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US Army Corps  
of Engineers  
Construction Engineering  
Research Laboratory

# Maintenance Task Data Base for Buildings: Electrical Systems

by  
Edgar S. Neely  
Robert D. Neathammer  
James R. Stirn  
Robert P. Winkler

This research project has provided improved maintenance resource data for use during facility planning, design, and maintenance activities. Data bases and computer systems have been developed to assist planners in preparing DD Form 1391 documentation, designers in life-cycle cost component selection, and maintainers in resource planning. The data bases and computer systems are being used by U.S. Army Corps of Engineers (USACE) designers at the District and installation levels and by resource programmers at USACE Headquarters, and Army Major Commands and installations. These research products may also be useful to other Government agencies and the private sector.

This report describes the building task maintenance and repair data base development and gives examples of its application. It is one of a series of special reports on the maintenance and repair data base. While this report describes electrical systems, other reports in the series cover heating, ventilation, and air-conditioning systems, plumbing systems, and architectural systems.

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## FOREWORD

This research was conducted for the Directorate of Military Programs, Headquarters, U.S. Army Corps of Engineers (HQUSACE) and the Office of the Assistant Chief of Engineers under various research, development, testing, and evaluation (RDTE) and reimbursable funding documents. Work began under RDTE in 1980 and continued in reimbursable projects during 1984 through 1989. The technical monitor for the RDTE part was Dr. Larry Schindler (CEMP-EC) and for the reimbursable part was Ms. Val Corbridge (DAEN-ZCF-R).

The work was performed by the Facility Systems Division (FS), U.S. Army Construction Engineering Research Laboratory (USACERL). The Principal Investigators were Dr. Edgar Neely and Mr. Robert Neathammer (USACERL-FS). The primary contractor for much of the data development was the Department of Architectural Engineering, Pennsylvania State University. Dr. Michael O'Connor is Chief of USACERL-FS.

COL Everett R. Thomas is Commander and Director of USACERL, and Dr. L.R. Shaffer is Technical Director.

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# MAINTENANCE TASK DATA BASE FOR BUILDINGS: ELECTRICAL SYSTEMS

## 1 INTRODUCTION

### Background

Maintenance<sup>\*</sup> and repair (M&R) cost estimates are needed during planning, design, and operations/maintenance of Army facilities. During planning, life-cycle costs are needed to evaluate alternative ways of meeting requirements (e.g., lease, new construction, renovate existing facilities). During design, M&R requirements for various types of components, such as built-up or shingle roofs, are needed so that the total life-cycle cost of different designs can be minimized. Finally, once the facility has been constructed, outyear predictions of maintenance and repair costs are needed so that enough funds can be programmed to ensure that Army facilities are maintained properly and do not deteriorate due to lack of maintenance.

The Directorate of Engineering and Construction (EC), Headquarters, U.S. Army Corps of Engineers (HQUSACE),<sup>\*\*</sup> asked the U.S. Army Construction Engineering Research Laboratory (USACERL) to coordinate the assembly of a single centralized maintenance and repair data base for use by Corps designers. This research was required because designers were not able to obtain reliable maintenance and repair data to support their life-cycle cost (LCC) analysis from installations or from the technical literature. One of the first tasks in the research effort was to determine if reliable data bases, which could be adapted for Corps use, existed in government or private industry. Comprehensive data bases of maintenance costs for government and private sector facilities did not exist. The little data available always depended on widely varying standards of maintenance used to maintain the facilities for which the data was collected and thus was unreliable for prediction purposes. Recognizing this, HQUSACE asked USACERL to develop a maintenance and repair cost data base. This data is for use by U.S. Army Corps of Engineers (USACE) designers in performing life-cycle cost analyses during the design of new facilities. Initial results were presented in several USACERL reports.<sup>1</sup>

Soon after this request, the Facilities Programming and Budgeting Branch of the Facilities Engineering Directorate asked USACERL to develop prediction models for outyear maintenance requirements of the Army facility inventory. The Programming Office of EC, responsible for Military Construction, Army (MCA) planning, also requested that USACERL provide methods and automated tools to help installations perform economic analyses. Part of the objective was to allow analysts to obtain future maintenance cost data.

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<sup>\*</sup>Maintenance in this report means all work required to keep a facility in good operating condition, it includes all maintenance, repair, and replacement of components required over the life of a facility.

<sup>\*\*</sup>At the time of this request, EC was part of the Office of the Chief of Engineers, which has since reorganized. In addition, EC has now become the Directorate of Military Programs.

<sup>1</sup> R.D. Neathammer, *Life Cycle Cost Database Design and Sample Cost Data Development*, Interim Report P-120/ADA0997222 (U.S. Army Construction Engineering Research Laboratory [USACERL], February 1981), R.D. Neathammer, *Life-Cycle Cost Database. Vol I, Design*, and *Vol II, Sample Data Development*, Technical Report P 139/ADA126644 and ADA126645 (USACERL, January 1983), Appendices E through G.

In response to these requests, USACERL began a multiyear effort to develop a comprehensive maintenance and repair cost research program for buildings. This coordinated program is the key to all detailed estimation of future maintenance costs for Army facilities.

### Research Performed and Reports Published

This is one of several interrelated reports addressing maintenance resource prediction in the facility life-cycle process. The total research effort is described in a USACERL Technical Report.<sup>2</sup>

The first research product was a data base containing maintenance tasks related to every building construction component. This data base provides labor, material, and equipment resource information. The frequency of task occurrence is also included. This information is published in a series of four USACERL Special Reports by engineering systems: (1) architectural, (2) heating, ventilating, and air-conditioning (HVAC), (3) plumbing, and (4) electrical. The title for the series is *Maintenance Task Data Base for Buildings*.<sup>3</sup> Table 1 shows an example from this data base. This data is also available in electronic form. The data base is used in a personal computer (PC) system under the Disk Operating System (DOS). This computer program allows a facility to be defined by entering the components and component quantities comprising the facility. The tasks are used to determine the resources required annually to keep the facility maintained.

The second research product was a component resource summary for the first 25 years of a facility. The tasks for the component were scheduled and combined into one set of annual resource requirements. This annual resource information is published in a series of four USACERL Special Reports titled *Building Component Maintenance and Repair Data Base*.<sup>4</sup> An example from this data base is shown in Table 2. The data base is also available in electronic form. This data can be used to perform special economic analyses such as one for a 20-year life using a 10-percent discount rate.

The third research product was a set of 25-year present worth factor tables for use by designers in selecting components for discount rates of 7 and 10 percent. The annual component resource values were multiplied by the appropriate present worth factor and added for the 25 years to produce one set of resource values. This information is published in a series of four USACERL Special Reports titled

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<sup>2</sup> E.S. Neely, R.D. Neathammer, J.R. Stirn, and R.P. Winkler, *Maintenance Resource Prediction in the Facility Life-Cycle Process*, Technical Report P-91/10 (USACERL, March 1991).

<sup>3</sup> E.S. Neely, R.D. Neathammer, J.R. Stirn, and R.P. Winkler, *Maintenance Task Data Base for Buildings: Heating, Ventilation, and Air-Conditioning Systems*, Special Report P-91/21 (USACERL, May 1991); E.S. Neely, R.D. Neathammer, J.R. Stirn, and R.P. Winkler, *Maintenance Task Data Base for Buildings: Plumbing Systems*, Special Report P-91/18 (USACERL, May 1991).

<sup>4</sup> E.S. Neely, R.D. Neathammer, J.R. Stirn, and R.P. Winkler, *Building Component Maintenance and Repair Data Base for Buildings: Architectural Systems*, Special Report P-91/27 (USACERL, May 1991); E.S. Neely, R.D. Neathammer, J.R. Stirn, and R.P. Winkler, *Building Component Maintenance Data Base for Buildings: Heating, Ventilation, and Air-Conditioning Systems*, Special Report P-91/22 (USACERL, May 1991); E.S. Neely, R.D. Neathammer, J.R. Stirn, and R.P. Winkler, *Building Component Maintenance and Repair Data Base for Buildings: Plumbing Systems*, Special Report P-91/30 (USACERL, May 1991); E.S. Neely, R.D. Neathammer, J.R. Stirn, and R.P. Winkler, *Building Component Maintenance and Repair Data Base for Buildings: Electrical Systems*, Special Report P-91/19 (USACERL, May 1991).

