FILE FILE

# BEFORE RECEIVED-DOCKETING DIV THE PUBLIC UTILITIES COMMISSION OF OHIO 2009 DEC 29 PM 5: 14

In the Matter of the Luk, Incorporated and Ohio Power Company for	)		PUCO
Approval of A Special Arrangement	Ó	Case No. 09-1542-EL-EEC	
Agreement with a Mercantile Customer	)	•	

### JOINT APPLICATION FOR APPROVAL OF A SPECIAL ARRANGEMENT BETWEEN OHIO POWER COMPANY WITH LUK, INCORPORATED

Applicants, Ohio Power Company (Company), and Luk, Incorporated (Customer)(collectively, "Applicants"), submit this application for Commission approval of the special arrangement described in this Joint Application and the attachment. The Customer has agreed to support this filing by its affirmation in Attachment 1 (Self Direct Project Overview/Commitment).

Amended Substitute Senate Bill 221 sets forth in R.C. 4928.66 energy efficiencỳ/peak demand reduction (EE/PDR) benchmarks that electric distribution utilities shall be required to meet or exceed. The statute allows utilities to include EE/PDR resources committed by mercantile customers for integration into the utilities programs to be counted toward compliance with a utility's EE/PDR benchmarks. The statute also enables the Commission to approve special arrangements for mercantile customers that commit EE/PDR resources to be counted toward compliance with EE/PDR benchmarks.

The Company is an electric distribution utility as defined in R. C. 4928.01(A). The Customer is a Mercantile customer as defined in R.C. 4928.01(A)(19). The Customer implemented the EE/PDR projects included in this Joint Application after January 1, 2006. In its application to the Company, the Customer has agreed to commit the EE/PDR resources

 identified in this application to the Company's compliance toward the EE/PDR benchmarks in SB 221.

The Company has reviewed the details associated with the project(s) submitted in this application and based upon a thorough review of the available records believe that the project(s) included in this Joint Application satisfy the requirements in R.C. 4928.66 and also further the State of Ohio's policy goals of reducing energy costs and usage. Attachment 1 (Self Direct Project Overview/Commitment) to this Joint Application includes a project overview that outlines the project, customer size, project installation date, kWh reduction, peak KW demand reduction, total project cost, incentive total, the eligible self direct incentive, and the exemption period from the rider. Attachment 1 (Self Direct Project Overview/Commitment) also provides the signature of the Customer indicating the validity and acceptance of the information, the Customer's support of this Joint Application, and the Customer's intent to participate in the program. The Applicants attest to the fact that the program in this Joint Application complies with the presumption that the mercantile projects are part of a demand response, energy efficiency, or peak demand reduction program to the extent the project either provides for early retirement of functioning equipment which is not yet fully depreciated, or achieves reductions in energy use and peak demand that exceed the reductions that would have occurred had the customer used standard new equipment, to the extent standard is defined by current code or statute.

Applicants agree that approval by the Commission of the Joint Application will result in an arrangement that: 1) addresses coordination requirements between the electric utility and the mercantile customer with regard to voluntary reductions in load by the mercantile customer, which are not part of an electric utility program, including specific communication procedures, if necessary 2) grants permission to the electric utility and Commission staff to measure and verify

savings and/or peak-demand reductions resulting from customer-sited projects and resources, and 3) identifies all consequences of noncompliance by the customer with the terms of the commitment. Attachment 2 (blank Self Direct Program Project Application including Rules & Requirements) is a blank application form identical to the application signed by the Customer that reflects the "Rules and Requirements" agreed to by the Customer without disclosing potential Customer-specific confidential information that would be revealed in a final executed version of the application.

The Customer has provided the Company documentation necessary to calculate energy savings and peak demand reductions. The Company uses methodologies, protocols and/or practices that conform to the general principles of the International Performance Measurement Verification Protocol (IPMVP) in order to justify the energy savings and/or demand reductions.

