26106.53
	07007854	P	04/26/07		AEG0426		
	4 SM.	N	123051	0042005550000070-620	SMITH RD - STATE CONTRA	0.00	2818.84
	06008040	P	04/26/07		AEG0426		
	4 SU.	N	123051	0042005550000080-620	SUMMERLIN - STATE CONTR	0.00	186.70
	06008059	P	04/26/07		AEG0426		
	5 SM	N	123051	0042005550000070-620	SMITH RD. STATE TERM CO	0.00	36867.45
	06008060	P	04/26/07		AEG0426		
	5 SU	N	123051	0042005550000080-620	SUMMERLIN -STATE CONTRA	0.00	35467.45
	06008062	P	04/26/07		AEG0426		
	1 EH	N	124453	0042005550000330-620	HVAC CONTROLS	0.00	44671.00
	07007473	P	05/29/07		AEG0529		
	1 WH.	N	124453	0042005550000320-620	HVAC CONTROLS PACKAGE	0.00	44671.00
	07007149	P	05/29/07		AEG0529		
	2 EH	N	124453	0042005550000330-620	HVAC & RELATED EQUIPMEN	0.00	42805.09
	07007475	P	05/29/07		AEG0529		
	2 WH	N	124453	0042005550000320-620	HVAC & RELATED EQUIPMEN	0.00	42786.27
	07007854	P	05/29/07		AEG0529		
	6 SM	N	124453	0042005550000070-620	SMITH RD. STATE TERM CO	0.00	6391.00
	06008060	P	05/29/07		AEG0529		
	6 SU	N	124453	0042005550000080-620	SUMMERLIN -STATE CONTRA	0.00	6391.00
	06008062	P	05/29/07		AEG0529		
	1 FS	N	125768	0042005550000340-620	LOGISTICS PACKAGE - HVA	0.00	7452.00
	07008067	P	06/21/07		AEG0621		
	2 EH.	N	125768	0042005550000330-620	HVAC CONTROLS	0.00	44417.00
	07007473	P	06/21/07		AEG0621		
	2 WH.	N	125768	0042005550000320-620	HVAC CONTROLS PACKAGE	0.00	44417.00
	07007149	P	06/21/07		AEG0621		
	3 EH	N	125768	0042005550000330-620	HVAC & RELAFED EQUIPMEN	0.00	17555.79
	07007475	P	06/21/07		AEG0621		
	3 WH	N	125768	0042005550000320-620	HVAC & RELATED EQUIPMEN	0.00	17603.25
	07007854	P	06/21/07		AEG0621		
	7 SM	N	125768	0042005550000070-620	SMITH RD. STATE TERM CO	0.00	4888.30
	06008060	P	06/21/07		AEG0621		
	7 SU	N	125768	0042005550000080-620	SUMMERLIN -STATE CONTRA	0.00	4888.30
	06008062	P	06/21/07		AEG0621		

E 07/06/2011 TIME 16:29:21 SUNGARD PENTAMATION - FINANCE PLUS FINANCIAL ACCOUNTING

Wyandot P.O. #07

(#3)

ION

LAKOTA LOCAL SCHOOLS, BUTLER COUNTY, OH
VENDOR PAYMENT HISTORY

IA: ({{{transact.vend_no = "7106"}} AND {{transact.key_orgn MATCHES "004*"}} AND {{transact.ck_date >= "2006-12-3

DOR	INVOICE PURCHASE OR	1099 P/P	CHECK NO DATE	BUDGET UNIT #2 PROJECT	------DESCRIPTION------ CONTROL	SALES TAX	AMOUNT
	1 FS.	N	126592	0042005550000340-620	LOGISTICS PACKAGE - HVA	0.00	181288.19
	07008060	P	07/31/07		AEG0731		
	3 EH.	N	126592	0042005550000330-620	HVAC CONTROLS	0.00	16084.50
	07007473	P	07/31/07		AEG0731		
	4 WH	N	126592	0042005550000320-620	HVAC & RELATED EQUIPMEN	0.00	42757.93
	07007854	P	07/31/07		AEG0731		
	6 WH	N	126592	0042005550000320-620	HVAC CONTROLS PACKAGE	0.00	11990.50
	07007149	P	07/31/07		AEG0731		
	8 SM	N	126592	0042005550000070-620	SMITH RD. STATE TERM CO	0.00	7534.83
	06008060	P	07/31/07		AEG0731		
	8 SU	N	126592	0042005550000080-620	SUMMERLIN -STATE CONTRA	0.00	7534.84
	06008062	P	07/31/07		AEG0731		
	1 F.S	N	127716	0042005550000340-620	LOGISTICS PACKAGE - VAV	0.00	23998.98
	07008066	P	08/31/07		AEG0830		
	1 F.S.	N	127716	0042005550000340-620	LOGISTICS PACKAGE - VAV	0.00	13868.35
	07008064	P	08/31/07		AEG0830		
	2 FS	N	127716	0042005550000340-620	LOGISTICS PACKAGE - HVA	0.00	49747.23
	07008060	P	08/31/07		AEG0830		
	4 EH	N	127716	0042005550000330-620	HVAC CONTROLS	0.00	32119.86
	07007473	P	08/31/07		AEG0830		
	4 EH	N	127716	0042005550000330-620	HVAC & RELATED EQUIPMEN	0.00	54401.26
	07007475	P	08/31/07		AEG0830		
	4 WH CONTROL	N	127716	0042005550000320-620	HVAC CONTROLS PACKAGE	0.00	34325.39
	07007149	P	08/31/07		AEG0830		
	5 EH	N	127716	0042005550000330-620	HVAC & RELATED EQUIPMEN	0.00	729.25
	07007475	P	08/31/07		AEG0830		
	5 WH	N	127716	0042005550000320-620	HVAC & RELATED EQUIPMEN	0.00	12352.64
	07007854	P	08/31/07		AEG0830		
	00001	N	128652	0042005550000330-620	CHANGES IN SEQUENCE OF	0.00	4337.92
	07010490	P	09/20/07		AEG0920		
	3 FS	N	128813	0042005550000340-620	LOGISTICS PACKAGE - HVA	0.00	79074.11
	07008060	P	09/27/07		AEG0927		
	5 E.H.	N	128813	0042005550000330-620	HVAC CONTROLS	0.00	20022.40
	07007473	P	09/27/07		AEG0927		
	5 W.H.	N	128813	0042005550000320-620	HVAC CONTROLS PACKAGE	0.00	24010.87
	07007149	P	09/27/07		AEG0927		
	7953915	N	128813	0042005550000320-620	CHANGES IN THE SEQUENCE	0.00	4337.93
	07010491	P	09/27/07		AEG0927		
	6 E.H.	N	130881	0042005550000330-620	HVAC & RELATED EQUIPMEN	0.00	1069.44
	07007475	P	10/30/07		AEG1030		
	6 EH	N	130881	0042005550000330-620	HVAC CONTROLS	0.00	31255.52
	07007473	P	10/30/07		AEG1030		
	6 W.H.	N	130881	0042005550000320-620	HVAC & RELATED EQUIPMEN	0.00	1069.44
	07007854	P	10/30/07		AEG1030		
	6 WH.	N	130881	0042005550000320-620	HVAC CONTROLS PACKAGE	0.00	29155.52
	07007149	P	10/30/07		AEG1030		
	7 WH	N	132838	0042005550000320-620	HVAC CONTROLS PACKAGE	0.00	12083.48
	07007149	P	11/30/07		AEG1129		
	2 FS.	N	133812	0042005550000340-620	LOGISTICS PACKAGE - VAV	0.00	10130.69
	07008064	P	12/20/07		AEG1220		

Wyandot PoP #07

(#4)

ION

LAKOTA LOCAL SCHOOLS, BUTLER COUNTY, OH
VENDOR PAYMENT HISTORY

PAGE NUMBER: 1
ACCTPA31

IA: ((((transact.vend_no = "1725")) AND ((transact.key_orgn MATCHES "004*")) AND ((transact.ck_date >= "2006-12-3

VENDOR	INVOICE PURCHASE OR	1099	CHECK NO P/F	DATE	BUDGET UNIT #2 PROJECT	DESCRIPTION CONTROL	SALES TAX	AMOUNT
P ENTERPRISE, I	8 SM 06008219	N	119147 P	01/25/07	0042005550000070-620	3.1C - PLUMBING PACKAGE AEG0125	0.00	26425.20
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
P ENTERPRISE, I	9 SM 06008219	N	120652 P	02/27/07	0042005550000070-620	3.1C - PLUMBING PACKAGE AEG0228	0.00	29296.60
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	1 HE [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
P ENTERPRISE, I	10 SM 06008219	N	121966 P	03/30/07	0042005550000070-620	3.1C - PLUMBING PACKAGE AEG0329	0.00	32182.60
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
P ENTERPRISE, I	11 SM 06008219	N	123014 P	04/26/07	0042005550000070-620	3.1C - PLUMBING PACKAGE AEG0426	0.00	94176.80
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P ENTERPRISE, I	[redacted] 07006430	[redacted]	[redacted] P	04/26/07	[redacted]	[redacted]	[redacted]	5100.00
P ENTERPRISE, I	12 SM 07006430	N	124431 P	05/29/07	0042005550000070-620	3.1C - PLUMBING PACKAGE AEG0529	0.00	16304.00
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P ENTERPRISE, I	[redacted] 06008220	[redacted]	[redacted] P	[redacted]	[redacted]	[redacted] AEG0629	[redacted]	[redacted]
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P ENTERPRISE, I	13 SM 06008219	N	125688 P	06/21/07	0042005550000070-620	3.1C - PLUMBING PACKAGE AEG0621	0.00	7781.00
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P ENTERPRISE, I	06008220	P	06/21/07			AEG0621		
P ENTERPRISE, I	4 HE 07006430	N	125688 P	06/21/07	0042005550000120-620	BID PACKAGE # 4 HVAC AEG0621	0.00	38063.00
P ENTERPRISE, I	5 HE 07006430	N	126571 P	07/31/07	0042005550000120-620	BID PACKAGE # 4 HVAC AEG0731	0.00	51612.00
P ENTERPRISE, I	14 SM 06008219	N	127669 P	08/31/07	0042005550000070-620	3.1C - PLUMBING PACKAGE AEG0830	0.00	1060.00
P ENTERPRISE, I	15 SM 06008219	N	127669 P	08/31/07	0042005550000070-620	3.1C - PLUMBING PACKAGE AEG0830	0.00	844.20
P ENTERPRISE, I	15 SU 06008220	N	127669 P	08/31/07	0042005550000080-620	3.1C PLUMBING PACKAGE AEG0830	0.00	1747.32
P ENTERPRISE, I	6 HE 07006430	N	127669 P	08/31/07	0042005550000120-620	BID PACKAGE # 4 HVAC AEG0830	0.00	38243.80
P ENTERPRISE, I	7 HE 07006430	N	128768 P	09/27/07	0042005550000120-620	BID PACKAGE # 4 HVAC AEG0927	0.00	55684.20
P ENTERPRISE, I	8 HE 07006430	N	136288 P	02/28/08	0042005550000120-620	BID PACKAGE # 4 HVAC AEG0228	0.00	18235.00
P ENTERPRISE, I	1 LE 08009651	N	142615 P	07/31/08	0042005550000130-620	LIBERTY ECS RENOVATIONS AEG0731	0.00	29152.00
P ENTERPRISE, I	1 WFS 08009652	N	142615 P	07/31/08	0042005550000310-620	WEST FRESHMAN RENOVATIO AEG0731	0.00	87402.80

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SUNGARD PENTAMATION - FINANCE PLUS FINANCIAL ACCOUNTING

Wyandot PoP #07

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PAGE NUMBER: 1
ACCTPA31

LAKOTA LOCAL SCHOOLS, BUTLER COUNTY, OH
VENDOR PAYMENT HISTORY

IA: ((((transact.vend_no = "8097")) AND ((transact.key_orgn MATCHES "004*")] AND ((transact.ck_date >= "2006-12-3