Table 1

Typical Task Data Form

Task Code: 1131411

Component: MERCURY VAPOR FIXT. 175W. System: LIGHTING SYSTEM Subsystem: LIGHTING FIXTURES  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 10.00 L: 20.00  
 Once every (H, A, L) years

Persons per Team: 1 Task Duration: 0.6154 hours

Trade: ELECTRICAL, INT. Task Classification: 0

Subtask Description	Labor Resources		Material Resources	
	Labor Hours	Quantity	Description	Unit Cost
1. REMOVE AND REINSTALL LOUVER	0.004100		BALLAST	50.0000
2. REMOVE AND REINSTALL 1 TUBE	0.071200			50.0000
3. REMOVE OLD/REINSTALL BALLAST	0.384000			
4. TEST FIXTURES	0.014100			

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor Hours		0.475400	0.142020	0.615420
Material Cost		50.000000		50.000000
Equipment Hours				0.615420



Table 2

Typical Component Summary

CACES No.: 113130 - Flour. Lighting Fixt. 80W.

113141 - Mercury Vapor Fixt. 175W

Labor Hours	Materials \$	Equipment Hours	YR	Labor Hours	Materials \$	Equipment Hours
0.0000	0.0000	0.0000	1	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	2	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	3	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	4	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	5	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	6	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	7	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	8	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	9	0.0000	0.0000	0.0000
0.8784	20.6700	0.8784	10	0.6840	81.6200	0.6840
0.0000	0.0000	0.0000	11	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	12	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	13	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	14	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	15	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	16	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	17	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	18	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	19	0.0000	0.0000	0.0000
0.7413	67.8400	0.7413	20	0.5816	134.6200	0.5816
0.0000	0.0000	0.0000	21	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	22	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	23	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	24	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	25	0.0000	0.0000	0.0000

All data is per fixture.

*Building Maintenance and Repair Data for Life-Cycle Cost Analyses.*<sup>5</sup> Table 3 shows an example from this data base. The data base is also available in electronic form. The first three resource columns provide data to allow designers to calculate the life-cycle costs at any location by multiplying by the correct labor rate, equipment rate, and material geographic factor. The multiplication and addition have been performed for the Military District of Washington, DC, and results are given in the fourth column of the table. The right section of the table is information that can be entered into computer systems that perform life-cycle cost analysis.

<sup>5</sup> E.S. Neely, R.D. Neathammer, J.R. Stirn, and R.P. Winkler, *Building Maintenance and Repair Data for Life-Cycle Cost Analyses. Architectural Systems*, Special Report P 91/17 (USACERL, May 1991); E.S. Neely, R.D. Neathammer, J.R. Stirn, and R.P. Winkler, *Building Maintenance and Repair Data for Life Cycle Cost Analyses. Heating, Ventilation, and Air-Conditioning Systems*, Special Report P 91/20 (USACERL, May 1991); E.S. Neely, R.D. Neathammer, J.R. Stirn, and R.P. Winkler, *Building Maintenance and Repair Data for Life Cycle Cost Analyses. Plumbing Systems*, Special Report P-91/24 (USACERL, May 1991); E.S. Neely, R.D. Neathammer, J.R. Stirn, R.P. Winkler, *Building Maintenance and Repair Data for Life-Cycle Cost Analyses: Electrical Systems*, Special Report P-91/26 (USACERL, May 1991).

Table 3

Life-Cycle Cost Analysis

EPS BASED MAINTENANCE AND REPAIR COST DATA FOR USE IN LIFE CYCLE COST ANALYSIS (\$ PER UNIT MEASURE)										PAGE 57		
COMPONENT DESCRIPTION	PRESENT WORTH OF ALL 25 YEAR MAINTENANCE AND REPAIR COSTS (d = 10%)					ANNUAL MAINTENANCE AND REPAIR PLUS HIGH COST REPAIR AND REPLACEMENT COSTS						
	By Resources		Washington D.C. Total	Annual Maintenance and Repair		Replacement and High Costs Tasks		Yr	labor	material	equipment	
	labor	material		labor	material	labor	material					
LIGHTING SYSTEM												
LIGHTING FIXTURES												
INCANDESCENT LIGHTING FIXT	0.12489	2.99191	6.20	0.12489	0.01012	0.14063	0.01012	0.44250	16.96000	0.44850	0.44850	0.44850
QUARTZ FIXTURE	0.18095	21.59174	26.33	0.18095	0.01795	2.07824	0.01796	0.44850	58.35000	0.44850	0.44850	0.44850
FLOUR. LIGHTING FIXT. 80W.	0.35366	14.22361	23.30	0.35366	0.03731	0.57794	0.03731	0.74126	67.84000	0.74126	0.74126	0.74126
MERCURY VAPOR FIXT. 175W	0.27593	40.56016	47.64	0.27593	0.02905	3.46673	0.02905	0.58162	134.62000	0.58162	0.58162	0.58162
METAL-HALIDE FIXT. 175W.	0.31034	66.72582	95.69	0.31034	0.03626	9.17686	0.03626	0.43550	197.16000	0.43550	0.43550	0.43550
EMERGENCY LIGHTING FIXT.	0.71076	16.09790	34.32	0.71046	0.04779	0.60201	0.04779	3.14782	100.70000	3.14782	3.14782	3.14782
H.P. SODIUM FIXT. 250W.	0.30038	167.06999	174.29	0.15019	0.03465	16.20810	0.01733	0.44850	436.72000	0.44850	0.44850	0.44850
L.P. SODIUM FIXT. 200W.	0.30038	99.54375	105.77	0.15019	0.03465	8.32916	0.01733	0.44850	341.32000	0.44850	0.44850	0.44850

A fourth research product was a PC system that allows facilities to be modeled by entering the components that comprise the facility. Future years resource predictions are produced by applying the individual tasks and then forming resource summaries by subsystems, systems, facilities, installations, reporting installations, Major Commands (MACOMS) and Army. A summary level computer system was also developed for use by the Department of the Army (DA) and MACOMS. The summary level system applies the most basic data contained in the current facility real property inventory files: (1) current facility use, (2) floor area, and (3) construction date. User' and system's manuals will be published as USACERL ADP Reports.

## Objective

The objective of this report is to describe the component summaries for electrical systems and give examples for using these tables in performing the component during the design process.

## Approach

The first activity in the research was to survey the literature for available maintenance data. No comprehensive task resource data base was located. The Navy has developed a series of manuals dealing with labor hours required to perform several basic maintenance tasks. This work has been adopted by the Department of Defense (DOD) for tri-service use. A series of Technical Bulletins (TBs) under the general title *Engineered Performance Standards* (EPS) has been published.

The next activity was to survey USACE District offices to solicit their input for a data base. A guiding committee composed of District personnel, installation representatives, and private sector consultants met and agreed upon a general data base design. More importantly, they recommended that the data base be developed using the EPS rather than historical data.

Once the data base was developed, component summaries were created by summing all tasks for a component. These summaries were then input into a program that computed present worth values for each component.

The calculation procedures described in this report were performed and summarized for standard Army life-cycle analysis of 25 years with a 7-or 10-percent present worth factor. Final results are published in the USACERL Special report series *Building Maintenance and Repair Data Base for Life-Cycle Analyses*.

## Scope

The 25-year component resources summary tables are for DOD designers and can also be used by those in the private sector.

## Mode of Technology Transfer

The tables pertinent to designer use will be issued as a supplement to Technical Manual (TM) 5-802-1, *Economic Studies for Military Construction Design—Applications*.

## 2 PROBLEM DEFINITION

In the facility life-cycle process, costs are incurred in construction, operation, maintenance, and disposal of a facility. Past emphasis during the planning, design, and construction phases has been on estimating initial construction costs. The impact of operating and maintaining facilities has always been a secondary consideration. In many cases, the operation and maintenance (O&M) costs are far greater than initial construction costs. Building owners are concerned with the total ownership costs of facilities rather than just the initial construction costs.

The Army has realized the importance of performing total life-cycle cost analyses for facilities at the design stage of accurately forecasting these costs for funds programming. HQUSACE asked USACERL in 1980 to develop a method of estimating future maintenance costs for buildings. In 1982, the programming branch of the former Facilities Engineering Directorate asked USACERL to develop effective models for forecasting facility maintenance resource requirements based on the actual facility.