The Applicants recognize that this Joint Application is filed at a time when the final version of the applicable rules governing the program are not yet effective. This filing attempts to the extent practical to implement the adopted rules ordered by the Commission in 08-888 even though they are not final and effective. As contemplated in the statute, the Company has been seeking mercantile customers, in the absence of final rules, to commit resources consistent with the framework set forth in R.C. 4928.66. Approval of this agreement as proposed under these rules would not serve as precedent for future agreements reached after the final and effective rules. The Commission recognized the need to be flexible in its October 15, 2009, Entry on Rehearing in 08-888-EL-ORD with respect to historical programs implemented prior to the adoption of official rules. At such time as new rules are developed and implemented future filings involving the Company will properly reflect those changes.

If the Joint Application is approved by the Commission, the Customer will have the option to either: (1) take a one-time reduced incentive payment on the condition of continuing

payment of the EE/PDR Rider, or (2) take advantage of an exemption from the EE/PDR Rider for a defined period. It is important to note that a stipulation was filed on November 12, 2009 in 09-1090-EL-POR dealing with the Company's EE/PDR Portfolio plan. The Signatory Parties¹ to the Stipulation support the Company's two options for the Self Direct Program to solicit commitments of previously-installed EE/PDR resources. (See Paragraph XII.3 of the 09-1090 Stipulation.)

"Option 1" provides mercantile customers the opportunity to receive a reduced incentive payment that is equivalent to the estimated payment of a portion of the customer's EE/PDR rider cost obligation due to the requirement that the customer continues to pay the EE/PDR rider cost for the projected period of time that the customer would otherwise be exempt from the EE/PDR Rider. Option 1 is an incentive payment of 75% of the calculated incentive amount under the Prescriptive and Custom Programs and requires the Customer to continue paying the EE/PDR rider. Because the Customer stays in the EE/PDR rider; i.e., keeps paying it, this incentive is simply an advance of a portion of those payments. The reduced incentive and requirement to continue paying the EE/PDR rider provides rate payers a benefit of lower overall program costs reflected in the EE/PDR rider because the Customer continues paying the EE/PDR rider rather than exempting from it as in Option 2. Whereas, a strict exemption approach would spread the overall program costs over fewer customers. The Customer continues to pay the EE/PDR rider for the period of exemption time calculated in Option 2. The 25% reduction over a new project incentive is reasonable because the customer has already made the EE/PDR investment. By remaining in the EE/PDR rider, the customer benefits by also remaining eligible for future

Ohio Consumers' Counsel, Ohio Environmental Council, Sierra Club, Natural Resources Defense Council, Ohio Poverty Law Center (the previous groups are collectively referred to as the Ohio Consumer and Environmental Advocates), Ohio Energy Group, Ohio Hospital Association, the Ohio Manufacturers' Association, the Ohio Partners for Affordable Energy, Columbus Southern Power Company, and the Ohio Power Company

incentives and can utilize Option 1 incentives to provide additional funding for future EE/PDR investments. "Option 1" is for customers who have completed some EE/PDR projects but want to use the advanced payment to help support new EE/PDR investments. Option 1 also requires participating customers to continue paying the EE/PDR rider allowing the customer to continue participation in EE/PDR programs offered by the Companies.

If the customer has no new energy efficiency projects to complete, the customer may be better served by Option 2 because the Option 1 incentive payment is typically less than the net present value of the projected EE/PDR rider costs over the exemption period calculated in Option 2. The customer may be better served taking Option 1 if they use the incentive payment to supplement Prescriptive or Custom program incentive dollars to help fund new energy efficiency projects. Option 1 encourages greater future energy efficiency investments from mercantile customers at a lower cost to rate payers.