VDOR	INVOICE PURCHASE	1099 OR P/F	CHECK NO DATE	BUDGET UNIT #2 PROJECT	------DESCRIPTION------ CONTROL	SALES TAX	AMOUNT
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[redacted]							
	8 SM	N	120657	0042005550000070-620	3.4C ELECTRICAL PACKAGE	0.00	56950.00
NDUSTRIES, INC.	06008225	P	02/27/07		AEG0228		
[redacted]							
	9 SM	N	121985	0042005550000070-620	3.4C ELECTRICAL PACKAGE	0.00	17500.00
NDUSTRIES, INC.	06008225	P	03/30/07		AEG0329		
[redacted]							
	10 SM	N	123031	0042005550000070-620	3.4C ELECTRICAL PACKAGE	0.00	61360.00
NDUSTRIES, INC.	06008225	P	04/26/07		AEG0426		
[redacted]							
	11 SM	N	124440	0042005550000070-620	3.4C ELECTRICAL PACKAGE	0.00	31382.00
NDUSTRIES, INC.	06008225	P	05/29/07		AEG0529		
[redacted]							
	12 SM	N	125713	0042005550000070-620	3.4C ELECTRICAL PACKAGE	0.00	19185.00
NDUSTRIES, INC.	06008225	P	06/21/07		AEG0621		
[redacted]							
	13 SM	N	127686	0042005550000070-620	3.4C ELECTRICAL PACKAGE	0.00	32974.15
NDUSTRIES, INC.	06008225	P	08/31/07		AEG0830		
[redacted]							
						0.00	568893.27
						0.00	568893.27

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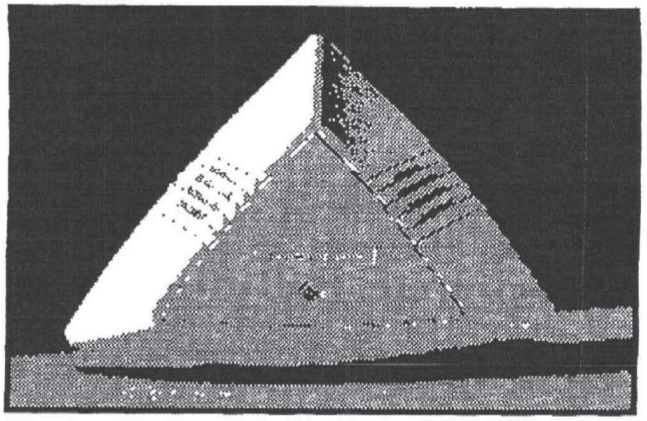
SUNGARD PENTAMATION - FINANCE PLUS FINANCIAL ACCOUNTING

novitas, inc.

MODEL 01-160
SMALL AREA ONE-WAY ROOM SENSOR

- **Automatic electronic lighting control for rooms from 150 to 500 square feet.**
- **Small size, designer styling.**
- **Full coverage. No gaps.**
- **Adjustable sensitivity control.**
- **Replaceable circuit board.**
- **Convenient and safe for occupants. Silent.**
- **Combines with a Novitas Switchpack.**
- **Five-year warranty.**



U.S. Patent No. Des. 337,733

How It Operates:

The 01-160 is a motion sensor that controls lighting and other electrical loads automatically based on the presence or absence of people. The Sensor activates a Novitas® Switchpack to turn loads on and off.

The Sensor produces a low intensity, inaudible sound. It detects changes in the acoustic waves caused by motion, such as reaching for a telephone, turning the pages of a book, walking into a room, turning in a swivel chair, etc. The Sensor does not respond to audible sound. When the Sensor detects motion, the relay in the connected Switchpack is closed and the lights are turned on. If no motion occurs within a pre-set period of time, the lights are turned off. To ensure continuous light when people are present, the time delay can be set from 15 seconds (for installer testing) to 30 minutes. The recommended time delay is usually six to eight minutes. People who remain very still for long periods may need a longer time delay.

Special Features:

- Design ensures complete coverage in all corners of a room.
- Fixed angle position makes installation fast and accurate. No swivel to adjust. No accidental change in coverage.
- Manual override switch turns load on easily should a Sensor ever fail.
- Snap-out circuit board allows fast, easy replacement without affecting hard wiring or mounting.
- Crystal control provides consistent and stable performance. Frequency variations will not exceed ±0.005 percent.
- Ten Switchpack control capability. Up to 20 Amps per Switchpack.
- Convenient access to controls under faceplate allows for easy adjustments by installer.
- Teflon-insulated pigtails are fire-rated for ceiling plenums.
- Removable shunt prevents unnecessary "lights on" following power sweeps in facilities with computer control systems.

Lighting Sweep Applications:

When Sensors are used in conjunction with computer systems that "sweep" power off at night and turn power on in the morning, the installer should remove the JP2 shunt from the printed circuit board to avoid a "lights on" following the power-on sweep (see Printed Circuit Board Diagram). In facilities where no computer sweeps are used, leave the shunt in the factory default setting.

Mounting:

The Sensor mounts through a single 3/4" hole in the ceiling tile. All hardware is provided. An adapter plate is available to allow mounting to a standard fixture ring and junction box.

Range & Coverage:

Use in rooms from approximately 150 to 500 square feet. Minor motion coverage up to 400 square feet. See Coverage Diagrams. For areas outside the range of coverage, refer to other Novitas technical sheets. Multiple sensors may be wired together for complete coverage of larger areas. Range and coverage vary slightly according to room shape and acoustics. In "soft" rooms with carpeting and drapes, coverage may be reduced by approximately 15 percent. An adjustable Sensitivity Control permits adaptation to different areas.

The NEMA WD 7 Guide and robotic method were utilized to verify coverage patterns.

Wiring:

Novitas Sensors are provided with Teflon insulated pigtails. Sensors and Switchpacks are interconnected using 18 AWG Class 2 wiring per NEC 725. Use UL-recognized Teflon insulated wire approved for plenum areas per NEC 725-2(b) where required.

Power Requirements:

15 VDC from Novitas Switchpack only. Up to five Sensors may be powered from one Switchpack.

Output:

Open collector output to switch up to ten Novitas Switchpacks.

Housing:

Handsome design, small and unobtrusive. Medium impact injection-molded housing. ABS resin complies with UL 94V0. Off-white color may be easily painted to match custom ceilings. Sensor guard available.

Size & Weight:

3-1/4" x 4-3/4" x 1" (82mm x 120mm x 24mm). DWH. Approximately 3 oz. (85.2 g).

Installation Considerations:

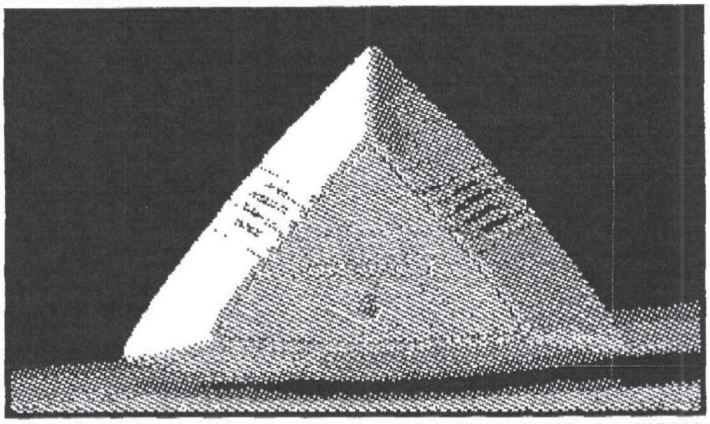
The Sensor must have a clear view of the area to be controlled. It should not be blocked from "seeing" people by high partitions. The Sensor will not "see" through glass. Mounting height should be kept below 12 feet. Avoid pointing into hallways. To prevent false activation, the Sensor should be mounted four feet away from the path of strong air turbulence for standard sensitivity settings and at least six feet away for maximum sensitivity settings. Not for use where temperatures fall below 32° F or exceed 100° F. For indoor use only.

Note: The life of some compact fluorescent lamps (CFLs) is shortened by frequent automatic or manual switching. Check with CFL and ballast manufacturer to determine effects of cycling.

novitas, inc.

MODEL 01-100
ONE-WAY ROOM SENSOR

- **Automatic electronic lighting control.**
- **Small size, designer styling.**
- **Full coverage. No gaps.**
- **Adjustable sensitivity control.**
- **Replaceable circuit board.**
- **Convenient and safe for occupants. Silent.**
- **Combines with a Novitas Switchpack.**
- **Five-year warranty.**



U.S. Letters Patent No. Des. 337,733

How It Operates:

The 01-100 is a motion sensor that controls lighting and other electrical loads automatically based on the presence or absence of people. The Sensor activates a Novitas® Switchpack to turn loads on and off.

The Sensor produces a low-intensity, inaudible sound. It detects changes in acoustic waves caused by motion, such as reaching for the telephone, turning the pages of a book, walking into a room, turning in a swivel chair, etc. The Sensor does not respond to audible sound. When the Sensor detects motion, the relay in the connected Switchpack is closed and lights are turned on. If no motion occurs within a pre-set period of time, lights are turned off. To ensure continuous light when people are present, time delay can be set from 15 seconds (for installer testing) to 30 minutes. The recommended time delay is usually 6-8 minutes. People who remain very still for long periods may need a longer time delay.

Special Features:

- Design ensures complete coverage in all corners of a room.
- Fixed angle position makes installation fast and accurate. No swivel to adjust. No accidental change in coverage.
- Manual override switch turns load on easily if Sensor ever fails.
- Snap-out circuit board allows fast, easy replacement without affecting hard wiring or mounting.
- Multiple frequencies can segment space for greater savings.
- Crystal control provides consistent and stable performance. Frequency variations will not exceed ±0.005 percent.
- Up to ten Switchpacks can be controlled in a single lighting zone. Up to 20 amps per Switchpack.
- Convenient access to controls under faceplate allows for easy adjustments by installer.
- Teflon-insulated pigtails are fire-rated for ceiling plenums.
- Removable shunt prevents unnecessary "lights on" following power sweeps in facilities with computer control systems.

Range & Coverage:

Use in areas from 500 to 1,270 square feet. Minor motion coverage up to 825 square feet. See Coverage Diagrams. For areas outside the range of coverage, refer to other Novitas technical sheets. Multiple Sensors may be wired together for complete coverage of larger areas. If partitions between 49" and 71" are present, see Coverage Diagrams. For greater partition heights, each partitioned area should be treated as an individual space with floor-to-ceiling walls. Range and coverage vary slightly according to room shape and acoustics. In "soft" rooms with carpet and drapes, coverage may be reduced by approximately 15 percent. An adjustable Sensitivity Control permits adaptation to different areas.

The NEMA WD 7 Guide and robotic method were utilized to verify coverage patterns.

Lighting Sweep Applications:

When Sensors are used in conjunction with computer systems that "sweep" power off at night and turn power on in the morning, the installer should remove the JP2 shunt from the printed circuit board to avoid a "lights on" following the power-on sweep (see Printed Circuit Board Diagram). In facilities where no computer sweeps are used, leave the shunt in the factory default setting.

Multiple Frequencies:

Large open areas can be divided into individually controlled spaces without gaps in coverage. Each adjacent area can be independently controlled by using alternate frequency Sensors. Three frequencies are available:

Frequency A = 25 KHz (Standard)
Frequency B = 27 KHz
Frequency C = 32 KHz

Coverage is slightly reduced with frequencies B and C (refer to Novitas Customer Service for coverage dimensions).

Mounting:

The Sensor mounts through a 3/4" hole in the ceiling tile. All hardware is provided. An adapter plate is available to allow mounting to a standard fixture ring and junction box.

Wiring:

Novitas Sensors are provided with Teflon-insulated pigtails. Sensors and Switchpacks are interconnected by 18 AWG Class 2 wiring per NEC 725. Use UL-recognized Teflon-insulated wire approved for plenum areas per NEC 725-2 (b) where required.

Power Requirements:

15 VDC from Novitas Switchpack only. Up to five Sensors may be powered from one Switchpack.

Output:

Open collector output to switch up to ten Novitas Switchpacks.

Housing:

Handsome design, small and unobtrusive. Medium impact injection-molded housing. ABS resin complies with UL 94V0. Off-white color may be easily painted to match custom ceilings. Sensor guard available.

Size & Weight:

3-1/4" x 4-3/4" x 1" (82mm x 120mm x 24mm). DWH. Approximately 3 oz. (85.2 g).

Installation Considerations:

The Sensor must have a clear view of the area to be controlled. It should not be blocked from "seeing" people by high partitions. (For partitioned areas, refer to Coverage Diagrams.) The Sensor will not "see" through glass. Mounting height should be kept below 12 feet. Avoid pointing into hallways. To prevent false activation, the Sensor should be mounted four feet away from the path of strong air turbulence for standard sensitivity settings and at least six feet away for maximum sensitivity settings. Not for use where temperatures fall below 32° F or exceed 100° F. For indoor use only.

Note: The life of some compact fluorescent lamps (CFLs) is shortened by frequent automatic or manual switching. Check with CFL and ballast manufacturer to determine effects of cycling.

novitas, inc.