Life-cycle cost economic studies are an integral part of facility design in the MCA program. Requirements for performing these studies are given in:

- Statutes, Code of Federal Regulations, and Executive Orders for performing analyses when energy is a key cost and for wastewater treatment plants
- USACE *Architectural and Engineering Instructions: Design Criteria*
- Army Regulation (AR) 11-28, *Economic Analysis and Program Evaluation for Resource Management* for general economic analyses.
- TM 5-802-1, *Economic Studies for Military Construction Design--Applications*.

The main purpose of these studies is to minimize the life-cycle costs of Army facilities.

To perform life-cycle cost analyses on facility designs, three categories of costs are needed: initial, operating, and maintenance. Initial costs are usually easy to estimate through existing cost estimating systems such as the Corps of Engineers Computer Assisted Cost Estimating System (CACES) and standard publications such as Means or Dodge. Operating costs can be estimated by using energy consumption models such as the Corps of Engineers Building Loads Analysis and System Thermodynamics (BLAST) program or the Trane Company's Trace program. However, accurate estimates of maintenance costs are not available.

There are no comprehensive data bases of maintenance costs for building components either in the private sector or State/Federal Governments. Some historical data is available from the Building Owners' and Managers' Association reports. Within the Army, the Integrated Facilities System (IFS) contains some historical data; however, it does not have a feature for retaining several types of a building component (e.g., having brick and wood exteriors or three types of floor covering). Moreover, the data in IFS has not been kept current. For example, at one installation several family housing units were shown as having wood siding when, in fact, they had been covered with aluminum siding several years earlier.

### 3 DATA BASE DEVELOPMENT

The first step in data base development was to subdivide a building into systems, subsystems, and components, and define maintenance tasks. The second step was to estimate resources for each task.

#### Building Subdivision

The UNIFORMAT method of dividing a building into systems, subsystems, and components was adopted since it is used by most Federal agencies and many private organizations. Systems requiring little maintenance such as foundations and superstructure were not subdivided.

The level of component detail was determined by maintenance and design personnel. This level varied, depending on the facility classification (e.g., historical) and the costs to collect and maintain data versus the benefit. Appendix A contains a complete list of the subdivisions. Major electrical categories are:

- 110 Interior Electric
- 111 Service & Distribution
- 112 Power System
- 113 Lighting System
- 114 Grounding System
- 120 Special Interior Electrical Systems
- 121 Sound System
- 122 Alarm System
- 123 Television System
- 124 Control System
- 125 Hospital System
- 126 Clock & Program System
- 127 Electrical Heating System
- 128 Power Generating System.

#### Task Development

The primary objective was to develop a data base that is neither time- or cost-dependent. A data base independent of time would also be unaffected by inflation. This condition was achieved for labor and equipment resources through the use of hours. The number of labor hours and equipment hours for a task depends only on the current rates when LCCA is performed. This process was not possible for material costs.

A typical task data form is shown in Table 1. The EPS adopted by all DOD agencies were used to determine labor resources. A USACERL Technical Report contains a full explanation of use of EPS in developing these resources.<sup>6</sup>

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<sup>6</sup> E.S. Neely, R.D. Neathanmer, and J.R. Stim (USACERL, March 1991).

Standard references such as DA criteria documents, Corps of Engineers Unit Price Manuals, Means, and Dodge were used to determine the Washington, DC, area material costs. Material costs in the data base are given in July 1985 dollars for this area. Material costs can be adjusted for site location by applying a geographic location adjustment factor similar to the values shown in Appendix B. Material costs can be adjusted for inflation by applying a time adjustment factor from July 1985 to the new point in time.

Task frequencies are the most subjective portion of the data base and were determined by applying professional experience, trade publication data, and data in manufacturers' literature. A range of values is given to provide more information than one average frequency.

The first activity was to list all maintenance tasks that occur during the life of each component. The next step was to develop resource data for each task. The five sets of elements shown in Figure 1 were needed for developing each task: (1) unit of measure, (2) frequency of occurrence, (3) labor hours, (4) equipment hours, and (5) material costs.

1. Unit of measure. A standard unit of measure for each component was selected based on commonly accepted measurement methods, the measurement units used within IFS, and the level of detail supported by the maintenance personnel.

The standard unit of measure was 1 fixture or circuit.

2. Frequency of occurrence. The frequency of occurrence for tasks is the most subjective element in the data base. The data base developers used their experience and information from journals, reports, and manufacturers to estimate task frequencies.

3. Labor hours. The primary source of labor requirements was the EPS, which are approved for use by all DOD agencies. EPS are based on either methods-time-measurement studies or work sampling studies. Using these techniques, times for performing subtasks were estimated and combined to provide total task times.

The following EPS sources were used:

TB 420-6, *Electric and Electronic Handbook*, February 1982

TB 420-6, *Electric and Electronic Formulas*, October 1972

TB 420-30, *Emergency/Service Handbook*, August 1979

When information was not available within EPS, the data was developed from existing trade journals, reports, and other publications.

4. Material resources. The amounts of materials needed were normally based on EPS and contractor experience. Material costs were taken from CACES, Means, Dodge, and other references.

5. Equipment resources. The equipment hours required for maintenance trucks were developed by dividing the total labor hours for the task by the normal crew size used on the task.

The data base has been reviewed by 13 different maintenance organizations and has been determined to accurately represent the resources required to perform the tasks.

## **Component Index**

Appendix A lists all systems, subsystems, and components in the data base.  
Appendix B gives geographical location adjustment factors.

## **Detailed Task Tables**

Appendix C gives detailed resources by subtask for each task.

## **Summary Task Tables**

Appendix D contains summary data from Appendix C. The half page per task given in Appendix C has been summarized into one line in Appendix D. This data includes the CACES number, task description, unit of measure, trade code, task classification (major or minor), the average, high, and low frequencies of task occurrence, labor hours, material costs, and equipment hours.

#### 4 DATA BASE APPLICATION EXAMPLE

The task information can be used to calculate resources to perform the tasks for programming, planning, and staffing. These detailed task tables normally should not be used in performing life-cycle cost analyses. Tables given in the USACERL Special Report series *Building Maintenance and Repair Data for Life-Cycle Cost Analysis* are more appropriate for standard 25-year life-cycle cost analysis using either 7 or 10 percent discount rates. Tables in the USACERL Special Report series *Building Component Maintenance and Repair Data Base* can be used for other life-cycle cost analyses.

The example below is to calculate the cost to maintain and repair all 175 W mercury-vapor light fixtures in an area, given the following information:

Number of fixtures	25
Labor rate	\$18.50/hr
Geographic location factor	1.05
Equipment rate	\$3.60/hr

Task data for this example is shown in Table 1. The calculation is: (Labor hr/fixture x Labor rate \$/hr + Material cost in Washington, DC dollars/fixture x Geographic location factor + Equipment rate \$/hr) x Roof area. Substituting the above data:

$$(.61542 \text{ hr/fixture} \times \$18.50/\text{hr} + 50 \times 1.05 + .61542 \text{ hr/fixture} \\ \times \$3.60 = 66.10078) \times 25 \text{ fixtures} = \$1652.52 \quad [\text{Eq 1}]$$



## 5 PROCEDURES FOR DEVELOPING TASKS

Procedures for developing a tasks can be demonstrated by using the existing task number 1131411, MAINTAIN AND REPAIR OF 175W MERCURY VAPOR LIGHT FIXTURE shown in Table 1. This task involves: removing and reinstalling the louver; removing and reinstalling one tube; removing and reinstalling ballast; and testing fixture.

Task GT-309, found on page 175 of TB 420-6 contains subtasks for this task as shown in Table 4.

In order to repair most light fixtures, the worker must first gain access to it by removing the Louver. Subtask 1, "Remove and Reinstall Louver," gives a labor rate of .00410 hr/fixture for Subtask 1.

The next step, "Remove and Reinstall One Tube," is subtask 2. If we assume that a ladder will be needed, the labor rate will be .07120 hr/fixture.

Subtask 3 lists the labor rate for step three, "Remove Old and Reinstall New Ballast in Fluorescent Fixture," as .0356 to remove and .3484 to reinstall. The total labor rate for subtask 3 would be .3840 hr/fixture.

The final task is to test the newly installed light fixture. Subtask 4 shows this labor rate as .01410 hr/fixture.

The total direct labor hours to perform the entire job would be the sum of all subtasks, or 0.47340 hr/fixture. The indirect time or the time to plan the work, load the truck at the beginning of the day, unload the truck at the end of the day, personal time, delay time, and material handling time must be included to obtain the total onsite labor time. In EPS, this value is expressed as a percentage of the direct labor. When all factors have been considered, the direct labor should be increased by 30 percent or 0.14202 hr/fixture. The total onsite labor hours would then be 0.615420 hr/fixture.