Option 2 provides mercantile customers the opportunity to be exempt from the EE/PDR rider for the period of time that their committed energy savings are equal to the Company's mandated benchmark requirement percentages of energy savings based on the customer's 2006-2008 average annual energy usage baseline. If Option 2 is selected, the Customer is not entitled to participate in any of the Company's EE/PDR programs during the calculated period of exemption. In order to extend the Customer's exemption period, the Customer has to commit additional EE/PDR resources by application for approval by the PUCO. Option 2 is for customers who have installed all cost effective energy efficiency projects and plan no further projects in the exemption period. The Company seeks approval of both Option 1 and Option 2 as part of the Commission's overall approval of this application.

As shown in Attachment 1 (Self Direct Project Overview/Commitment), the Customer must comply with any Commission requirement to provide an annual report on the energy savings and electric utility peak-demand.

The Company will adjust the energy savings and demand reduction effects from this joint application during its applicable baseline period by excluding such effects from the baselines by increasing its applicable baseline for energy savings and baseline for peak demand reductions by the amount of corresponding Customer's energy savings and peak demand reductions, recognizing that savings may have diminishing effects over time as technology evolves or equipment degrades.

For these reasons, the Applicants request that the Commission approve the Joint Application applying the Customer's energy and demand resources to the Company's energy and demand target/benchmarks as identified in SB 221 and approve the Company to either pay the one-time incentive payment or exempt the Customer from the EE/PDR rider as outlined above. Upon approval, the agreement will be implemented and the Company will reflect the cost recovery as part of the EE/PDR Rider.

Respectfully submitted,

Steven T. Nourse

Matthew J. Satterwhite

American Electric Power Service Corporation

1 Riverside Plaza, 29<sup>th</sup> Floor Columbus, Ohio 43215

Telephone: (614) 716-1915

Fax: (614) 716-2950

Email: stnourse@aep.com

mjsatterwhite@aep.com

**Counsel for Ohio Power Company** 



#### Self Direct Project Overview & Commitment

Project Name:	Luk Inc
Project Number:	722
Date Received	11/23/09
Project Installation Date	12/20/2008
kWh Reduction:	876,353
Peak KW Demand Reduction:	142.6
Total Project Cost	\$164,546.76
Preliminary/Unadjusted Incentive	\$63,220.16
Calculation	·
Option 1 - Self Direct Incentive (75%)	\$47,415.12
Option 2 – EE/PDR Rider Exemption	43 months (after PUCO approval)
Simple Payback	3.0 years

#### **Project Overview:**

The Self Direct Lighting/Custom project that Luk Inc has applied for is to replace 52 4 foot 9 lamp lighting fixture with new 4 foot 2 lamp T8 fixture and replace 250 1000 W Metal Halide lighting fixture with new 4 foot 9 lamp T8 fixture. Occupancy sensors have been installed on 4F 2L T8 fixtures in the aisles for the warehouse and a lighting control system will control 4F 9L T8 fixtures for 1/3 lamps during factory shift changes. The invoicing that was provided proved the quantities that were applied for were installed

By signing this document, the Mercantile customer affirms its intention to commit and integrate the above listed demand reduction, response, and/or energy efficiency resources into the utility's demand reduction, demand response, and energy efficiency programs. By signing, the Mercantile customer also agrees to serve as a joint applicant in any filings necessary to secure approval of this arrangement by the Public Utilities Commission of Ohio, and comply with any information and compliance reporting requirements imposed by rule or as part of that approval.

Ohio Power Company	Luk Inc	
Ву:	Ву:	
Title: Manager	Title:	
Date:	Date:	