MODEL 01-110
TWO-WAY LARGE ROOM & INDOOR GARAGE SENSOR

- **Automatic electronic lighting control.**
- **Sleek styling.**
- **Full coverage. No gaps.**
- **Adjustable sensitivity control.**
- **Replaceable circuit board.**
- **Convenient and safe for occupants. Silent.**
- **Combines with a Novitas Switchpack.**
- **Five-year warranty.**

How It Operates:

The 01-110 is a motion sensor that controls lighting and other electrical loads automatically based on the presence or absence of people. The Sensor activates a Novitas® Switchpack to turn loads on and off.

The Sensor produces a low-intensity, inaudible sound. It detects changes in acoustic waves caused by motion, such as reaching for the telephone, turning the pages of a book, walking into a room, etc. The Sensor does not respond to audible sound. When the Sensor detects motion, the relay in the connected Switchpack is closed and the lights are turned on. If no motion occurs within a pre-set period of time, the lights are turned off. To ensure continuous light when people are present, the time delay can be set from 15 seconds (for installer testing) to 30 minutes. The recommended time delay is usually 6-8 minutes. People who remain very still for long periods may need a longer time delay.

Special Features:

- Design ensures complete coverage in all corners of a room.
- Fixed angle position makes installation fast and accurate. No swivel to adjust. No accidental change in coverage.
- Manual override switch turns load on easily if Sensor ever fails.
- Snap-out circuit board allows fast, easy replacement without affecting hard wiring or mounting.
- Multiple frequencies can segment space for greater savings.
- Crystal control provides consistent and stable performance. Frequency variations will not exceed ±0.005 percent.
- Up to ten Switchpacks can be controlled in a single lighting zone. Up to 20 amps per Switchpack.
- Convenient access to controls under faceplate allows for easy adjustments by installer.
- Teflon-insulated pigtails are fire-rated for ceiling plenums.
- Removable shunt prevents unnecessary "lights on" following power sweeps in facilities with computer control systems.

Range & Coverage:

Use in areas from 1,270 to 2,850 square feet. Minor motion coverage up to 1,872 square feet. See Coverage Diagrams. For areas outside the range of coverage, refer to other Novitas technical sheets. Multiple sensors may be wired together for complete coverage of larger areas. If partitions between 49" and 71" are present, see Coverage Diagrams. For greater partition heights, each partitioned area should be treated as an individual space with floor-to-ceiling walls. Range and coverage vary slightly according to room shape and acoustics. In "soft" rooms with carpet and drapes, coverage may be reduced by approximately 15 percent. An adjustable Sensitivity Control permits adaptation to different areas.

The NEMA WD 7 Guide and robotic method were utilized to verify coverage patterns.

Lighting Sweep Applications:

When Sensors are used in conjunction with computer systems that "sweep" power off at night and turn power on in the morning, the installer should remove the JP2 shunt from the printed circuit board to avoid a "lights on" following the power-on sweep (see Printed Circuit Board Diagram). In facilities where no computer sweeps are used, leave the shunt in the factory default setting.

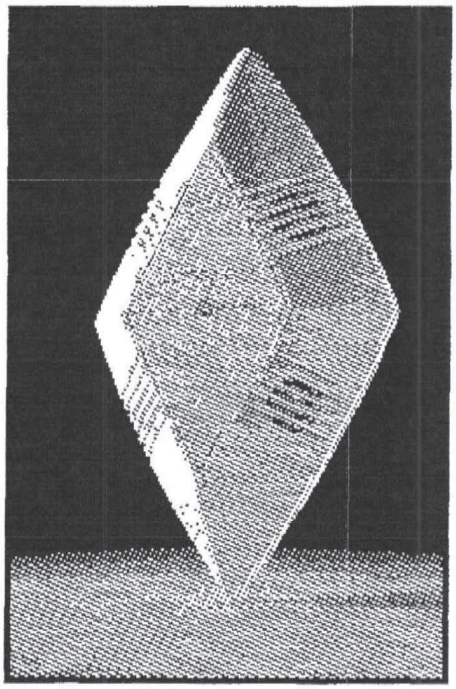
Multiple Frequencies:

Large open areas can be divided into individually controlled spaces without gaps in coverage. Each adjacent area can be independently controlled by using alternate frequency Sensors. Three frequencies are available:

Frequency A = 25 KHz (Standard)

Frequency B = 27 KHz

Frequency C = 32 KHz



U.S. Letters Patent No. Des. 337,542

Coverage is slighted reduced with frequencies B and C (refer to Novitas Customer Service for coverage dimensions).

Mounting:

The Sensor mounts through a single 3/4" hole in the ceiling tile. All hardware is provided. An adapter plate is available to allow mounting to a standard fixture ring and junction box.

Wiring:

Novitas Sensors are provided with Teflon-insulated pigtails. Sensors and Switchpacks are interconnected by 18 AWG Class 2 wiring per NEC 725. Use UL-recognized Teflon-insulated wire approved for plenum areas per NEC 725-2 (b) where required.

Power Requirements:

15 VDC from Novitas Switchpack only. Up to five Sensors may be powered from one Switchpack.

Output:

Open collector output can switch up to ten Novitas Switchpacks.

Housing:

Handsome design. Medium impact injection-molded housing. ABS resin complies with UL 94V0. Off-white color may be easily painted to match custom ceilings. Sensor guard available.

Size & Weight:

3-3/4" x 6" x 1" (94mm x 151mm x 24mm). DWH. Approximately 4 oz. (113.6 g).

Installation Considerations:

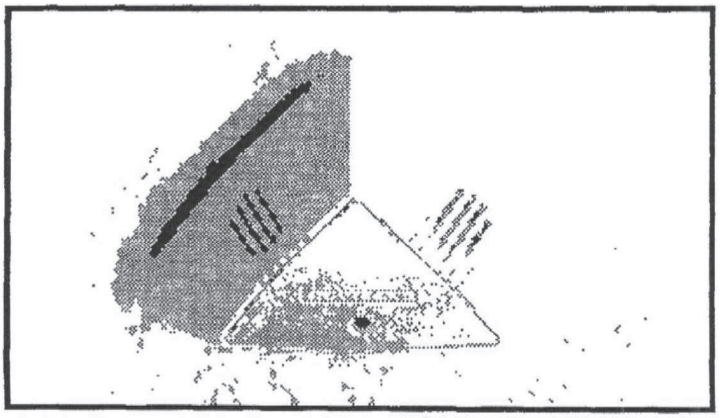
The Sensor must have a clear view of the area to be controlled. It should not be blocked from "seeing" people by high partitions. (For partitioned areas, refer to Coverage Diagrams.) The Sensor will not "see" through glass. Mounting height should be kept below 12 feet. Avoid pointing into hallways. To prevent false activation, the Sensor should be mounted four feet away from the path of strong air turbulence for standard sensitivity settings and at least six feet away for maximum sensitivity settings. Not for use where temperatures fall below 32° F or exceed 100° F. For indoor use only.

Note: The life of some compact fluorescent lamps (CFLs) is shortened by frequent automatic or manual switching. Check with CFL and ballast manufacturer to determine effects of cycling.

novitas, inc.

MODEL 01-180
ONE-WAY CORRIDOR SENSOR

- **Automatic lighting control for corridors.**
- **Small size. Designer styling.**
- **Full coverage. No gaps.**
- **Adjustable sensitivity control.**
- **Replaceable circuit board.**
- **Crystal-controlled for accuracy.**
- **Combines with a Novitas Switchpack.**
- **Five-year warranty.**



U.S. Letters Patent No. Des. 337,733

How It Operates:

The 01-180 is a motion sensor which controls lighting and other electrical loads automatically based on the presence or absence of people. It activates a Novitas® Switchpack to turn loads on and off. Model 01-180 is designed specifically for use in short corridors, where one-way coverage is preferred, or to supplement coverage of a two-way Sensor. For two-way coverage in corridors, use Model 01-190.

The Sensor produces a low intensity, inaudible sound. It detects changes in the acoustic waves caused by motion, such as walking into a corridor. The Sensor does not respond to audible sound. When the Sensor detects motion, relays in all connected Switchpacks are closed and lights are turned on. If no motion occurs within a preset period of time, lights turn off. To ensure continuous light while people are present, the time delay can be set from 15 seconds (for installer testing) to 30 minutes.

Special Features:

- Adjustable sensitivity control provides full corridor coverage; avoids activation from motion in a cross-aisle.
- Manual override switch turns load on easily if Sensor ever fails.
- Snap-out circuit board allows fast, easy replacement without affecting hard wiring or mounting.
- Fixed angle position makes installation fast and accurate. No swivel to adjust. No accidental change in coverage.
- Multiple frequencies enable separate control of adjacent areas.
- Crystal control provides consistent and stable performance. Frequency variations will not exceed ±0.005 percent.
- Up to ten Switchpacks can be controlled in a single lighting zone. Up to 20 amps per Switchpack.
- Teflon-insulated pigtails are fire rated for ceiling plenums.
- Removable shunt prevents unnecessary "lights on" following power sweeps in facilities with computer control systems.

Range & Coverage:

When mounted approximately 10' above the floor, one A Frequency Sensor covers approximately 50' in a 14' wide corridor. See Coverage Diagrams for B and C Frequency Sensors.

The NEMA WD 7 Guide and robotic method were utilized to verify coverage patterns.

Multiple Sensors may be used for long corridors. Five Sensors may be connected to each Switchpack. Use additional Switchpacks where more Sensors are required. Range and coverage may vary slightly, depending on corridor shape and acoustics.

Mounting:

The Sensor mounts through a 3/4" hole in the ceiling tile using hardware provided. An adapter plate is available to allow mounting to a standard fixture ring and junction box.

Lighting Sweep Applications:

When Sensors are used in conjunction with computer systems that "sweep" power off at night and turn power on in the morning, the installer should remove the JP2 shunt from the printed circuit board to avoid a "lights on" following the power-on sweep (see Printed Circuit Board Diagram). In facilities where no computer sweeps are used, leave the shunt in the factory default setting.

Multiple Frequencies:

False activation of lighting in adjoining corridors can be prevented by using alternate frequency Sensors. Three frequencies are available:

Frequency A = 25 KHz
Frequency B = 27 KHz (Standard)
Frequency C = 32 KHz

Coverage varies slightly with different frequencies (see Coverage Diagrams). B Frequency Sensors avoid changes in coverage and false activation when used with standard Novitas Room Sensors which are Frequency A.

Wiring:

Novitas Sensors are provided with Teflon-insulated pigtails. Sensors and Switchpacks are interconnected using 18 AWG class 2 wiring per NEC 725. Use UL-recognized Teflon-insulated wire for plenum areas per NEC 725-2(b) where required.

Power Requirements:

15 VDC from Novitas Switchpack only. Up to five Sensors may be powered from one Switchpack.

Output:

Open collector output to switch up to 10 Novitas Switchpacks.

Housing & Color:

Handsome design, small and unobtrusive. Medium impact injection-molded housing. ABS resin complies with UL 94V0. Off-white color may be easily painted to match custom ceilings. Sensor guard available.

Size & Weight:

3-1/4" x 4-3/4" x 1" (82mm x 120mm x 24mm). DWH. Approximately 3 oz. (85.2g).

Installation Considerations:

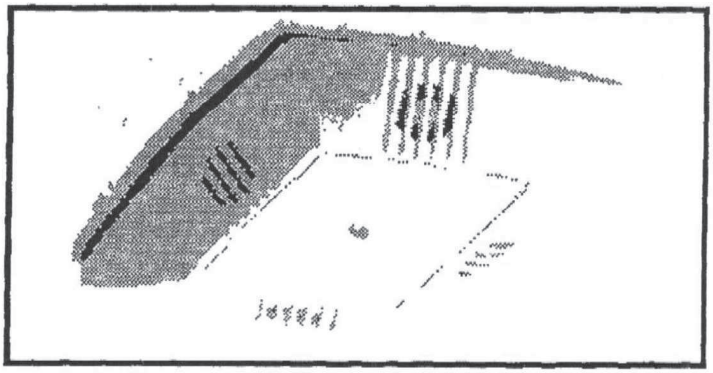
The Sensor must have a clear view of the area to be controlled. There must be an unobstructed line-of-sight from the Sensor to any part of the controlled area. The Sensor will not "see" through glass. To prevent false activation, the Sensor should not be mounted in the path of strong air turbulence. Not for use where temperatures fall below 32° F or exceed 100° F. For indoor use only.

Note: The life of some compact fluorescent lamps (CFLs) is shortened by frequent automatic or manual switching. Check with CFL and ballast manufacturer to determine effects of cycling.

novitas, inc.