The normal procedure is for the shop to equip a maintenance truck with all required tools such as ladders and handtools. The cost for the truck and equipment is usually based on task duration.

The material cost for ballast, \$50/ballast, was taken from Means Electrical Cost Data (p. 191). Because only one material is involved, the material cost for ballast is equal to the total cost.

Table 4

Tasks for a 175W Mercury Vapor Fixture

TASK DATA FORM

Task Code: 1131411

Component: MERCURY VAPOR FIXT. 175W. System: LIGHTING SYSTEM Subsystem: LIGHTING FIXTURES  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 10.00 L: 20.00  
 Persons per Team: 1 Task Duration: 0.6154 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE AND REINSTALL LOUVER	0.004100	BALLAST	1	50.0000
2.REMOVE AND REINSTALL 1 TUBE	0.071200			50.0000
3.REMOVE OLD/REINSTALL BALLAST	0.384000			
4.TEST FIXTURES	0.014100			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.473400	0.142020	0.615420
Material Cost \$	50.000000		50.000000
Equipment Hours			0.615420

Components In This Task: 1131410

Table 4 (Cont'd)

TASK DATA FORM

Task Code: 1131412

Component: MERCURY VAPOR FIXT. 175W. System: LIGHTING SYSTEM Subsystem: LIGHTING FIXTURES  
 Task Description: H/R REPLACE LAMP  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 10.00 L: 15.00  
 Persons per Team: 1 Task Duration: 0.0686 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.CHANGE LAMP IN FLUSH FIXTURE	0.052800	LAMP	1	27.0000 27.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.052800	0.015840	0.068640
Material Cost \$	27.000000		27.000000
Equipment Hours			0.068640

Components In This Task: 1131410

TASK DATA FORM

Task Code: 1131413

Component: MERCURY VAPOR FIXT. 175W. System: LIGHTING SYSTEM Subsystem: LIGHTING FIXTURES  
 Task Description: REPLACE REPLACE FIXTURE  
 Unit of Measure: COUNT Frequency of Occurrence: H: 10.00 A: 20.00 L: 40.00  
 Persons per Team: 1 Task Duration: 0.5816 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.TURN BRANCH CIRCUIT OFF AND ON	0.014100	FIXTURE	1	127.0000 127.0000
2.INSTALL OUTLET BOX COVER PLATE	0.012900			
3.CUT LEADS IN BOX AND TAPE ENDS	0.016600			
4.DISASSEMBLE/REMOVE FIXTURES	0.090700			
5.REMOVE AND UNPACK PARTS	0.030200			
6.INSTALL MOUNTING BRACKETS	0.064300			
7.ASSEMBLE AND HANG REFLECTOR	0.218600			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.447400	0.134220	0.581620
Material Cost \$	127.000000		127.000000
Equipment Hours			0.581620

Components In This Task: 1131410

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## LIST OF ACRONYMS

ACE	Assistant Chief of Engineers
AMS	Army Management System
APC	Account Processing Code
AR	Army Regulation
ARR	Annual Requirements Report
ASTM	American Society for Testing and Materials
BLAST	Building Loads Analysis and System Thermodynamics
BMAR	Backlog of Maintenance and Repair
CA	Commercial Activities
CACES	Computer-Assisted Cost Estimating System
CONUS	Continental United States
DA	Department of the Army
DEH	Directorate of Engineering and Housing
DOD	Department of Defense
EA	Economic Analysis
EPS	Engineered Performance Standards
HQ-IFS	Headquarters - Integrated Facilities System
HQDA	Headquarters Department of the Army
IFS	Integrated Facilities System
IJO	Individual Job Order
LCC	Life-Cycle Cost
LCCID	Life-Cycle Cost in Design
M&R	Maintenance and Repair
MACOM	Major Command

MCA	Military Construction, Army
MRPM	Maintenance Resource Prediction Model
OCE	Office of the Chief of Engineers
PAVER	Pavement Maintenance Management System
PC	Personal Computer
PM	Preventive Maintenance
R&D	Research and Development
RAM	Random Access Memory
RMF	Recurring Maintenance Factor
RPI	Real Property Inventory
RPLANS	Real Property Planning System
RPMS	Real Property Management System
SO	Service Order
STANFINS	Standard Army Financial System
TB	Technical Bulletin
URR	Unconstrained Requirements Report
USACE	U.S. Army Corps of Engineers
USACERL	U.S. Army Construction Engineering Research Laboratory
USAEHSC	U.S. Army Engineering and Housing Support Center

**APPENDIX A:**

**TASK DATA BASE INDEX**

Cases No :	Unit of Measure :	Description
1100000		INTERIOR ELECTRICAL
1110000		SERVICE & DISTRIBUTION
1112000		OVERHEAD SERVICE FEEDER
1113000		MAIN PROTECTION EQUIPMENT
1113100	5	SWITCHGEAR, MAIN FRAME, 1200 A.
1113200	1	FUSE
1114000		PRIMARY TRANSFORMER
1114100	1	TRANSFORMER, LIQUID FILLED ABOVE 600 V
1114200	1	TRANSFORMER, DRY, ABOVE 15,000 V
1115000		POWER PROTECTION EQUIPMENT
1115100	5	SWITCHGEAR, INDOOR, 0-600 V
1115200	5	SWITCHGEAR, INDOOR, ABOVE 600 V
1116000		SECONDARY TRANSFORMER
1116100	1	TRANSFORMER, LIQUID FILLED BELOW 600 V
1116200	1	TRANSFORMER, DRY BELOW 15,000 V
1117000		LIGHTNING PROTECTION
1117100	5	SWITCHGEAR, INDOOR, BELOW 600 V
1117200	5	SWITCHGEAR, INDOOR, ABOVE 600 V
1118000		POWER & LIGHTING DISTRIBUTION
1118100	4	CABLE, THERMOPLASTIC, 601-15,000 V
1118200	4	CABLE, THERMOSETTING, 601-15,000 V
1118300	4	CABLE, LEAD COVERED, 601-15,000 V
1118400	4	CABLE, FLEXIBLE METALIC < 600 VOLT
1118500	4	BRANCH WIRING, 0-600 V
1118600	4	BRANCH WIRING, OVER 600 V
1118700	3	RUSS DUCT
1118800	4	CONDUIT EMT
1119000		SPECIAL EQUIPMENT
1119100	1	METER, DARSONVAL GALVANOMETER
1119300	1	INVERTER
1119400	1	RECTIFIER, UNDER 600 V
1120000		POWER SYSTEM
1122000		SAFETY SWITCHES & BREAKERS
1122100	1	SAFETY SWITCH, ENCLOSED
1122300	1	CIRCUIT BREAKERS
1122310	1	CIRCUIT BREAKER, MC, 0-599 V
1122320	1	CIRCUIT BREAKER, MC, 600 V AND OVER
1122330	1	CIRCUIT BREAKER, FIXED, 0-599 V
1122340	1	CIRCUIT BREAKER, FIXED, 600V AND OVER
1122350	1	CIRCUIT BREAKER, M.C. > 600V 2P
1122360	1	CIRCUIT BREAKER, M.C. > 600V 3P
1122370	1	CIRCUIT BREAKER, FIXED < 599V 1P
1122380	1	CIRCUIT BREAKER, FIXED < 599V 2P
1122390	1	CIRCUIT BREAKER, FIXED < 599V 3P
11223A0	1	CIRCUIT BREAKER, FIXED > 600V 1P
11223B0	1	CIRCUIT BREAKER, FIXED > 600V 2P
11223C0	1	CIRCUIT BREAKER, FIXED > 600V 3P
1122400	1	SAFETY SWITCHES
1122410	1	SAFETY SWITCH FUSED 1P
1122420	1	SAFETY SWITCH FUSED 2P
1122430	1	SAFETY SWITCH FUSED 3P
1122440	1	LOW VOLTAGE CARTRIDGE
1122450	1	PLUG FUSE
1123000		MOTOR STARTER
1123600	1	MOTOR STARTER, 0-600 V
1123700	1	MOTOR STARTER, 601-15,000 V
1124000		CONTACTORS AND RELAYS
1127000		RECEPTACLES & PLUGS
1127100	1	WIRING DEVICE, SWITCH
1127200	1	RECEPTACLE AND PLUG
1127300	1	SWITCH, PULL CORD
1130000		LIGHTING SYSTEM
1131000		LIGHTING FIXTURES
1131100	1	INCANDESCENT LIGHTING FIXTURE
1131200	1	QUARTZ LIGHTING FIXTURE
1131300	1	FLUORESCENT LIGHTING FIXTURE
1131400	1	HID
1131410	1	HID, MERCURY VAPOR FIXTURE, 250-W
1131420	1	HID, METAL HALID FIXTURE, 250-W
1131500	1	EMERGENCY LIGHTING FIXTURE
1131600	1	SODIUM FIXTURE
1131610	1	H.P. 250 WATT
1131620	1	L.P. 200 WATT
1131700	1	EXIT LIGHT
1140000		GROUNDING SYSTEM
1141000		ELECTRICAL SERVICE GROUND
1142000		BUILDING STRUCTURE GROUND
1143000		LIGHTNING PROTECTION
1143100	4	LIGHTNING PROTECTION SYS. GENERAL
1143110	4	LIGHTNING PROTECTION SYS. ROO
1143500	1	LIGHTNING PROTECTION SYS. GROUNDING ROD
1143510	1	LIGHTNING PROTECTION SYS. GROUNDING ROD
1144000		COMPUTER SYSTEM GROUND
1145000		SPECIAL GROUND SYSTEM
1200000		SPECIAL INTERIOR ELECTRICAL SYSTEM
1210000		SOUND SYSTEM
1211000		TELEPHONE SYSTEM
1211100	1	4-PIN RECEPTACLE
1211200	4	TELEPHONE CABLE
1212000		INTERCOMMUNICATION SYSTEM
1213000		PUBLIC ADDRESS SYSTEM
1214000		RADIO COMMUNICATION SYSTEM
1215000		DOOR BELL
1220000		ALARM SYSTEM
1221000		FIRE ALARM SYSTEM
1221100	1	MANUAL PULL STATION
1221200	1	SMOKE DETECTOR
1221300	1	FIRE ALARM BELL
1221400	1	ANNUNCIATION PANEL
1221500	1	HEAT DETECTOR
1221600	1	FIRE ALARM CONT. PANEL
1222000		INTRUDER DETECTION SYSTEM
1223000		EQUIPMENT ALARM SYSTEM
1230000		TELEVISION SYSTEM