AEP OHIO

A unit of American Electric Power

### Self-Direct Program Project Application

#### **Application Instructions**

- Complete the application form for each installation account number.
- Complete the appropriate Self-Direct Program Excel spreadsheet fully describing each measure
  replaced and installed along with project costs, existing and new equipment inventories/operation
  descriptions, baseline and new usage measurements or detailed calculations, total energy and demand
  savings, and other specified information. It shall be the customer's responsibility to provide all
  necessary documentation, calculations, and energy impact and summer peak demand saving
  verification in order to justify the project for incentives. Select the appropriate spreadsheet based on
  the project:
  - o The Self-Direct Custom Spreadsheet for lighting improvements not covered in the Lighting Program and for any other energy efficiency installation.
  - The Self-Direct Lighting Spreadsheet for lighting conversions and installations covered in the Lighting Program.
- Complete the Self-Direct Program project description and include all required documentation including detailed customer-approved invoices, proof of purchase, receipts, technical specifications, studies/proposals, etc. Please submit up to five photos of the new equipment and the removed equipment (if available).
- NOTE: Sending inadequate invoice documentation, incomplete/incorrect forms, or incomplete backup information, including detailed energy and summer peak demand calculations, will delay review of the application. Contact AEP Ohio if you require additional assistance in completing the application.
- Submit all information to AEP Ohio. All completed submissions become the property of AEP Ohio.
   Make a copy of all documents for your records.

FORM SUBMITTAL: Please note all Rules and Requirements.

Emailed submissions with attachments are preferred.

Return the signed, completed form and all required detailed documentation to:

Email:

gridSMARTohio@kema.com

Mail:

AEP Ohio

6031 East Main Street, Suite 190

Columbus, OH 43213

Fax:

877-607-0740

Questions:

877-607-0739

Visit **gridSMARTohio.com** for more information on the Self-Direct Program and other energy efficiency incentive programs offered by AEP Ohio.

AEP OHIO

Customer Signature

A unit of American Electric Power

## Self-Direct Program Project Application

THIS INCENTIVE APPLICATION FORM IS VALID THROUGH DECEMBER 31, 2010.				Project ID provided by AEP Ohio PROJECT ID:				
Account Qualification	(Check one or both if applica	able)				_		
☐ 700,000 kWh per	year 🔲 National Acco	unt or N	Multiple Fa					io)
SECTION 1: CUSTOMER	INFORMATION	il danaş. Məhrəz		dunu. Majo			terirakaj Diauska	The state of the s
Company Name					Contract Dat	e of Ac	ceptance	
Mailing Address					Contact E-m	ail*		
City				State	<u> </u>		Zip Cod	e
Contact Name (print)			Phone			Fax		
Taxpayer ID # of Recipient (if	not a Corporation or Tax Exemp	t)	Tax Status: (may receive	e 1 <b>0</b> 99)	☐ Corporatio		INC, PC, Other	etc.)   Tax Exempt
SECTION 2: COMPLETIC	N AND PAYMENT INFORM	ATION	l (who will re	ceive inc	entive payment)		W.Angre	研。"" <b>"这句</b> 图。
Attention to				Total 1	Incentive Amoun	t Reque	ested	
······································			al Project Cost		Total Incremental Cost			
Tax Status: Corporation (Incl. INC, PC, etc.) Tax Exempt (may receive 1099) Individual Other		Total Annual kWh Claimed		kW Demand Reduction Claimed				
SECTION 3: JOB SITE IN	FORMATION (where equipm	ent was	nstalled)	(Micris)		talyni Ukin	Mhinida	
Job Site Name					Project Contact I	Name	<u> </u>	
Job Site Address (physical local	tion)				Project Contact	Telepho	ne	
City	State	e Zi <sub>l</sub>	p Code		Project Contact I	Email		
Job Site Account Number			Primary	Account	Number (if diffe	rent tha	an Job Sit	e)
Construction Type: ☐ New Co	onstruction   Existing Building	☐ Majo	r Renovation					
Building Type: ☐ Office ☐ Grocery	☐ School (K-12) ☐ College ☐ Warehouse ☐ Light ind		etail/Service		staurant	otel/Mo Municip		Medical Other
SECTION 4: CONTRACTO	R INFORMATION (equipme	ent or ser	vice provider,	installer	<b>)</b>		1916) - 114 Hendriger	
Contractor Name								
Contractor Street Address				City			State	Zip Code
Contractor Contact Name		Contact	Telephone		c	contact	Email	
SECTION 5: CUSTOMER	ELECTION (CHOOSE ONE	OPTIO	N AND CO	4PLETE	ASSOCIATE	D INP	ORMAT	
Option #1	☐ Incentive Payment			Incentive Calculation: \$				
Option #2	☐ Exemption From EE/PDR Rider			# of Months Exempted: months (calculation provided by AEP Ohio)				
	the information on this applicat application and I have the auth							and understand the