MODEL 01-190
TWO-WAY CORRIDOR SENSOR

- **Automatic lighting control for corridors.**
- **Sleek styling.z**
- **Bi-directional pattern.**
- **Full coverage. No gaps.**
- **Replaceable circuit board.**
- **Adjustable sensitivity control.**
- **Crystal-controlled for accuracy.**
- **Combines with a Novitas Switchpack.**
- **Five-year warranty.**



U.S. Letters Patent No. Des. 337,542

How It Operates:

The 01-190 is a motion sensor which controls lighting and other electrical loads automatically based on the presence or absence of people. Designed specifically for use in corridors, the Sensor activates a Novitas® Switchpack to turn loads on and off.

The Sensor produces a low intensity, inaudible sound. It detects changes in the acoustic waves caused by motion, such as walking into a corridor. The Sensor does not respond to audible sound. When the Sensor detects motion, relays in all connected Switchpacks are closed and lights are turned on. If no motion occurs within a preset period of time, lights are turned off. To ensure continuous light while people are present, the time delay can be set from 15 seconds (for installer testing) to 30 minutes.

Special Features:

- Bi-directional design maximizes coverage in long, narrow spaces.
- Manual override switch turns load on easily if Sensor ever fails.
- Snap-out circuit board allows fast, easy replacement without affecting hard wiring or mounting.
- Adjustable sensitivity control provides full corridor coverage; avoids activation from motion in a cross-aisle.
- Fixed angle position makes installation fast and accurate. No swivel to adjust. No accidental change in coverage.
- Multiple frequencies enable separate control of adjacent areas.
- Crystal control provides consistent and stable performance. Frequency variations will not exceed ±0.005 percent.
- Up to ten Switchpacks can be controlled in a single lighting zone. Up to 20 amps per Switchpack.
- Teflon insulated pigtails are fire rated for ceiling plenums.
- Removable shunt prevents unnecessary "lights on" following power sweeps in facilities with computer control systems.

Range & Coverage:

When mounted approximately 10' above the floor, one A Frequency Sensor covers approximately 100' in a 14' wide corridor. Add additional Sensors to increase coverage. See Coverage Diagrams for B and C Frequency Sensors.

The NEMA WD 7 Guide and robotic method were utilized to verify coverage patterns.

Multiple Sensors may be used for long corridors. Five Sensors may be connected to each Switchpack. Use additional Switchpacks where more Sensors are required. Range and coverage may vary slightly, depending on corridor shape and acoustics.

Mounting:

The Sensor mounts through a 3/4" hole in the ceiling tile using provided hardware. An adapter plate is available to allow mounting to a standard fixture ring and junction box.

Lighting Sweep Applications:

When Sensors are used in conjunction with computer systems that "sweep" power off at night and turn power on in the morning, the installer should remove the JP2 shunt from the printed circuit board to avoid a "lights on" following the power-on sweep (see Printed Circuit Board Diagram). In facilities where no computer sweeps are used, leave the shunt in the factory default setting.

Multiple Frequencies:

False activation of lighting in adjoining corridors can be prevented by using alternate frequency Sensors. Three frequencies are available:

Frequency A = 25 KHz
Frequency B = 27 KHz (Standard)
Frequency C = 32 KHz

Coverage varies slightly with different frequencies (see Coverage Diagrams). B Frequency Sensors avoid changes in coverage and false activation when used with standard Novitas Room Sensors which are Frequency A.

Wiring:

Novitas Sensors are provided with Teflon insulated pigtails. Sensors and Switchpacks are interconnected using 18 AWG class 2 wiring per NEC 725. Use UL-recognized Teflon insulated wire for plenum areas per NEC 725-2(b) where required.

Power Requirements:

15 VDC from Novitas Switchpack only. Up to five Sensors may be powered from one Switchpack.

Output:

Open collector output to switch up to 10 Novitas Switchpacks.

Housing:

Handsome design. Medium impact injection-molded housing. ABS resin complies with UL 94V0. Off-white color may be easily painted to match custom ceilings. Sensor guard available.

Size & Weight:

3-3/4" x 6" x 1" (94mm x 151mm x 24mm). DWH. Approximately 4 oz. (113.6g).

Installation Considerations:

The Sensor must have a clear view of the area to be controlled.

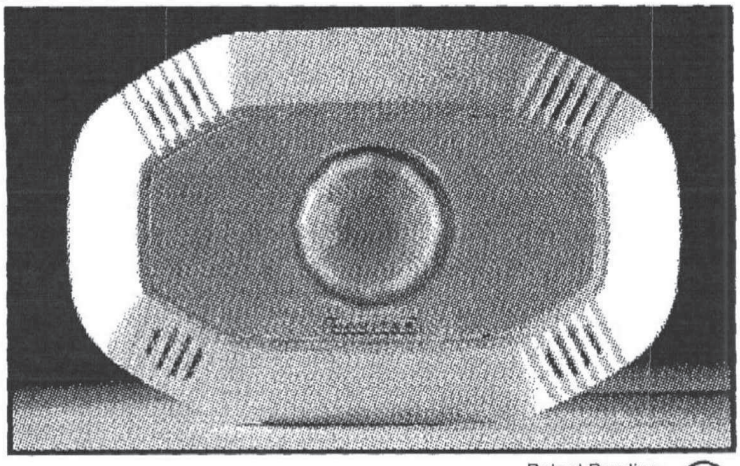
There must be an unobstructed line-of-sight from the Sensor to any part of the controlled area. The Sensor will not "see" through glass. To prevent false activation, the Sensor should not be mounted in the path of strong air turbulence. Not for use where temperatures fall below 32 degrees Fahrenheit or exceed 100 degrees Fahrenheit. For indoor use only.

Note: The life of some compact fluorescent lamps (CFLs) is shortened by frequent automatic or manual switching. Check with CFL and ballast manufacturer to determine effects of cycling.

novitas, inc.

MODEL 01-310-BAS
SUPER DUAL TECH SENSOR (ONE-WAY)

- **Ultrasonic & passive infrared sensors.**
- **Real-time self-adjusting sensitivity and time delay.**
- **Microprocessor-based Airflow Tolerant Technology™.**
- **Manual On/Off switch capability.**
- **BAS interface with "Zero Time Delay" option.**
- **Immune to RFI, EMI and voltage fluctuations.**
- **Five-year warranty.**



Patent Pending

How It Operates:

The Super Dual Tech Sensor provides superior performance in lighting and HVAC control through the most effective combination of passive infrared (PIR) and ultrasonic technologies. This pairing helps eliminate false activation in rooms with heavy airflow while providing full coverage without gaps. Separate, concurrent time delays for each technology avoid inadvertent lights out in occupied rooms. Microprocessor-based Airflow Tolerant Technology™ safeguards against false activation during vacancy by filtering out the portion of the frequency spectrum related to air movement. This advanced dual tech sensor is best used to control lighting and HVAC in classrooms, computer rooms and other challenging applications.

The 01-310-BAS activates a Novitas® Switchpack to turn loads on and off. Lights turn on when the PIR sensor detects motion. In the standard configuration, lights stay on if either technology detects occupancy. When the room is vacated, lights turn off after the time delay elapses. Digital microprocessor-based circuitry allows time delay settings from 15 seconds (for installer testing) to 30 minutes. The Sensor can also be configured to maintain lighting with both technologies.

The 01-310-BAS offers the most versatile connections available. A built-in isolated Form C relay may be configured for either a Building Automation System (BAS) or Alarm system interface, via a DIP switch. When connecting the 01-310-BAS to a BAS, any of the following may be used: (1) Form C relay output, with or without time delay option, (2) open collector output, with or without pull-up feature, and (3) direct BAS connection. See Power Requirements and Wiring Diagram.

Special Features:

- Self-adjusts sensitivity and time delay in real time to optimize performance and minimize the need for follow-up adjustments.
- False activation from corridor activity is avoided by the self-adjusting sensitivity feature.
- Airflow Tolerant Technology™ resists false activation in high airflow environments.
- Coverage remains stable regardless of environmental conditions.
- Separate, concurrent time delays for ultrasonic and infrared sensors avoid inadvertent lights-out in occupied rooms.
- Simplifies installation with 10-minute time delay default when potentiometer is left at minimum setting.
- DIP switch selectable lighting sweep option prevents unnecessary "lights on" following power sweeps in facilities with computer control systems.
- Internal pull-up option via shunt simplifies BAS interface.
- "Zero Time Delay" DIP switch is available in both BAS and Alarm modes for building management systems equipped with an internal timing function.
- Complements existing security system. Alarm function avoids false alarm activation through detection redundancy testing.
- DIP switch permits override should a Sensor ever fail.
- Snap-out circuit board allows fast, easy replacement without affecting hard wiring or mounting.
- Manual On/Off option via a wall switch; BAS relay remains active during occupancy.
- Fully self-resetting; lights turned off manually in Automatic On mode stay off during occupancy. After the room is vacated and the time the next time someone enters.
- A 10-second grace period allows lights to be turned on by motion anywhere in the room after being turned off due to inactivity.
- Crystal control provides consistent and stable performance. Frequency variations will not exceed ±0.005 percent.
- Bi-color LED indicates which technology detects motion.

Range & Coverage:

Use in areas from 300 to 700 square feet. Coverage for normal desktop motion is 450 square feet.

Mounting:

Ceiling mount permits optimum location of sensor and reduces tampering. Fixed angle position makes installation fast and accurate. The Sensor mounts through a 3/4" hole in the ceiling tile using provided hardware. An adapter plate is available to allow mounting to a standard fixture ring and junction box.

Wiring:

Novitas Sensors are provided with Teflon insulated pigtails. Sensors and Switchpacks are interconnected using 18 AWG class 2 wiring per NEC 725. Use UL-recognized Teflon insulated wire for plenum areas per NEC 725-2(b) where required.

Power Requirements:

15 VDC from Novitas Switchpack. Up to five Sensors may be powered by one Novitas Switchpack. Direct connection to a Building Automation System is possible if the BAS provides between 10 and 30 VDC at 25mA. Sensor circuit includes jumper selectable pull-ups which enable the BAS to recognize the sensor's open collector output.

Output:

Up to 10 Novitas Switchpacks may be connected to one Sensor with 20 amps maximum per Switchpack.

Housing:

Impact-resistant injection molded housing in off-white. ABS resin complies with UL 94V0. Protective sensor guard available.

Size & Weight:

1-5/12" x 3-3/4" x 6-1/12" (37mm x 100mm x 154mm) HDW. Approximately 6 oz. (170g).

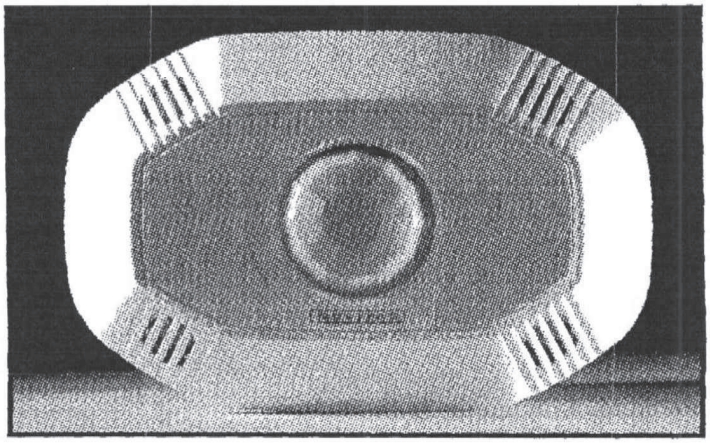
Installation Considerations:

For indoor use only. For best results, mounting height should be kept below 12 feet; temperatures should be above 60°F and below 90°F. Note: The life of some compact fluorescent lamps (CFLs) is shortened by frequent automatic or manual switching. Check with

novitas, inc.

MODEL 01-300-BAS
SUPER DUAL TECH SENSOR (TWO-WAY)

- **Ultrasonic & passive infrared sensors. 360° coverage.**
- **Real-time self-adjusting sensitivity and time delay.**
- **Microprocessor-based Airflow Tolerant Technology.**
- **Manual On/Off switch capability.**
- **BAS interface with "Zero Time Delay" option.**
- **Immune to RFI, EMI and voltage fluctuations.**
- **Five-year warranty.**



Patent Pending

How It Operates:

The Super Dual Tech Sensor provides superior performance in lighting and HVAC control through the most effective combination of passive infrared (PIR) and ultrasonic technologies. This pairing helps eliminate false activation in rooms with heavy airflow while providing full coverage without gaps. Separate, concurrent time delays for each technology avoid inadvertent lights out in occupied rooms. Microprocessor-based Airflow Tolerant Technology™ safeguards against false activation during vacancy by filtering out the portion of the frequency spectrum related to air movement. This advanced dual tech sensor is best used to control lighting and HVAC in classrooms, computer rooms and other challenging applications.