Cases No : Unit of Measure : Description

1232000 CLOSED CIRCUIT TV SYSTEM  
 1233000 TV CABLE OUTLET  
 1240000 CONTROL SYSTEM  
 1241000 ENERGY MANAGEMENT SYSTEM  
 1242000 RADIO CONTROL SYSTEM  
 1243000 LIGHT DIMMING PANEL  
 1250000 HOSPITAL SYSTEM  
 1251000 NURSE CALL  
 1252000 DOCTOR PAGING  
 1253000 DOCTOR REGISTER  
 1254000 GROUND DETECTION  
 1255000 NARCOTICS ALARM  
 1256000 OXYGEN ALARM  
 1260000 CLOCK & PROGRAM SYSTEM  
 1261000 CLOCK AND PROGRAM SYSTEM  
 1261100 1 TIME CONTROL CLOCK  
 1270000 ELECTRIC HEATING SYSTEM  
 1271000 BASEBOARD HEATERS  
 1272000 WALL & CEILING HEATERS  
 1272100 1 WALL MOUNTED & RECESSED WITH FAN  
 1272200 1 RADIANT SUSPENDED, COMMERCIAL  
 1272300 1 INFRARED SUSPENDED, COMMERCIAL  
 1273000 INDUSTRIAL HEATERS  
 1273100 1 STANDARD SUSPENDED HEATER  
 1273200 1 EXPLOSION PROOF INDUSTRIAL  
 1274000 DUCT HEATERS  
 1280000 POWER GENERATING SYSTEM  
 1281000 ENGINE GENERATOR SETS  
 1281100 1 GENERATOR, GASOLINE POWERED  
 1281200 1 GENERATOR, DIESEL  
 1281300 1 GENERATOR, VAPOR GAS POWERED  
 1281400 1 TURBINES  
 1281410 1 GENERATOR, STEAM TURBINE  
 1281420 1 GENERATOR, GAS TURBINE  
 1281500 1 TRANSFER SWITCH  
 1282000 UNINTERRUPTIBLE POWER SOURCE  
 1282100 1 STATIC CHARGER, BATTERY  
 1282200 1 MOTOR GENERATOR, BATTERY  
 1283000 EMERGENCY BATTERY SYSTEM  
 1283100 1 BATTERY, PRIMARY WET  
 1283200 1 BATTERY, PRIMARY DRY  
 1283300 1 BATTERY, SECONDARY WET  
 1283400 1 BATTERY, SECONDARY DRY

APPENDIX B:

GEOGRAPHICAL LOCATION ADJUSTMENT FACTORS

<u>State</u>	<u>Location</u>	<u>ACF Index</u>
Alabama	State Average	.86
	Birmingham	.96
	Mobile	.86
	Montgomery	.76
	Anniston Army Depot	.81
	Huntsville	.88
	Fort McClellan	.80
	Redstone Arsenal	.88
Alaska	Fort Rucker	.80
	State Average	2.25
	Anchorage	1.92
	Delta Junction	2.70
	Fairbanks	2.13
	Adak	3.88
	Aleutian Islands	3.86
	Anchorage NSGA	1.92
	Barrow	4.18
	Burnt Mtn.	6.86
	Clear	3.10
	Eielson AFB	2.13
	Elmendorf AFB	1.92
	Galena	3.73
	Fort Greely	2.70
Arizona	Fort Richardson	1.92
	Fort Wainwright	2.13
	State Average	1.02
	Flagstaff	1.02
	Phoenix	.99
	Tucson	1.05
	Fort Huachuca	1.22
	Yuma Proving Ground	1.31
Arkansas	Yuma	1.31
	State Average	.89
	Pinebluff	.93
	Little Rock	.83
	Fort Smith	.92
	Fort Chaffee	.92
California	Pine Bluff Arsenal	.93
	State Average	1.21
	Los Angeles	1.20
	San Diego	1.18
	San Francisco	1.25
	Beale	1.28
	Bridgeport NWTC	1.27
	Castle	1.13
	Centerville Beach	1.32
	Desert Area	1.18
Edwards AFB	1.30	

<u>State</u>	<u>Location</u>	<u>ACF Index</u>	
California (Cont'd)	El Centro	1.27	
	George AFB	1.31	
	Fort Hunter Liggett	1.29	
	Fort Irwin	1.20	
	Le Moore NAS	1.20	
	March AFB	1.18	
	Mather AFB	1.17	
	McClellan AFB	1.17	
	Monterey Area	1.23	
	Presidio of Monterey	1.23	
	Norton AFB	1.16	
	Oakland Army Base	1.33	
	Fort Ord	1.24	
	Port Huenema Area	1.20	
	Riverside	1.18	
	Sacramento	1.15	
	Sacramento Army Depot	1.15	
	Presidio of San Francisco	1.25	
	San Nicholas Island	2.59	
	Sharpe Army Depot	1.13	
	Sierra Army Depot	1.33	
	Stockton	1.15	
	Travis AFB	1.27	
	Vandenburg AFB	1.38	
	Colorado	State Average	.98
		Colorado Springs	.94
		Denver	1.04
		Pueblo	.96
		Fort Carson	1.01
		Fitzsimmons AMC	1.06
		Pueblo Army Depot	.96
		Peterson AFB	.94
		Rocky Mountain Arsenal	1.06
State Average		1.13	
Connecticut	Bridgeport	1.16	
	Hartford	1.10	
	New London	1.14	
Delaware	State Average	.99	
	Dover	1.04	
	Lewes	.98	
	Milford	.96	
	Lewes NF	1.04	
District of Columbia	Dover AFB	1.04	
	Washington	1.03	
	Fort McNair	1.03	
	Walter Reed AMC	1.03	
Florida	State Average	.89	
	Miami	.95	
	Panama City	.92	
	Tampa	.79	
	Cape Canaveral	.96	
	Cape Kennedy	.96	