<sup>\*</sup> By providing your e-mail address, you are granting AEP Ohio permission to send further e-mails regarding our programs and services.

Attachment 2- Self Direct Program Project
Application Blank including Rules and Requirements

### Self-Direct Program Retrospective Projects / Rules and Requirements

Columbus Southern Power Company and Ohio Power Company are collectively known as AEP Ohio ("AEP Ohio"). AEP Ohio provides energy-efficiency incentives for the purchase and installation of qualifying cost-effective equipment in the customer's facility (the customer's "Commitment of Resources") under the Rules and Requirements provided in this incentive application and subject to regulatory approvals.

#### Customer Qualifications

The Self-Direct Program (the "Program") applies to customers served at AEP Ohio's retail electric rates who meet the minimum energy usage requirements of 700,000 kWh per year or who are part of a national account involving multiple facilities in one or more states. This application defines the Date of Acceptance.

#### **Terms and Conditions**

- THIS INCENTIVE APPLICATION FORM IS VALID FOR SUBMITTAL BY SELF-DIRECT CUSTOMERS UNTIL DECEMBER 31, 2010. AEP Ohio incentive programs may be changed or cancelled at any time without notice. The Customer and its contractor are solely responsible for contacting AEP Ohio to ask whether or not the program is still in effect and to verify program parameters.
- Customer agrees to commit all energy and demand resources identified in this
  application to AEP Ohio's energy and demand target / benchmarks as identified in
  Senate Bill 221.
- Incentive payments are available while program funding lasts.
- To ensure maximum program participation, AEP Ohio reserves the right to limit funding on a per project basis.
- Pre-approval by AEP Ohio is required.
- Incentive items must be installed on the AEP Ohio electric account listed on the application.
- The incentive payment shall be:
  - 75% of the calculated incentive under the Business Lighting or Custom Program, whichever is applicable to this project.
- In lieu of a one-time incentive payment, the customer may elect to seek an exemption from the Energy Efficiency / Peak bemand Reduction (EE/PDR) Rider for the associated electric account(s) for a defined period of time as stated on this Application. For this exemption, and as defined in the table below, the incentive payment amount is compared to the estimated net present value (NPV) of the customer's estimated EE/PDR rider obligation, as calculated by AEP Ohio. If exemption is elected, the customer is not eligible for other programs offered by AEP Ohio during the period of exemption. Unless additional resources are committed, the customer will, after the specified number of months on this Application, be subject to the EE/PDR Rider.
- If an incentive is elected, the customer remains in the EE/PDR rider for the period of time that an exemption would have been in effect and may also participate in other AEP Ohio programs.
- All equipment must be new; used or rebuilt equipment is not eligible for an incentive.
- Eligible measures must produce <u>veriffable</u> and <u>persistent</u> energy and/or demand reduction, for a period of no less than five (5) years from the date of installation, through an increase in efficiency or through the use of load-shifting technologies. Measurement and verification may be required.
- Ineligible measures:
  - Rely solely on changes in customer behavior and require no capital Investment, or merely terminate existing processes, facilities and/or operations.
  - Are required by state or federal law, building or other codes, or are standard industry practices.
  - 3. Involve fuel switching, plug loads, or generate electricity.
  - Are easily reverted / removed or are installed entirely for reasons other than improving energy efficiency.
  - 5. Include other conditions to be determined by AEP Ohio.
- Projects submitted for retrospective claims must be installed and operating between January 1, 2006 and the Date of Acceptance into the Self-Direct Program. Incentive levels, as shown in the table below, are based on the calendar year of installation / operation. Customer shall provide proof of equipment installation / operation start-up.
- All applications are subject to AEP Ohlo, its contractor(s) / agent(s), and the Public
  Utility Commission of Ohio (PUCO) review and approval prior to any incentives paid or
  exemption from the EE/PDR Rider under this program.