The 01-300-BAS activates a Novitas® Switchpack to turn loads on and off. Lights turn on when the PIR sensor detects motion. In the standard configuration, lights stay on if either technology detects occupancy. When the room is vacated, lights turn off after the time delay elapses. Digital microprocessor-based circuitry allows time delay settings from 15 seconds (for installer testing) to 30 minutes. The Sensor can also be configured to maintain lighting with both technologies.

The 01-300-BAS offers the most versatile connections available. A built-in isolated Form C relay may be configured for either a Building Automation System (BAS) or Alarm system interface, via a DIP switch. When connecting the 01-300-BAS to a BAS, any of the following may be used: (1) Form C relay output, with or without time delay option, (2) open collector output, with or without pull-up feature, and (3) direct BAS connection. See Power Requirements and Wiring Diagram.

Special Features:

- Self-adjusts sensitivity and time delay in real-time to optimize performance and minimize the need for follow-up adjustments.
- False activation from corridor activity is avoided by the self-adjusting sensitivity feature.
- Coverage remains stable regardless of environmental conditions.
- Separate, concurrent time delays for ultrasonic and infrared sensors avoid inadvertent lights out in occupied rooms.
- Simplifies installation with 10-minute time delay default when potentiometer is left at minimum setting.
- Airflow Tolerant Technology resists false activation in high airflow environments.
- DIP switch selectable lighting sweep option prevents unnecessary "lights on" following power sweeps in facilities with computer control systems.
- Internal pull-up option via shunt simplifies BAS interface.
- "Zero Time Delay" DIP switch is available in both BAS and Alarm modes for building management systems equipped with an internal timing function.
- Complements existing security system. Alarm function avoids false alarm activation through detection redundancy testing.
- DIP switch permits override should a Sensor ever fail.
- Snap-out circuit board allows fast, easy replacement without affecting hard wiring or mounting.
- Manual On/Off option via a wall switch; BAS relay remains active during occupancy.
- Fully self-resetting; lights turned off manually in Automatic On mode stay off during occupancy. After the room is vacated and the time delay and grace period have elapsed, lights turn on automatically the next time someone enters.
- A 10-second grace period allows lights to be turned on by motion anywhere in the room after being turned off due to inactivity.
- Crystal control provides consistent and stable performance. Frequency variations will not exceed ±0.005 percent.
- Bi-color LED indicates which technology detects motion.

Range & Coverage:

Use in areas from 300 to 1,750 square feet. Coverage for normal desktop motion is 900 square feet.

Mounting:

Ceiling mount permits optimum location of sensor and reduces tampering. Fixed angle position makes installation fast and accurate. The Sensor mounts through a 3/4" hole in the ceiling tile using provided hardware. An adapter plate is available to allow mounting to a standard fixture ring and junction box.

Wiring:

Novitas Sensors are provided with Teflon insulated pigtails. Sensors and Switchpacks are interconnected using 18 AWG class 2 wiring per NEC 725. Use UL-recognized Teflon insulated wire for plenum areas per NEC 725-2(b) where required.

Power Requirements:

15 VDC from Novitas Switchpack. Up to five Sensors may be powered by one Novitas Switchpack. Direct connection to a Building Automation System is possible if the BAS provides between 10 and 30 VDC at 25mA. Sensor circuit includes jumper selectable pull-ups which enable the BAS to recognize the sensor's open collector output.

Output:

Up to 10 Novitas Switchpacks may be connected to one Sensor with 20 amps maximum per Switchpack.

Housing:

Impact-resistant injection molded housing in off-white. ABS resin complies with UL 94V0. Protective sensor guard available.

Size & Weight:

1-5/12" x 3-3/4" x 6-1/12" (37mm x 100mm x 154mm) HDW. Approximately 6 oz. (170g).

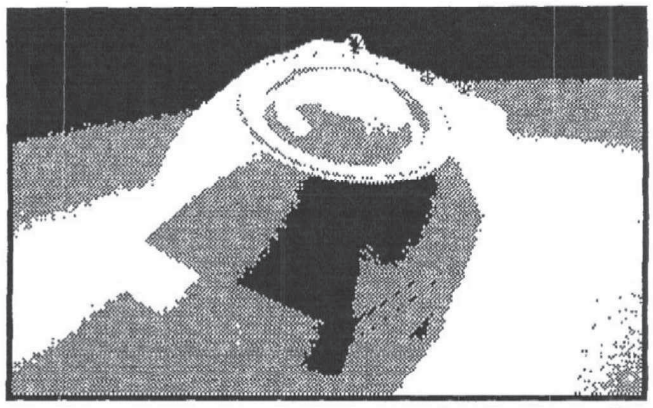
Installation Considerations:

For indoor use only. For best results, mounting height should be kept below 12 feet; temperatures should be above 60°F and below 90°F. Note: The life of some compact fluorescent lamps (CFLs) is shortened by frequent automatic or manual switching. Check with CFL and ballast manufacturer to determine effects of cycling.

novitas, inc.

MODEL 01-BAS340
EXTREME TEMPERATURE SENSOR

- **Automatic lighting control for parking structures, cold storage, and walk-in freezers.**
- **Temperature-compensating circuitry avoids false activation in extreme conditions.**
- **Passive Infrared (PIR) sensor technology.**
- **Built-in photocell optimizes savings.**
- **Compatible with High/Low HID & fluorescent.**
- **BAS compatible.**
- **Immune to RFI, EMI and voltage fluctuations.**
- **Five-year warranty.**



Patent Pending

How It Operates:

Unique temperature-compensating circuitry enables Model 01-BAS340 to control lighting in applications where extreme temperatures and/or humidity must be tolerated, such as parking structures, cold storage areas and walk-in freezers. The Sensor activates a Novitas® Switchpack to turn lights on upon detection of human or automobile motion within the coverage area. Illumination is maintained until no motion is detected within a preset period of time. Then lights are turned down and energy is saved.

If ambient lighting is sufficient, the sensor will detect motion, but will not turn lights on. If ambient light is not sufficient, based on predetermined thresholds, lights will be activated when motion is detected. The Ambient Lights Control Circuit includes a deadband and time delay which ignores brief changes in light levels, such as headlights of a passing car.

To ensure the proper start-up of HID lighting, lamps are forced into "high" mode for the first 20 minutes. After the 20-minute warm-up, if motion is detected, the sensor will keep lights on at full brightness.

When connecting to a Building Automation System (BAS), the 01-BAS340 Extreme Temperature Sensor offers the most versatile connection possibilities available including an open collector output with or without the pullup feature and a direct BAS connection. See Power Requirements and Wiring Diagram.

Special Features:

- Temperature-compensating circuitry stabilizes sensitivity at temperatures from -40°C (-40°F) to 52°C (125°F) to avoid false activations. If the temperature is outside of this range, lights will remain on and the LED will blink three times every five seconds.
- Utilizes the NEMA WD 7 Guide to verify coverage patterns.
- 8 discreet time delay settings: One setting at 15 seconds (for installer testing) and 7 additional settings in increments of 4 minutes starting at 6 minutes.
- Delay control left at 15 seconds (for installer test), resets to 6-minute delay automatically after remaining off for one complete hour.
- Ambient Lights Control Circuit prevents the sensor from turning lights on when ambient lighting is sufficient. A deadband and time delay ensure the Circuit ignores brief changes in light levels, such as headlights of a passing car.
- High/Low HID function ensures sufficient lamp warm-up.
- Dip switch selectable, lighting sweep function prevents unnecessary "lights on" following power sweeps in facilities with
- Internal pull-up option simplifies BAS interface.
- Immune to RFI, EMI and voltage fluctuations.
- Override DIP switch allows the load to be turned on manually should a Sensor ever fail.

Range & Coverage:

Up to a maximum area of 1,500 square feet of major motion at a mounting height of 8 feet. (Utilizes the NEMA WD 7 Guide to verify coverage patterns.)

Mounting:

The Sensor may be surface mounted or mounted to a standard NEMA 2S junction box. An adapter plate is available for mounting to a standard NEMA 4S junction box. Sensor also mounts through a 3/4" hole in the ceiling tile using provided hardware or directly to the surface.

Wiring:

Novitas Sensors are provided with Teflon insulated pigtails. Sensors and Switchpacks are interconnected using 18 AWG class 2 wiring per NEC 725.

Power Requirements:

15 VDC from Novitas Switchpack. Direct connection to a Building Automation System is possible if the BAS provides between 10 and 30 VDC at 25mA. Sensor circuit includes a dip switch selectable pull-up which enables the BAS to recognize the sensor's open collector output.

Output:

Isolated Form C latching relay provides two maintained contact closures. Relays are rated at 1 amp. Up to 10 Novitas Switchpacks may be connected to one Sensor with 20 amps maximum per Switchpack.

Housing:

Rugged, watertight enclosure protects the sensor from humidity and dust particles. Impact resistant injection molded housing in off-white. Valox resin complies with UL 94V0. Protective sensor guard available.

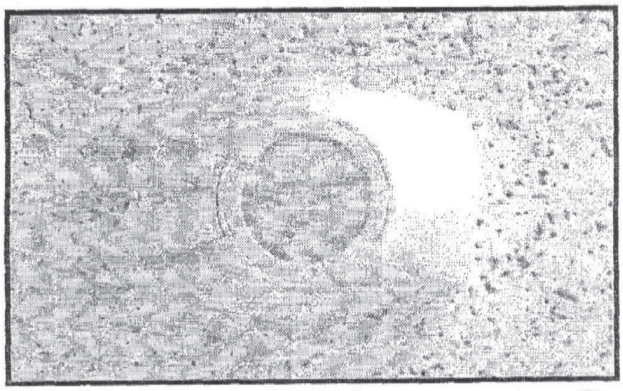
Installation Considerations:

The Sensor must have a clear view of the area to be controlled. There must be an unobstructed line-of-sight from the Sensor to any part of the controlled area. For maximum coverage, position the Sensor parallel to the longest dimension in the area. Best used in temperatures between -40°C (-40°F) and 52°C (125°F).

Note: The life of some compact fluorescent lamps (CFLs) is shortened by frequent automatic or manual switching. Check with CFL and ballast manufacturer to determine effects of

MODEL 01-340-BAS EXTREME TEMPERATURE SENSOR
MODEL 01-341-BAS EXTREME TEMPERATURE HIGH BAY SENSOR

- **Automatic lighting control for parking structures, cold storage, and walk-in freezers.**
- **Temperature-compensating circuitry avoids false activation in extreme conditions.**
- **Passive Infrared (PIR) sensor technology.**
- **Built-in photocell optimizes savings.**
- **Compatible with High/Low HID & fluorescent.**
- **BAS compatible.**
- **Immune to RFI, EMI and voltage fluctuations.**
- **Five-year warranty.**



Patent Pending

How It Operates:

Unique temperature-compensating circuitry enables Models 01-340-BAS and 01-341-BAS to control lighting in applications where extreme temperatures and/or humidity must be tolerated, such as parking structures, cold storage areas and walk-in freezers. The Sensor activates a Novitas® Switchpack to turn lights on upon detection of human or automobile motion within the coverage area. Illumination is maintained until no motion is detected within a preset period of time. Then lights are turned down and energy is saved.

If ambient lighting is sufficient, the sensor will detect motion, but will not turn lights on. If ambient light is not sufficient, based on predetermined thresholds, lights will be activated when motion is detected. The Ambient Lights Control Circuit includes a deadband and time delay which ignores brief changes in light levels, such as headlights of a passing car.

To ensure the proper start-up of HID lighting, lamps are forced into "high" mode for the first 20 minutes. After the 20-minute warm-up, if motion is detected, the sensor will keep lights on at full brightness.

When connecting to a Building Automation System (BAS), the 01-340-BAS Extreme Temperature Sensor and 01-341-BAS Extreme Temperature High Bay Sensor offer the most versatile connection possibilities available including an open collector output with or without the pullup feature and a direct BAS connection. See Power Requirements and Wiring Diagram.

Special Features:

- Temperature-compensating circuitry stabilizes sensitivity at temperatures from -40°C (-40°F) to 52°C (125°F) to avoid false activations. If the temperature is outside of this range, lights will remain on and the LED will blink three times every five seconds.
- NEMA WD 7 GuideRobotic Method utilized to verify coverage patterns.
- 8 discreet time delay settings: One setting at 15 seconds (for installer testing) and 7 additional settings in increments of 4 minutes starting at 6 minutes.
- Delay control left at 15 seconds (for installer test), resets to 6-minute delay automatically after remaining off for one complete hour.
- Ambient Lights Control Circuit prevents the sensor from turning lights on when ambient lighting is sufficient. A deadband and time delay ensure the Circuit ignores brief changes in light levels, such as headlights of a passing car.
- High/Low HID function ensures sufficient lamp warm-up.
- Dip switch selectable, lighting sweep function prevents unnecessary "lights on" following power sweeps in facilities with computer control systems.
- Internal pull-up option simplifies BAS interface.
- Immune to RFI, EMI and voltage fluctuations.
- Override DIP switch allows the load to be turned on manually should a Sensor ever fail.