<u>State</u>	<u>Location</u>	<u>ACF Index</u>	
Florida (Cont'd)	Gulf Coast	.85	
	Homestead AFB	.88	
	Homestead	.88	
	Jacksonville A. .	.85	
	Key West NAS	1.08	
	Orlando	.80	
	Pensacola Area	.85	
	McDill AFB	.77	
	Eglin AFB	.77	
	Tyndall AFB	.92	
	State Average	.80	
	Georgia	Albany	.82
		Atlanta	.87
		Macon	.70
Athens		.90	
Atlanta-Marietta		.93	
Fort Benning		.71	
Columbus		.71	
Fort Gillem		.87	
Fort Gordon		.94	
Kings Bay		.93	
Fort McPherson		.87	
Fort Stewart		.84	
Hawaii	State Average	1.28	
	Hawaii	1.29	
	Honolulu	1.27	
	Maui	1.29	
	Alimanu	1.27	
	Barbars Point NAS	1.34	
	Fort Debussy	1.27	
	EWA Beach Area	1.34	
	Helemano	1.34	
	Hickam Army Air Field	1.27	
	Kaneohe MCAS	1.34	
	Moanalua	1.27	
	Pearl City	1.27	
	Pearl Harbor	1.27	
	Pohakuloa	1.32	
	Schofield Barracks	1.27	
	Fort Shafter	1.27	
	Tripler AMC	1.27	
	Wheeler Army Air Field	1.34	
	Idaho	State Average	1.11
Boise		1.05	
Idaho Falls		1.08	
Mountain Home		1.19	
Mountain Home AFB		1.20	
Illinois	State Average	1.03	
	Belleville	.96	
	Chicago	1.09	
	Rock Island	1.03	
	Rock Island Arsenal	1.06	

<u>State</u>	<u>Location</u>	<u>ACF Index</u>
Illinois (Cont'd)	St. Louis Support Ctr	.96
	Savannah Army Depot	1.05
	Scott AFB	1.03
Indiana	Fort Sheridan	1.10
	State Average	.99
	Indianapolis	1.03
	Logansport	.99
	Madison	.94
	Fort Benjamin Harrison	1.07
	Crane	1.10
	Crane AAP	1.10
	Grissom AFB	1.06
	Indiana AAP	1.02
Iowa	Jefferson Proving Ground	.94
	State Average	1.02
	Burlington	1.04
	Cedar Rapids	.98
	Des Moines	1.05
Kansas	Iowa AAP	1.06
	State Average	.94
	Manhattan	.97
	Topeka	.96
	Wichita	.88
	Kansas AAP	.94
	Fort Leavenworth	.94
	Fort Riley	.97
Kentucky	Sunflower AAP	.97
	State Average	.96
	Bowling Green	.99
	Lexington	.96
	Louisville	.93
	Fort Campbell	.93
	Fort Knox	.99
Louisiana	Lexington/Bluegrass Army Depot	1.06
	Louisville NAS	.93
	State Average	.92
	Alexandria	.87
	New Orleans	.94
	Shreveport	.94
	Barksdale AFB	.94
	England AFB	.87
	Gulf Outport New Orleans	.94
	Louisiana AAP	.94
Maine	Fort Polk	.94
	State Average	.93
	Bangor	.85
	Caribou	.99
	Portland	.94
	Brunswick	.93
	Cutler	.98
Northern Area	1.17	
Winter Harbor	.98	

<u>State</u>	<u>Location</u>	<u>ACF Index</u>	
Maryland	State Average	.97	
	Baltimore	.95	
	Fredrick	.94	
	Lexington Park	1.01	
	Aberdeen Proving Ground	.94	
	Annapolis	1.03	
	Fort Detrick	.94	
	Harry Diamond Lab	1.00	
	Fort Meade	.95	
	Patuxent River Area	1.08	
	Fort Ritchie	.90	
	Massachusetts	State Average	1.10
		Boston	1.13
Fitchburg		1.08	
Springfield		1.08	
Army Mtls & Mech Research Ctr		1.13	
Fort Devens		1.15	
Natick Research & Development Ctr		1.13	
South Weymouth		1.13	
Michigan	State Average	1.06	
	Bay City	1.02	
	Detroit	1.14	
	Marquette	1.03	
	Detroit Arsenal	1.14	
	Northern Area	1.25	
	Republic (Elfcom)	1.10	
	Selfridge AFB	1.14	
Minnesota	State Average	1.08	
	Duluth	1.05	
	Minneapolis	1.09	
	St. Cloud	1.10	
	Twin Cities AAP	1.09	
Mississippi	State Average	.84	
	Biloxi	.87	
	Columbus	.81	
	Jackson	.84	
	Columbus AFB	.81	
	Gulfport Area	.87	
	Meridian	.92	
Missouri	State Average	.92	
	Kansas City	.92	
	St. Louis	.99	
	Rolla	.85	
	Lake City AAP	.93	
	Fort Leonard Wood	.91	
Montana	State Average	1.15	
	Billings	1.15	
	Butte	1.18	
	Great Falls	1.12	
Nebraska	Malmstrom AFB	1.12	
	State Average	1.03	
	Grand Island	1.00	

<u>State</u>	<u>Location</u>	<u>ACF Index</u>
Nebraska. (Cont'd)	Lincoln	1.05
	Omaha	1.05
	Offutt AFB	1.05
Nevada	State Average	1.18
	Hawthorne	1.26
	Las Vegas	1.13
	Reno	1.15
	Fallon	1.28
	Hawthorne AAP	1.26
	Nellis AFB	1.13
New Hampshire	State Average	1.09
	Concord	1.06
	Nashua	1.06
	Portsmouth	1.14
	Cold Regions Lab	1.17
New Jersey	State Average	1.08
	Newark	1.11
	Red Bank	1.08
	Trenton	1.06
	Bayonne	1.10
	Bayonne Mil Ocean Term	1.09
	Fort Dix	1.03
	Earle	1.10
	Lakehurst	1.05
	Fort Monmouth	1.09
	Picatinny Arsenal	1.20
	State Average	1.03
	Alamogordo	.99
New Mexico	Albuquerque	1.03
	Gallup	1.06
	Holloman AFB	1.05
	Kirtland AFB	1.03
	White Sands Missile Range	1.09
	Fort Wingate	1.06
	State Average	1.12
	Albany	1.07
	New York City	1.24
	Syracuse	1.05
	Brooklyn	1.24
New York	Fort Drum	1.18
	Fort Hamilton	1.24
	Seneca Army Depot	1.15
	U.S. Military Academy	1.17
	Watervliet Arsenal	1.07
	State Average	.76
	Fayetteville	.76
	Greensboro	.75
	Wilmington	.78
	Fort Bragg	.76
	North Carolina	Camp Lejeune Area
Cherry Point		.86
Goldsboro		.77

<u>State</u>	<u>Location</u>	<u>ACF Index</u>
North Carolina (Cont'd)	Pope AFB	.82
	Seymour AFB	.77
	Sunny Point Mil Ocean Term	.78
North Dakota	State Average	1.03
	Bismarck	1.02
	Grand Forks	.98
	Minot	1.10
	Grand Forks AFB	.98
	Stanley R. Hicklesen CPX	1.03
	Minot AFB	1.12
	State Average	1.00
Ohio	Columbus	1.03
	Dayton	.98
	Youngstown	.99
	Cleveland	1.14
	Wright-Patterson AFB	.98
	State Average	.93
Oklahoma	Lawton	.90
	McAlester	.91
	Oklahoma City	.98
	Altus AFB	.94
	Enid	1.01
	McAlester AAP	.91
	Fort Sill	.90
	State Average	1.05
Oregon	Pendleton	1.08
	Portland	1.07
	Salem	.99
	Charleston	1.11
	Coos Head	1.08
	Umatilla Army Depot	1.18
	State Average	1.00
	Harrisburg	.91
Pennsylvania	Philadelphia	1.05
	Pittsburgh	1.04
	Carlisle Barracks	.93
	New Cumberland Army Depot	.91
	Fort Indiantown Gap	1.07
	Letterkenny Army Depot	1.07
	Mechanicsburg Area	.91
	Tobyhanna Army Depot	1.14
	Warminster Area	1.04
	State Average	1.11
	Bristol	1.13
Rhode Island	Newport	1.11
	Providence	1.10
	Davisville	1.17
	State Average	.82
South Carolina	Charleston	.81
	Columbia	.82
	Myrtle Beach	.84
	Beaufort Area	.89
	State Average	.82