Incentive Levels (for retrospective projects completed since January 1, 2006)	75% of the calculated incentive payment under the current Business Lighting or Custom Programs, whichever is applicable.
Min / Max payback w/o incentive applied	1 year Min / 7 Year Max

- Customer is allowed and encouraged to consider using all or a portion of the incentive payment, as received from AEP Ohio under this program, to help fund other customer-initiated energy efficiency and demand reduction projects in the future. Future projects can also qualify for incentives under the Business Lighting or Custom program.
- A signed final application with documentation verifying installation of the project including, but not limited to, equipment, invoices, approvals, and other related information must be submitted to AEP Ohio prior to application approval.
- The summer peak period is defined as weekday peak-demand hours (7:00 AM to 9:00 PM, May through September).
- Customers are encouraged to submit projects that warrant special treatment (i.e., non-typical projects) to be considered on a case-by-case basis by AEP Ohio.
- AEP Ohio reserves the right to randomly inspect customer facility(ies) for installation
  of materials listed on this incentive application and will need access to survey the
  installed project. Customer understands and agrees that Program installations may
  also be subject to inspections by the PUCO or their designee, and photographs of
  installation may be required. All documentation and verification is subject to strict
  confidentiality.
- If the inspection finds that customer did not comply with program rules and requirements, any incentive received under this Program must be returned to AEP Ohio including interest. Exemption from the rider will be voided as well. In addition, AEP Ohio reserves the right to withhold payment or exemption for projects that do not meet reasonable inclustry standards as determined by AEP Ohio.
- AEP Ohio reserves the right to refuse payment and participation if the customer or contractor violates program rules and procedures. AEP Ohio is not liable for incentives promised to customers as a result of program misrepresentation.
- The customer understands and agrees that all other terms and conditions, as specified in the application, including all attachments and exhibits attached to this application, which will serve as a contract for the customer's commitment of energy and demand resources to AEP Ohio, shall apply.
- AEP Ohio reserves the right to request additional backup information, supporting detail, calculations, manufacturer specification sheets or any other information prior to any incentive payment.
- Equipment could have been installed in retrofit, replacement, or new construction applications and must meet reasonable industry standards. All equipment / measures must meet minimum cost effectiveness requirements as defined or determined by AEP Ohio. Customer must also provide evidence of measure like.
- AEP Ohio will issue any approved incentives in the form of checks.
- Customer can not apply for incentives for future projects and elect after the fact to apply for exemption under this program.
- All documentation and verification is subject to strict confidentiality.
- All completed submissions become the property of AEP Ohio.

#### Disclaimers

#### AEP Ohio:

- Does not endorse any particular manufacturer, product or system design by offering these incentives.
- Will not be responsible for any tax liability imposed on the customer as a result of the
  payment of incentives. AEP Ohlo will report incentives greater than \$as income on
  IR5 form 1099. Such incentives shall be taxable unless Customer 600 meets
  acceptable tax exemption criteria. Customers are encouraged to consult with their
  tax advisors about the taxability of any incentive payments.
- Does not expressly or implicitly warrant the performance of installed equipment (contact your contractor for detailed equipment warranties).
- Is not responsible for the proper disposal/recycling of any waste generated as a result
  of this project.
- Is not liable for any damage caused by the operation or malfunction of the installed equipment.
- Does not guarantee that a specific level of energy or cost savings will result from the implementation of energy conservation measures or the use of products funded under this program.