Range & Coverage:

01-340-BAS: Up to a maximum area of 1,500 square feet of major motion at a mounting height of 8 feet.

01-341-BAS: Coverage is 2MH or twice the mounting height when mounted up to 25 feet. In a warehouse aisle, a sensor mounted at 25 feet will provide coverage for 25 feet in any direction or 50 lin. ft. in a warehouse aisle.

Mounting:

The Sensor may be surface mounted or mounted to a standard NEMA 2S junction box. An adapter plate is available for mounting to a standard NEMA 4S junction box. Sensor also mounts through a 3/4" hole in the ceiling tile using provided hardware or directly to the surface.

Wiring:

Novitas Sensors are provided with Teflon insulated pigtails. Sensors and Switchpacks are interconnected using 18 AWG class 2 wiring per NEC 725.

Power Requirements:

15 VDC from Novitas Switchpack. Direct connection to a Building Automation System is possible if the BAS provides between 10 and 30 VDC at 25mA. Sensor circuit includes a dip switch selectable pull-up which enables the BAS to recognize the sensor's open collector output.

Output:

Isolated Form C latching relay provides two maintained contact closures. Relays are rated at 1 amp. Up to 10 Novitas Switchpacks may be connected to one Sensor with 20 amps maximum per Switchpack.

Housing:

Rugged, watertight enclosure protects the sensor from humidity and dust particles. Impact resistant injection molded housing in off-white. Valox resin complies with UL 94V0. Protective sensor guard available.

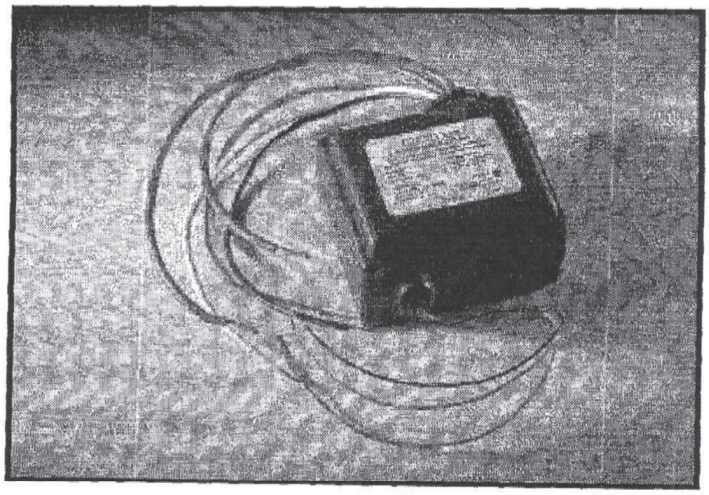
Installation Considerations:

The Sensor must have a clear view of the area to be controlled. There must be an unobstructed line-of-sight from the Sensor to any part of the controlled area. For maximum coverage, position the Sensor parallel to the longest dimension in the area. Best used in temperatures between -40°C (-40°F) and 52°C (125°F).

novitas, inc.

MODEL 13-051
HEAVY DUTY SWITCHPACK

- **Replaces separate transformers and relays.**
- **Zero crossing circuit for high inrush current loads.**
- **Isolated (dry) 20A contacts.**
- **120/277 VAC operation.**
- **Easy mounting on or in a junction box.**
- **Reduces installation expense.**
- **Five-year warranty.**



How It Operates:

The 13-051 Switchpack combines a Class 2 power supply and an isolated Form A relay in a single housing, eliminating the need to install and wire separate transformers and relays when installing Novitas® Sensors. Zero crossing circuitry ensures that the relay contacts engage at the zero crossing point of the AC voltage source when the load is activated, thereby minimizing relay damage when used to control high inrush loads. The relay contacts also disengage at the zero crossing point when the load is deactivated. This minimizes relay damage when controlling inductive loads and increases the life of the Switchpack.

The 13-051 can be used on either 120 or 277 VAC circuits and is UL listed. A single Switchpack can provide power for up to five Sensors. Up to ten Switchpacks can be connected to one Sensor for control of multiple circuits. Isolated contacts may also be used to control HVAC, contactors, motors, etc.

The 13-051 is designed to work with Novitas Sensors which require Novitas Switchpacks. It cannot be used with Novitas Sensors designed for use with any other low voltage relay systems. Consult Sensor Tech sheets for other Sensor/relay combinations.

Mounting:

Designed to be mounted externally to any standard junction box. When mounted, the line connections are inside the box and the Class 2 wiring exits via the rear of the Switchpack housing. In areas where Class 2 wiring is not permitted, the Switchpack can be mounted internally to a standard junction box. Refer to Mounting Diagram.

Housing:

Medium impact injection molded housing. ABS resin complies with UL 94V0. Plenum rated for external junction box mounting.

Wiring:

All connections are made via pigtails with twist-on wire connectors.

NOTE: Connect only one of the black or orange supply leads to the power source. Cap the unused lead.

Electrical Ratings:

Relay contacts are silver alloy.

Contacts:	15A 120 VAC Tungsten 20A 120 VAC Ballast 20A 277 VAC Ballast 1 HP 120 VAC 2 HP 250 VAC

Contacts are isolated and may be used to control low voltage circuits.

Input:	120 or 277 VAC ± 10% 60 Hz.
Output:	15 VDC 200 mA to operate up to five Sensors. Class 2 Teflon insulated leads for plenum installations.
Control:	Connecting the 22 AWG black and blue control leads to each other will close the relay contacts.
Certification:	UL Listed.

NOTE: The life of some compact fluorescent lamps (CFLs) is shortened by frequent automatic or manual switching. Check with CFL and ballast manufacturer to determine effects of cycling.

Size and Weight:

$2\ ^{15}/_{16}$" x $2\ ^{7}/_{16}$" x $1\ ^{11}/_{16}$"; approximately 9 oz.

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 PrescriptiveIncentives@duke-energy.com, mail to: Duke Energy • 431 Charmany Drive • Madison, WI 53719 or fax to 1-866-906-4921

Is this application: ☒ **NEW** (original) or ☐ **REVISED** (changes made to original application)

Building type - Segment (check one)

☐ Data Centers	☐ Full Service Restaurant	☐ Office
☒ Education/K-12	☐ Healthcare	☐ 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	☐ Invoice with make, model number, quantity and equipment manufacturer	☐ Tax ID number for payee	☐ Customer/vendor agree to Terms and Conditions

Customer Information

Customer/Business	Wyandot Elementary	Contact		Robert Fischer	
Phone	513-777-3316	Account Number		3000-3637-01	
Street Address (Where Incentive should be mailed)		6947 Yankee Rd			
City	Liberty Township	State	Ohio	Zip Code	45044
Installation Street Address	7667 Summerlin Blvd.				
City	Liberty Township	State	Ohio	Zip Code	45044
E-mail Address	rober.fischer@lakotaonline.com				

**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	Plug Smart	Contact		Lucas Dixon	
Phone	614-580-3352	Fax		611-453-5743	
Street Address	1275 Kinnear Road, Suite 229				
City	Columbus	State	Ohio	Zip Code	43212
E-mail Address	lucas.dixon@plugsmart.com				

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 directly to the vendor:	Customer Signature (written signature)	
	Date	
Provide Tax ID Number for Payee	Customer Tax ID #	31-6000897
	Vendor Tax ID #	262366277

Terms and Conditions

I have read and hereby agree to the Terms & Conditions and Program Requirements.

Customer Signature	Robert Fischer	Vendor Signature	
Date	6/20/11	Date	6/20/2011
Title	DIR BLDGS & GRDS	Title	Project 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 Smart $aver® website for further detail.

The Equipment below is (check one): ☐ New Equipment ☐ Retrofit Equipment ☐ Replace Failed Equipment

Motor

Motor	Make/Model or Catalog #	Quantity	Type	RPM	Incentive	HP	Installed Nominal Efficiency*	Annual Operating Hrs (Minimum of 2000)	Equipment Cost	Date Installed and Operable (mm/yy)	Total Incentive
1-5 HP			☐ OPEN ☐ TEFC	☐ 1200 ☐ 1800 ☐ 3600	$10/HP	HP	%	Hrs			
7.5-20 HP			☐ OPEN ☐ TEFC	☐ 1200 ☐ 1800 ☐ 3600	$8/HP	HP	%	Hrs			
25-100 HP			☐ OPEN ☐ TEFC	☐ 1200 ☐ 1800 ☐ 3600	$5/HP	HP	%	Hrs			
125 – 250 HP			☐ OPEN ☐ TEFC	☐ 1200 ☐ 1800 ☐ 3600	$4/HP	HP	%	Hrs			

*** See page four for required efficiency levels for motors.**

*Incentive capped at 50% of project cost (equipment and external labor).

- 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.

The Equipment below is (check one): ☐ New Equipment ☐ Retrofit Equipment ☐ Replace Failed Equipment

High Efficiency Pumps								
Pump	Make/Model or Catalog #	Quantity	Incentive	Installed Nominal Efficiency* (pump curve)	Annual Operating Hrs (Minimum of 2000)	Equipment Cost	Date Installed and Operable (mm/yy)	Total Incentive
1.5 HP			$122.00/PUMP	%	Hrs			
2 HP			$175.00/PUMP	%	Hrs			
3 HP			$175.00/PUMP	%	Hrs			
5 HP			$170.00./PUMP	%	Hrs			
7.5 HP			$249.00/PUMP	%	Hrs			
10 HP			$165.00/PUMP	%	Hrs			
15 HP			$290.00/PUMP	%	Hrs			
20 HP			$400.00/PUMP	%	Hrs			
*** 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.

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

Process pumping does not include HVAC or swimming pool fluid pumping system.

List Process Pumping Application

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	TR1-SVX10A-EN	4	$40.00/HP	2860Hrs	$5,000.00	07/07	$800.00
7.5 HP			$40.00/HP	Hrs			
10 HP			$40.00/HP	Hrs			
15 HP			$40.00/HP	Hrs			
20 HP			$40.00/HP	Hrs			
25 HP			$40.00/HP	Hrs			
30 HP			$40.00/HP	Hrs			
40 HP			$40.00/HP	Hrs			
50 HP			$40.00/HP	Hrs			

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

Duke Energy®

Variable Frequency Drive (VFD) – Any Size HVAC Fans Only (Retrofit* Applications only)

VFD HVAC Applications (please check one):

☐ Supply Fan ☐ Cooling Tower Fan ☐ Return Fan

☐ Exhaust Fan

VFD**	Make/Model or Catalog #	Quantity	Incentive***	Annual Operating Hrs (Minimum of 2000)	Project Cost	Date Installed and Operable (mm/yy)	Total Incentive
1.5 HP			$100.00/HP	Hrs			
2 HP			$100.00/HP	Hrs			
3 HP			$100.00/HP	Hrs			
5 HP			$100.00/HP	Hrs			
7.5 HP			$100.00/HP	Hrs			
10 HP			$100.00/HP	Hrs			
15 HP			$100.00/HP	Hrs			
20 HP			$100.00/HP	Hrs			
25 HP			$100.00/HP	Hrs			
30 HP			$100.00/HP	Hrs			
40 HP			$100.00/HP	Hrs			
50 HP			$100.00/HP	Hrs			

*** Retrofit only – incentives are only available for new VFDs installed on existing HVAC fan systems.**
****VFDs over 50 HP and VFD's on new equipment are not eligible for prescriptive incentives, but may qualify through the custom program.**
*****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.

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 #	Quantity	Incentive***	Annual Operating Hrs (Minimum of 2000)	Project Cost	Date Installed and Operable (mm/yy)	Total Incentive
1.5 HP			$100.00/HP	Hrs			
2 HP			$100.00/HP	Hrs			
3 HP			$100.00/HP	Hrs			
5 HP			$100.00/HP	Hrs			
7.5 HP			$100.00/HP	Hrs			
10 HP			$100.00/HP	Hrs			
15 HP			$100.00/HP	Hrs			
20 HP			$100.00/HP	Hrs			
25 HP			$100.00/HP	Hrs			
30 HP			$100.00/HP	Hrs			
40 HP			$100.00/HP	Hrs			
50 HP			$100.00/HP	Hrs			

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

Efficiencies for Premium Motor/Pump Measures

Nominal Full Load Efficiencies for NEMA Design A, B and Double Cage Motors (1200, 1800 and 3600 RPM Open Drip Proof and Totally Enclosed Fan-Cooled)						
	Open Drip Proof			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 Motor/Pump Efficiencies	
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.
- Applications, along with the required documentation, must be submitted within 90 days of equipment installation and operation.
- 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 3rd party vendor. The 3rd party vendor is responsible for mailing the 1099 form at the end of the calendar year for tax filing. Duke Energy and the 3rd 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. Review program and equipment requirements on the incentive application. (Page 6)
2. Purchase and install eligible energy-efficient equipment.
3. Complete and submit application within 90 days after equipment has been installed and is operational.
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 PrescriptiveIncentives@duke-energy.com or fax to 1-866-908-4921 or mail to the following address:

   Duke Energy
   Smart $aver® Incentive Program
   431 Charmany Drive
   Madison, WI 53719

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.