<u>State</u>	<u>Location</u>	<u>ACF Index</u>	
South Carolina (Cont'd)	Charleston AFB	.81	
	Fort Jackson	.82	
	Sumter	.80	
South Dakota	State Average	.95	
	Aberdeen	.95	
	Sioux Falls	.94	
	Rapid City	.96	
	Ellsworth AFB	.98	
Tennessee	State Average	.84	
	Chattanooga	.86	
	Kingsport	.72	
	Memphis	.95	
	Arnold AFB	.90	
	Milan AAP	.98	
	Holston AAP	.71	
Texas	State Average	.85	
	San Angelo	.76	
	San Antonio	.86	
	Fort Worth	.93	
	Fort Bliss	.96	
	Carswell AFB	.93	
	Chase Field - Beeville	.97	
	Corpus Christi Army Depot	.92	
	Corpus Christi	.92	
	Dallas	.93	
	Dyess AFB	.94	
	Fort Hood	.89	
	Kingsville	.99	
	Red River Army Depot	.78	
	Fort Sam Houston	.86	
	William Beaumont AMC	.96	
	Bergstrom AFB	.95	
	Brooks AFB	.86	
	Randolph AFB	.86	
	Kelly AFB	.86	
	Lackland AFB	.86	
	Utah	State Average	1.03
		Ogden	1.05
Salt Lake City		1.00	
Tooele		1.06	
Dugway Proving Ground		1.03	
Hill AFB		1.07	
Tooele Army Depot		1.05	
State Average		.99	
Vermont	Burlington	1.00	
	Montpelier	1.00	
	Rutland	.96	
Virginia	State Average	.95	
	Norfolk	.95	
	Radford	.95	
	Richmond	.94	
	Arlington	1.04	

<u>State</u>	<u>Location</u>	<u>AGF Index</u>	
Virginia (Cont'd)	Arlington Hall Station	1.04	
	Arlington National Cemetery	1.04	
	Fort Belvoir	1.04	
	Cameron Station	1.04	
	Dahlgren	1.10	
	Fort Eustis	.96	
	Humphreys Engineer Center	1.03	
	Fort A. P. Hill	.92	
	Fort Lee	.93	
	Fort Monroe	.94	
	Fort Myer	1.03	
	Norfolk-Newport News Area	.95	
	Fort Pickett	.98	
	Quantico	1.03	
	Nadford AAP	1.02	
	Port Story	.95	
	Vint Hill Farms Station	1.08	
	Washington	State Average	1.09
		Spokane	1.08
		Tacoma	1.07
Yakima		1.11	
Fairchild AFB		1.13	
Jim Creek		1.34	
Fort Lewis		1.07	
Pacific Beach		1.27	
Puget Sound Area		1.15	
Seattle Area		1.12	
Widbey Island		1.12	
Yakima Firing Center		1.18	
West Virginia		State Average	.95
	Bluefield	.92	
	Clarksburg	.95	
	Charleston	.99	
	Sugar Grove	1.15	
Wisconsin	State Average	1.06	
	LaCrosse	1.04	
	Madison	1.02	
	Milwaukee	1.13	
	Badger AAP	1.06	
	Clam Lake	1.20	
	Fort McCoy	1.11	
Wyoming	State Average	1.08	
	Casper	1.07	
	Cheyenne	1.10	
	Laramie	1.08	
	F. E. Warren AFB	1.10	

**APPENDIX C:**

**TASK DATA BASE DETAILED RESOURCE TABLES**

TASK DATA FORM

Task Code: 1118201

Component: CABLE THRMSETT, <15,000V. System: SERVICE AND DIST. Subsystem: POWER & LIGHTING DIST.  
 Task Description: REPLACE REPLACE CABLE  
 Unit of Measure: 1000 LINEAR FEET Frequency of Occurrence: H: 50.00 A: 100.00 L: 200.00  
 Persons per Team: 2 Task Duration: 3.6813 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.SHUT OFF POWER,LATER TURN ON	0.014100	WIRE(#12)	1000 FT	0.0800
2.REMOVE COVER PLATE	0.046600	STAPLES	200	0.0200
3.REMOVE SWITCH OR TERMINAL	0.008200	BOX	10	1.8000
4.PULL WIRE SPLICES OUT	0.006000			102.0000
5.REMOVE TAPE FROM SPLICES IN BOX	0.024900			
6.CUT CONDUCTOR LEADS IN BOX	0.019600			
7.CUT CABLE ADJACENT TO BOX	0.009200			
8.REMOVE CABLE END FORM CONNECTOR	0.031700			
9.REMOVE CABLES AND STAPLES	1.613200			
10.REMOVE EXISTING TERMINAL BOXES	0.019800			
11.PUSH RETAPED LEADS BACK IN BOX	0.006000			
12.INSTALL COVER PLATE TO BOX	0.012900			
13.LADDER TIME,ADDITIONAL,PER BOX	1.414000			
14.INSTALL BOXES TO WOOD SURFACE	0.137500			
15.INSTALL FOOTAGE OF CABLE	1.259500			
16.REMOVE EXISTING BOX COVER PLATE	0.012900			
17.REMOVE KNOCKOUT PLUGS IN BOXES	0.122200			
18.FASTEN CABLE TO BOXES	0.897000			
19.MOVE EXISTING WIRE SPLICE ASIDE	0.008300			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	5.663600	1.699080	7.362680
Material Cost \$	102.000000		102.000000
Equipment Hours			3.681340

Components In This Task: 1118200

TASK DATA FORM

Task Code: 1118301

Component: CABLE SHIELDED,<15,000V. System: SERVICE AND DIST. Subsystem: POWER & LIGHTING DIST.  
 Task Description: REPLACE REPLACE CABLE  
 Unit of Measure: 1000 LINEAR FEET Frequency of Occurrence: H: 50.00 A: 100.00 L: 200.00  
 Persons per Team: 2 Task Duration: 3.6814 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.SHUT OFF POWER,LATER TURN ON	0.014100	WIRE(#6)	1000 FT	0.3000
2.REMOVE COVER PLATE	0.046600	STAPLES	200	0.0300
3.REMOVE SWITCH OR TERMINAL	0.008200	BOX	10	1.8000
4.PULL WIRE SPLICES OUT	0.006000			324.0000
5.REMOVE TAPE FROM SPLICES IN BOX	0.024900			
6.CUT CONDUCTOR LEADS IN BOX	0.019600			
7.CUT CABLE ADJACENT TO BOX	0.009300			
8.REMOVE CABLE END FROM CONNECTOR	0.031700			
9.REMOVE CABLES AND STAPLES	1.613200			
10.REMOVE EXISTING TERMINAL BOXES	0.019800			
11.PUSH RETAPED LEADS BACK IN BOX	0.006000			
12.INSTALL COVER PLATE TO BOX	0.012900			
13.LADDER TIME,ADDITIONAL,PER BOX	1.414000			
14.INSTALL BOXES TO WOOD SURFACE	0.137500			
15.INSTALL FOOTAGE OF CABLE	1.259500			
16.REMOVE EXISTING BOX COVER PLATE	0.012900			
17.REMOVE KNOCKOUT PLUGS IN BOXES	0.122200			
18.FASTEN CABLE TO BOXES	0.897000			
19.MOVE EXISTING WIRE SPLICE ASIDE	0.008300			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	5.663700	1.699110	7.362810
Material Cost \$	324.000000		324.000000
Equipment Hours			3.681400

Components In This Task: 1118300

TASK DATA FORM

Task Code: 1118401

Component: CABLE, FLEX. METALIC <600V. System: SERVICE AND DIST. Subsystem: POWER & LIGHTING DIST.  
 Task Description: REPLACE REPLACE CABLE  
 Unit of Measure: 1000 LINEAR FEET Frequency of Occurrence: H: 30.00 A: 60.00 L: 120.00  
 Persons per Team: 2 Task Duration: 28.1060 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE AND REINSTALL BOX COVER	2.580000	WIRE(#12)	1000 FT	0.5400
2.REMOVE BOX	3.760000	STAPLES	200	0.0200
3.CUT/PULL GIVEN FOOTAGE #8 OUT	0.750000	BOX	10	1.8000
4.REMOVE CONDUIT FROM CONNECTOR	8.820000			562.0000
5.REMOVE CLIPS OR CLAMPS	3.960000			
6.REMOVE AND REINSTALL BOX COVER	2.580000			
7.INSTALL BOX TO WOOD SURFACE	3.790000			
8.REMOVE KNOCKOUT PLUGS	1.220000			
9.INSTALL CONNECTORS TO BOXES	3.240000			
10.MEASURE, MARK, CUT, DEBURR CONDUIT	4.710000			
11.INSTALL CONDUIT TO CONNECTORS	5.730000			
12.INSTALL ONE HOLE CLAMP	2.100000			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	43.240000	12.972000	56.212000
Material Cost \$	562.000000		562.000000
Equipment Hours			28.106000