#### 

Exemption from the EE/PDR rider is determined by comparing the value of the one-time incentive payment with the estimated net present value (NPV) of the EE/PDR rider payments, as calculated by AEP Ohio, for the customer's associated electric account. This NPV is defined as the customer's financial contribution to AEP Ohio's efforts to reach EE/PDR targets. Exemption term will be rounded to the nearest month.

Attachment 2- Self Direct Program Project
Application Blank including Rules and Requirements
Page 4 of 5

Self-Direct Program

Retrospective Project Description: Project \_\_\_\_\_ of \_\_\_\_

Project Descriptive Name	1000	Project In-service Date
Affected Electric Account Number(s)		
Claimed Project Baseline (AEP Ohio will make the final	determination of applicabl	e baseline):
Retrofit (the project was an elective retrofit and the	e equipment was still opera	able)
Replacement (the project was a replacement of	of equipment at or near t	he end of its useful life)
New (the project was an addition of new equipment	nt in an existing facility or r	new construction)
Describe the project including detail of energy savings of	equipment. Attach addition	al sheets if needed.
Describe the removed equipment and operating strateg Attach additional sheets if needed.	y. Please provide up to five	e photos of the equipment, if available.
Describe the installed equipment and operating strategy sheets if needed.	y. Please provide up to five	photos of the equipment. Attach additional
Describe your calculation method for energy savings. A	ttach additional sheets if n	eeded.
In addition to electrical energy and/or demand reduction	n, other benefits of propose	ed project include:
Conserves other utilities (gas, water, etc.)	Meets enviro	nmental regulations
Improves process flow	Reduces lab	or
Improves product quality	Saves energ	у
Increases production capacity	Uses fewer r	aw materials
Other		

Attachment 2- Self Direct Program Project
Application Blank including Rules and Requirements
Page 5 of 5

#### **Project Technical Specifications**

(This sheet provides an example of required data collection. The Self-Direct spreadsheet provides additional guidance and streamlines the process for collecting, documenting and reporting this information to AEP Ohio, and it follows the format of this sheet. Please provide as much detail as possible on the Self-Direct spreadsheet to expedite review and processing of the requested incentive).

Please complete the Self-Direct spreadsheet for each measure installed and provide supporting documentation including engineering or equipment supplier studies, customer-approved invoices, purchase orders, detailed calculations of baseline and energy and peak summer demand savings. A detailed proposal and complete package will expedite review of application. This information is required by AEP Ohio and/or its consultants for project analysis.

	· · ·	
	EQUIPMENT REMOVED OR LOWER EFFICIENCY OPTION	INSTALLED EQUIPMENT OR HIGHER EFFICIENCY OPTION
Equipment type		
Manufacturer of equipment		
Model number(s)		
Date of Removal / In-Service Date		
Age of equipment at removal		
Estimated remaining useful life at time of removal or Installation		
Efficiency rating		
Nameplate data: kW, tons, HP, watts, etc.		
Quantity		
Annual operating hours		
Annual energy savings (kWh)		
Summer peak reduction (kW)*		
Annual electric bill savings (\$)		
COST BREAKOUT	PANISANANAN TERRETAKAN	
Equipment		
Engineering		
Installation		
Other (explain)		
TOTAL PROJECT COST		
Incremental Cost = Installed Option Total Cost – Removed Equipment or Lower Efficiency Option Total Cost		
* Determination of peak demand reduction (kM over the period from 7 a.m. to 9 p.m., weekdays, i demands over the peak demand period, and aver	from May 1 through September 30. The preferred	d calculation method will estimate hourly kW

\* Determination of peak demand reduction (kW) within HVAC systems: Calculate the maximum HVAC peak demand reduction that occurs

rigorous estimation process may be applied if approved in advance by the program.

between 7 a.m. to 9 p.m. on a weekday from May 1 through September 30.