Ben Aring

From: Veronica Gayotin [veronica.gayotin@lakotaonline.com]
Sent: Thursday, July 07, 2011 7:58 AM
To: Robert Fischer
Subject: RE: Duke Question - READ FIRST

Bob, I grouped the query based on acct # do you know the building numbers (the last two digits followed by a zero)?

The account number will start with 004 (shown at the top of the report)

07 Wyandot (Summerlin)
08 Endeavor (Smith)
12 Hopewell
31 West Freshman
32 West
33 East
34 East Freshman

Acct # 003 is LWC
06 New Union

Let me know if this helps. I believe I can break the report down further by adding a line in the query for each building, would you prefer that?

Veronica Gayotin
Lakota Local Schools - Business Operations
5572 Princeton Road
Liberty Township, OH 45011
513.644.1172 or Ext 22021
513.644.1183 Fax

From: Robert Fischer [mailto:robert.fischer@lakotaonline.com]
Sent: Thursday, July 07, 2011 7:18 AM
To: Veronica Gayotin
Subject: RE: Duke Question - READ FIRST

Wyandot PoP → #07

(#1)

ION

LAKOTA LOCAL SCHOOLS, BUTLER COUNTY, OH
VENDOR PAYMENT HISTORY

IA: ((((transact.vend_no = "011547")) AND ((transact.key_orgn MATCHES "004*")) AND ((transact.ck_date >= "2006-12

OOR----------	INVOICE PURCHASE	1099 OR P/F	CHECK NO DATE	BUDGET UNIT &2 PROJECT	------DESCRIPTION------ CONTROL	SALES TAX	AMOUNT
	1 EH	N	119190	0042005550000330-620	10C BID PACKAGES - PLU	0.00	32029.52
HANICAL INC.	07005757	P	01/25/07		AEG0125		
	1 WH	N	119190	0042005550000320-620	10C BID PACKAGES - PLUM	0.00	32029.52
HANICAL INC.	07005760	P	01/25/07		AEG0125		
	7 SM	N	119190	0042005550000070-620	3.3A HVAC PACKAGE	0.00	141770.00
HANICAL INC.	06008223	P	01/25/07		AEG0125		
	7 SU	N	119190	0042005550000080-620	3.3B HVAC PACKAGE	0.00	191486.42
HANICAL INC.	06008224	P	01/25/07		AEG0125		
	2 EH	N	120659	0042005550000330-620	10C BID PACKAGES - PLU	0.00	46267.73
HANICAL INC.	07005757	P	02/27/07		AEG0228		
	2 WH	N	120659	0042005550000320-620	10C BID PACKAGES - PLUM	0.00	6749.12
HANICAL INC.	07005760	P	02/27/07		AEG0228		
	8 SM	N	120659	0042005550000070-620	3.3A HVAC PACKAGE	0.00	21866.00
HANICAL INC.	06008223	P	02/27/07		AEG0228		
	8 SU	N	120659	0042005550000080-620	3.3B HVAC PACKAGE	0.00	47715.85
HANICAL INC.	06008224	P	02/27/07		AEG0228		
	3 EH	N	121998	0042005550000330-620	10C BID PACKAGES - PLU	0.00	36738.80
HANICAL INC.	07005757	P	03/30/07		AEG0329		
	3 WH	N	121998	0042005550000320-620	10C BID PACKAGES - PLUM	0.00	92181.98
HANICAL INC.	07005760	P	03/30/07		AEG0329		
	9 SM	N	121998	0042005550000070-620	3.3A HVAC PACKAGE	0.00	30666.00
HANICAL INC.	06008223	P	03/30/07		AEG0329		
	9 SU	N	121998	0042005550000080-620	3.3B HVAC PACKAGE	0.00	40313.00
HANICAL INC.	06008224	P	03/30/07		AEG0329		
	10 SM	N	123044	0042005550000070-620	3.3A HVAC PACKAGE	0.00	20628.00
HANICAL INC.	06008223	P	04/26/07		AEG0426		
	10 SU	N	123044	0042005550000080-620	3.3B HVAC PACKAGE	0.00	33424.00
HANICAL INC.	06008224	P	04/26/07		AEG0426		
	4 EH	N	123044	0042005550000330-620	10C BID PACKAGES - PLU	0.00	211556.53
HANICAL INC.	07005757	P	04/26/07		AEG0426		
	4 WH	N	123044	0042005550000320-620	10C BID PACKAGES - PLUM	0.00	206118.54
HANICAL INC.	07005760	P	04/26/07		AEG0426		
	11 SM	N	124448	0042005550000070-620	3.3A HVAC PACKAGE	0.00	16232.00
HANICAL INC.	06008223	P	05/29/07		AEG0529		
	11 SU	N	124448	0042005550000080-620	3.3B HVAC PACKAGE	0.00	15492.00
HANICAL INC.	06008224	P	05/29/07		AEG0529		
	5 EH	N	124448	0042005550000330-620	10C BID PACKAGES - PLU	0.00	189791.96
HANICAL INC.	07005757	P	05/29/07		AEG0529		
	5 WH	N	124448	0042005550000320-620	10C BID PACKAGES - PLUM	0.00	179955.49
HANICAL INC.	07005760	P	05/29/07		AEG0529		
	12 SM	N	125742	0042005550000070-620	3.3A HVAC PACKAGE	0.00	51600.00
HANICAL INC.	06008223	P	06/21/07		AEG0621		
	12 SU	N	125742	0042005550000080-620	3.3B HVAC PACKAGE	0.00	6187.00
HANICAL INC.	06008224	P	06/21/07		AEG0621		
	6 EH	N	125742	0042005550000330-620	10C BID PACKAGES - PLU	0.00	60264.03
HANICAL INC.	07005757	P	06/21/07		AEG0621		
	6 WH	N	125742	0042005550000320-620	10C BID PACKAGES - PLUM	0.00	54454.21
HANICAL INC.	07005760	P	06/21/07		AEG0621		
	13 SM	N	126586	0042005550000070-620	3.3A HVAC PACKAGE	0.00	12315.00
HANICAL INC.	06008223	P	07/31/07		AEG0731		

Wyandot P.O.P #07

(#2)

ION

PAGE NUMBER: 1
ACCTPA31

LAKOTA LOCAL SCHOOLS, BUTLER COUNTY, OH
VENDOR PAYMENT HISTORY

IA: ((((transact.vend_no = "7106")) AND ((transact.key_orgn MATCHES "004*")) AND ((transact.ck_date >= "2006-12-3

DOR	INVOICE PURCHASE OR	1099 P/F	CHECK NO DATE	BUDGET UNIT #2 PROJECT	------DESCRIPTION------ CONTROL	SALES TAX	AMOUNT
	2 SM TEMP CO	N	119203	0042005550000070-620	SMITH RD. STATE TERM CO	0.00	25420.53
	06008060	P	01/25/07		AEG0125		
	[redacted]	N	[redacted]03	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	P	[redacted]		[redacted]		
	3 SM	N	120661	0042005550000070-620	SMITH RD. STATE TERM CO	0.00	34653.97
	06008060	P	02/27/07		AEG0228		
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]RA	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]		[redacted]28		
	4 SM	N	122005	0042005550000070-620	SMITH RD. STATE TERM CO	0.00	53275.82
	06008060	P	03/30/07		AEG0329		
	[redacted]	N	[redacted]006	[redacted]	[redacted]TRA	[redacted]	[redacted]
	06008062	P	03/30/07		AEG0329		
	033107	N	123051	0042005550000330-620	HVAC & RELATED EQUIPMEN	0.00	26112.27
	07007475	P	04/26/07		AEG0426		
	1 WH	N	123051	0042005550000320-620	HVAC & RELATED EQUIPMEN	0.00	26106.53
	07007854	P	04/26/07		AEG0426		
	4 SM.	N	123051	0042005550000070-620	SMITH RD - STATE CONTRA	0.00	2818.84
	06008040	P	04/26/07		AEG0426		
	4 SU.	N	123051	0042005550000080-620	SUMMERLIN - STATE CONTR	0.00	186.70
	06008059	P	04/26/07		AEG0426		
	5 SM	N	123051	0042005550000070-620	SMITH RD. STATE TERM CO	0.00	36867.45
	06008060	P	04/26/07		AEG0426		
	5 SU	N	123051	0042005550000080-620	SUMMERLIN -STATE CONTRA	0.00	35467.45
	06008062	P	04/26/07		AEG0426		
	1 EH	N	124453	0042005550000330-620	HVAC CONTROLS	0.00	44671.00
	07007473	P	05/29/07		AEG0529		
	1 WH.	N	124453	0042005550000320-620	HVAC CONTROLS PACKAGE	0.00	44671.00
	07007149	P	05/29/07		AEG0529		
	2 EH	N	124453	0042005550000330-620	HVAC & RELATED EQUIPMEN	0.00	42805.09
	07007475	P	05/29/07		AEG0529		
	2 WH	N	124453	0042005550000320-620	HVAC & RELATED EQUIPMEN	0.00	42786.27
	07007854	P	05/29/07		AEG0529		
	6 SM	N	124453	0042005550000070-620	SMITH RD. STATE TERM CO	0.00	6391.00
	06008060	P	05/29/07		AEG0529		
	6 SU	N	124453	0042005550000080-620	SUMMERLIN -STATE CONTRA	0.00	6391.00
	06008062	P	05/29/07		AEG0529		
	1 FS	N	125768	0042005550000340-620	LOGISTICS PACKAGE - HVA	0.00	7452.00
	07008067	P	06/21/07		AEG0621		
	2 EH.	N	125768	0042005550000330-620	HVAC CONTROLS	0.00	44417.00
	07007473	P	06/21/07		AEG0621		
	2 WH.	N	125768	0042005550000320-620	HVAC CONTROLS PACKAGE	0.00	44417.00
	07007149	P	06/21/07		AEG0621		
	3 EH	N	125768	0042005550000330-620	HVAC & RELATED EQUIPMEN	0.00	17555.79
	07007475	P	06/21/07		AEG0621		
	3 WH	N	125768	0042005550000320-620	HVAC & RELATED EQUIPMEN	0.00	17603.25
	07007854	P	06/21/07		AEG0621		
	7 SM	N	125768	0042005550000070-620	SMITH RD. STATE TERM CO	0.00	4888.30
	06008060	P	06/21/07		AEG0621		
	7 SU	N	125768	0042005550000080-620	SUMMERLIN -STATE CONTRA	0.00	4888.30
	06008062	P	06/21/07		AEG0621		

E 07/06/2011 TIME 16:29:21

SUNGARD PENTAMATION - FINANCE PLUS FINANCIAL ACCOUNTING

Wyandot P.P #07

(#3)

ION

LAKOTA LOCAL SCHOOLS, BUTLER COUNTY, OH
VENDOR PAYMENT HISTORY

IA: ((((transact.vend_no = "7106")) AND ((transact.key_orgn MATCHES "004*")) AND ((transact.ck_date >= "2006-12-3

DOR----------	INVOICE PURCHASE OR	1099 P/F	CHECK NO DATE	BUDGET UNIT #2 PROJECT	------DESCRIPTION------ CONTROL	SALES TAX	AMOUNT
	1 FS.	N	126592	0042005550000340-620	LOGISTICS PACKAGE - HVA	0.00	181288.19
	07008060	P	07/31/07		AEG0731		
	3 EH.	N	126592	0042005550000330-620	HVAC CONTROLS	0.00	16084.50
	07007473	P	07/31/07		AEG0731		
	4 WH	N	126592	0042005550000320-620	HVAC & RELATED EQUIPMEN	0.00	42757.93
	07007854	P	07/31/07		AEG0731		
	6 WH	N	126592	0042005550000320-620	HVAC CONTROLS PACKAGE	0.00	11990.50
	07007149	P	07/31/07		AEG0731		
	8 SM	N	126592	0042005550000070-620	SMITH RD. STATE TERM CO	0.00	7534.83
	06008060	P	07/31/07		AEG0731		
	8 SU	N	126592	0042005550000080-620	SUMMERLIN -STATE CONTRA	0.00	7534.84
	06008062	P	07/31/07		AEG0731		
	1 F.S	N	127716	0042005550000340-620	LOGISTICS PACKAGE - VAV	0.00	23998.98
	07008066	P	08/31/07		AEG0830		
	1 F.S.	N	127716	0042005550000340-620	LOGISTICS PACKAGE - VAV	0.00	13868.35
	07008064	P	08/31/07		AEG0830		
	2 FS	N	127716	0042005550000340-620	LOGISTICS PACKAGE - HVA	0.00	49747.23
	07008060	P	08/31/07		AEG0830		
	4 EH	N	127716	0042005550000330-620	HVAC CONTROLS	0.00	32119.86
	07007473	P	08/31/07		AEG0830		
	4 EH	N	127716	0042005550000330-620	HVAC & RELATED EQUIPMEN	0.00	54401.26
	07007475	P	08/31/07		AEG0830		
	4 WH CONTROL	N	127716	0042005550000320-620	HVAC CONTROLS PACKAGE	0.00	34325.39
	07007149	P	08/31/07		AEG0830		
	5 EH	N	127716	0042005550000330-620	HVAC & RELATED EQUIPMEN	0.00	729.25
	07007475	P	08/31/07		AEG0830		
	5 WH	N	127716	0042005550000320-620	HVAC & RELATED EQUIPMEN	0.00	12352.64
	07007854	P	08/31/07		AEG0830		
	00001	N	128652	0042005550000330-620	CHANGES IN SEQUENCE OF	0.00	4337.92
	07010490	P	09/20/07		AEG0920		
	3 FS	N	128813	0042005550000340-620	LOGISTICS PACKAGE - HVA	0.00	79074.11
	07008060	P	09/27/07		AEG0927		
	5 E.H.	N	128813	0042005550000330-620	HVAC CONTROLS	0.00	20022.40
	07007473	P	09/27/07		AEG0927		
	5 W.H.	N	128813	0042005550000320-620	HVAC CONTROLS PACKAGE	0.00	24010.87
	07007149	P	09/27/07		AEG0927		
	7953915	N	128813	0042005550000320-620	CHANGES IN THE SEQUENCE	0.00	4337.93
	07010491	P	09/27/07		AEG0927		
	6 E.H.	N	130881	0042005550000330-620	HVAC & RELATED EQUIPMEN	0.00	1069.44
	07007475	P	10/30/07		AEG1030		
	6 EH	N	130881	0042005550000330-620	HVAC CONTROLS	0.00	31255.52
	07007473	P	10/30/07		AEG1030		
	6 W.H.	N	130881	0042005550000320-620	HVAC & RELATED EQUIPMEN	0.00	1069.44
	07007854	P	10/30/07		AEG1030		
	6 WH.	N	130881	0042005550000320-620	HVAC CONTROLS PACKAGE	0.00	29155.52
	07007149	P	10/30/07		AEG1030		
	7 WH	N	132838	0042005550000320-620	HVAC CONTROLS PACKAGE	0.00	12083.48
	07007149	P	11/30/07		AEG1129		
	2 FS.	N	133812	0042005550000340-620	LOGISTICS PACKAGE - VAV	0.00	10130.69
	07008064	P	12/20/07		AEG1220		

Wyandot P.P #07

(#4)

ION

LAKOTA LOCAL SCHOOLS, BUTLER COUNTY, OH
VENDOR PAYMENT HISTORY

PAGE NUMBER: 1
ACCTPA31

IA: ((((transact.vend_no = "1725")) AND ((transact.key_orgn MATCHES "004**")) AND ((transact.ck_date >= "2006-12-3

DOR	INVOICE PURCHASE	1099 OR P/F	CHECK NO DATE	BUDGET UNIT #2 PROJECT	DESCRIPTION CONTROL	SALES TAX	AMOUNT
P ENTERPRISE, I	8 SM 06008219	N P	119147 01/25/07	0042005550000070-620	3.1C - PLUMBING PACKAGE AEG0125	0.00	26425.20
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
P ENTERPRISE, I	9 SM 06008219	N P	120652 02/27/07	0042005550000070-620	3.1C - PLUMBING PACKAGE AEG0228	0.00	29296.60
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P ENTERPRISE, I	10 SM 06008219	N P	121966 03/30/07	0042005550000070-620	3.1C - PLUMBING PACKAGE AEG0329	0.00	32182.60
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
P ENTERPRISE, I	11 SM 06008219	N P	123014 04/26/07	0042005550000070-620	3.1C - PLUMBING PACKAGE AEG0426	0.00	94176.80
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P ENTERPRISE, I	07006430	N P	[redacted] 04/26/07	[redacted]	[redacted]	[redacted]	5100.00
P ENTERPRISE, I	12 SM 06008219	N P	124431 05/29/07	0042005550000070-620	3.1C - PLUMBING PACKAGE AEG0529	0.00	16304.00
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P ENTERPRISE, I	07006430	N P	[redacted] 05/29/07	[redacted]	[redacted]	[redacted]	[redacted]
P ENTERPRISE, I	13 SM 06008219	N P	125688 06/21/07	0042005550000070-620	3.1C - PLUMBING PACKAGE AEG0621	0.00	7781.00
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
P ENTERPRISE, I	06008220	P	06/21/07		AEG0621		
P ENTERPRISE, I	4 HE 07006430	N P	125688 06/21/07	0042005550000120-620	BID PACKAGE # 4 HVAC AEG0621	0.00	38063.00
P ENTERPRISE, I	5 HE 07006430	N P	126571 07/31/07	0042005550000120-620	BID PACKAGE # 4 HVAC AEG0731	0.00	51612.00
P ENTERPRISE, I	14 SM 06008219	N P	127669 08/31/07	0042005550000070-620	3.1C - PLUMBING PACKAGE AEG0830	0.00	1060.00
P ENTERPRISE, I	15 SM 06008219	N P	127669 08/31/07	0042005550000070-620	3.1C - PLUMBING PACKAGE AEG0830	0.00	844.20
P ENTERPRISE, I	15 SU 06008220	N P	127669 08/31/07	0042005550000080-620	3.1C PLUMBING PACKAGE AEG0830	0.00	1747.32
P ENTERPRISE, I	6 HE 07006430	N P	127669 08/31/07	0042005550000120-620	BID PACKAGE # 4 HVAC AEG0830	0.00	38243.80
P ENTERPRISE, I	7 HE 07006430	N P	128768 09/27/07	0042005550000120-620	BID PACKAGE # 4 HVAC AEG0927	0.00	55684.20
P ENTERPRISE, I	8 HE 07006430	N P	136288 02/28/08	0042005550000120-620	BID PACKAGE # 4 HVAC AEG0228	0.00	18235.00
P ENTERPRISE, I	1 LE 08009651	N P	142615 07/31/08	0042005550000130-620	LIBERTY ECS RENOVATIONS AEG0731	0.00	29152.00
P ENTERPRISE, I	1 WFS 08009652	N P	142615 07/31/08	0042005550000310-620	WEST FRESHMAN RENOVATIO AEG0731	0.00	87402.80

E 07/06/2011 TIME 17:22:24

SUNGARD PENTAMATION - FINANCE PLUS FINANCIAL ACCOUNTING

Wyandot PoP #07

(#5)

ION

PAGE NUMBER: 1
ACCTPA31

LAKOTA LOCAL SCHOOLS, BUTLER COUNTY, OH
VENDOR PAYMENT HISTORY

IA: ({{{transact.vend_no = "8097"}} AND {{transact.key_orgn MATCHES "004*"}} AND {{transact.ck_date >= "2006-12-3

DOR----------	INVOICE PURCHASE OR	1099 P/F	CHECK NO DATE	BUDGET UNIT #2 PROJECT	------DESCRIPTION------ CONTROL	SALES TAX	AMOUNT
	7 SM	N	119167	0042005550000070-620	3.4C ELECTRICAL PACKAGE	0.00	63778.00
NDUSTRIES, INC.	06008225	P	01/25/07		AEG0125		
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	8 SM	N	120657	0042005550000070-620	3.4C ELECTRICAL PACKAGE	0.00	56950.00
NDUSTRIES, INC.	06008225	P	02/27/07		AEG0228		
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	9 SM	N	121985	0042005550000070-620	3.4C ELECTRICAL PACKAGE	0.00	17500.00
NDUSTRIES, INC.	06008225	P	03/30/07		AEG0329		
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	10 SM	N	123031	0042005550000070-620	3.4C ELECTRICAL PACKAGE	0.00	61360.00
NDUSTRIES, INC.	06008225	P	04/26/07		AEG0426		
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	11 SM	N	124440	0042005550000070-620	3.4C ELECTRICAL PACKAGE	0.00	31382.00
NDUSTRIES, INC.	06008225	P	05/29/07		AEG0529		
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	12 SM	N	125713	0042005550000070-620	3.4C ELECTRICAL PACKAGE	0.00	19185.00
NDUSTRIES, INC.	06008225	P	06/21/07		AEG0621		
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	13 SM	N	127686	0042005550000070-620	3.4C ELECTRICAL PACKAGE	0.00	32974.15
NDUSTRIES, INC.	06008225	P	08/31/07		AEG0830		
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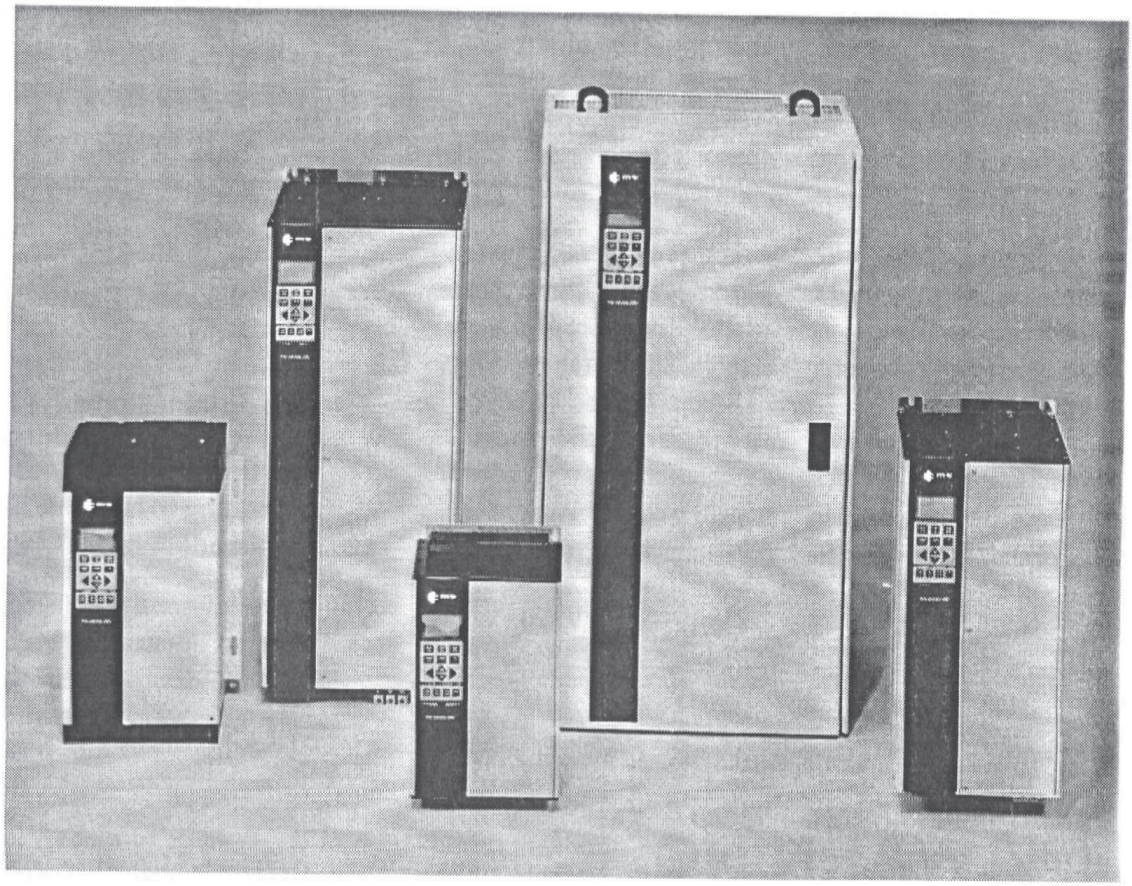
TRANE®

TR1™ Series VFD
Variable Frequency Drive

Installation and Operation Manual



August, 2004

TR1-SVX10A-EN

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