Components In This Task: 1118400

TASK DATA FORM

Task Code: 1118501

Component: BRANCH WIRING, < 600V. System: SERVICE AND DIST. Subsystem: POWER & LIGHTING DIST.  
 Task Description: REPLACE REPLACE BRANCH WIRING  
 Unit of Measure: 1000 LINEAR FEET Frequency of Occurrence: H: 25.00 A: 50.00 L: 100.00  
 Persons per Team: 2 Task Duration: 5.1765 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.SHUT OFF POWER, LATER TURN ON	0.014100	WIRE(#12)	1000 FT	0.1200
2.REMOVE COVER PLATE	0.046600	STAPLES	200	0.0200
3.REMOVE SWITCH OR TERMINAL	0.008200	BOX	10	1.8000
4.PULL WIRE SPLICES OUT	0.006000			142.0000
5.REMOVE TAPE FROM SPLICES IN BOX	0.024900			
6.CUT CONDUCTOR LEADS IN BOX	0.019600			
7.CUT CABLE ADJACENT TO BOX	0.009300			
8.REMOVE CABLE END FROM CONNECTOR	0:031700			
9.REMOVE CABLES AND STAPLES	1.613200			
10.REMOVE EXISTING TERMINAL BOXES	0.019800			
11.PUSH RETAPED LEADS BACK IN BOX	0.006000			
12.INSTALL COVER PLATE TO BOX	0.012900			
13.LADDER TIME, ADDITIONAL, PER BOX	1.414000			
14.MAKE BOX CUT-OUT HOLES	0.648700			
15.REMOVE EXISTING BOX COVER PLATE	0.012900			
16.REMOVE KNOCKOUT PLUGS IN BOXES	0.122200			
17.INSTALL FOOTAGE OF CABLE	2.594000			
18.FASTEN CABLE TO NEW BOXES	0.897000			
19.MOVE EXISTING WIRE SPLICES	0.083000			
20.INSTALL BOXES IN CUT-OUT HOLES	0.379800			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	7.963900	2.389170	10.353070
Material Cost \$	142.000000		142.000000
Equipment Hours			5.176535

Components In This Task: 1118500

TASK DATA FORM

Task Code: 1118601

Component: BRANCH WIRING, > 600V. System: SERVICE AND DIST. Subsystem: POWER & LIGHTING DIST.  
 Task Description: REPLACE REPLACE BRANCH WIRING  
 Unit of Measure: 1000 LINEAR FEET Frequency of Occurrence: H: 60.00 A: 130.00 L: 250.00  
 Persons per Team: 2 Task Duration: 4.3430 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.CUT 7PULL WIRES #8 OR LESS OUT	0.710400	WIRE(#12)	1000 FT	0.0300
2.PULL #8 OR LESS WIRES THROUGH	3.446900	BOX	10	1.8000
3.CUT, FORM AND ALIGN 4 WIRES	0.318400			0000
4.SPLICE,SOLDER,INSULATE 2 WIRES	2.205900			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	6.681600	2.004480	8.686080
Material Cost \$	48.000000		48.000000
Equipment Hours			4.343040

Components In This Task: 1118600

TASK DATA FORM

Task Code: 1118701

Component: BUSS DUCT System: SERVICE AND DIST. Subsystem: POWER & LIGHTING DIST.  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: LINEAR FEET Frequency of Occurrence: H: 3.00 A: 5.00 L: 15.00  
 Persons per Team: 2 Task Duration: 0.0065 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.TIGHTEN CONNECTIONS	0.010000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.010000	0.003000	0.013000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.006500

Components In This Task: 1118700

TASK DATA FORM

Task Code: 1118702

Component: BUSS DUCT System: SERVICE AND DIST. Subsystem: POWER & LIGHTING DIST.  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: LINEAR FEET Frequency of Occurrence: H: 1.00 A: 1.00 L: 1.00  
 Persons per Team: 1 Task Duration: 0.0026 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.INSPECT,CLEAN,DISCONNECTS,CHECK	0.002000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.002000	0.000600	0.002600
Material Cost \$	0.000000		0.000000
Equipment Hours			0.002600

Components In This Task: 1118700

TASK DATA FORM

Task Code: 1118703

Component: BUSS DUCT System: SERVICE AND DIST. Subsystem: POWER & LIGHTING DIST.  
 Task Description: REPLACE REPLACE BUSS DUCT  
 Unit of Measure: LINEAR FEET Frequency of Occurrence: H: 10.00 A: 20.00 L: 60.00  
 Persons per Team: 2 Task Duration: 0.1521 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/REINSTALL SUPPLY BOX	0.041200	BUSS DUCT	1 FT	32.5000
2.CUT WIRES AND TAPE ENDS	0.030600	HANGERS	.5	4.5000
3.CUT,PULL,COIL #8 OR SMALLER OUT	0.001600			34.7500
4.REMOVE CONNECTORS	0.004900			
5.REMOVE LENGTHS OF WIREWAY/BOX	0.001900			
6.REMOVE LENGTHS OF WIREWAY/SEC.	0.001900			
7.REMOVE BUSHINGS	0.000400			
8.REMOVE ELBOW COVERS	0.001300			
9.REMOVE ELBOW BASE PLATES	0.001100			
10.REMOVE JUNCTION,SWITCH,UTILITY	0.003700			
11.LADDER TIME CONNECTOR/BOX	0.001400			
12.LADDER TIME CONNECTOR/BOX/SECT	0.001400			
13.REMOVE/REINSTALL SUPPLY BOX	0.042200			
14.REMOVE KNOCKOUT PLUGS OLD/NEW	0.018000			
15.INSTALL CONNECTORS TO BOXES	0.008300			
16.MOUNT JUNCTION,SWITCH,UTILITY	0.003700			
17.CUT/DEBURR LENGTH OF WIREWAY	0.004700			
18.INSTALL ELBOW BASE PLATE	0.002100			
19.INSTALL ALL SECTIONS OF WIREWAY	0.060600			
20.INSTALL 2 BUSHINGS FOR EACH BOX	0.000400			
21.INSTALL BOX COVER PLATES	0.001300			
22.INSTALL ELBOW COVER FOR ALL BOX	0.001300			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.234000	0.070200	0.304200
Material Cost \$	34.750000		34.750000
Equipment Hours			0.152100

Components In This Task: 1118700

TASK DATA FORM

Task Code: 1118801

Component: CONDUIT EMT System: SERVICE AND DIST. Subsystem: POWER & LIGHTING DIST.  
 Task Description: REPLACE REPLACE EMT CONDUIT  
 Unit of Measure: 1000 LINEAR FEET Frequency of Occurrence: H: 150.00 A: 200.00 L: 250.00  
 Persons per Team: 2 Task Duration: 14.4913 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs
1.REM.7REINSTALL SUPPLY BOX COVER	0.025800
2.CUT WIRES AND TAPE ENDS	0.025400
3.CUT,PULL & COIL WIRES	1.347200
4.REMOVE 2-HOLE STRAPS FROM WOOD	4.356000
5.REMOVE EMT FROM BOX ENDS	0.822400
6.REMOVE COUPLINGS OR CONNECTORS	2.741000
7.REMOVE JUNCTION,OUTLET/SH.BOXES	0.376000
8.LADDER TIME PER BOX FOR EA.BOX	1.751300
9.REMOVE EXISTING BOX COVER PLATE	0.012900
10.MOVE EXISTING SPLICED WIRES	0.008300
11.REMOVE KNOCKOUT IN EXISTING BOX	0.007400
12.INSTALL NEW BOXES TO WOOD SURF.	0.379800
13.REMOVE KNOCKOUTS IN NEW BOXES	0.122200
14.INSTALL LENGTH OF EMT & CONNECT	0.024900
15.MAKE OFFSET IN EMT FOR EA.W.BOX	0.335600
16.MEASURE,MARK,CUT & REAM LENGTH	1.404400
17.INSTALL CONNECTOR TO NEW BOXES	0.162000
18.INSTALL 10-FT.LENGTHS OF EMT	2.869000
19.INSTALL COUPLINGS TO EMT	1.782000
20.INSTALL LENGTH OF EMT TO 2 CON.	0.573800
21.INSTALL EMT TO WOOD SURFACE	3.025000
22.INSTALL COVER PLATES ON NEW BOX	0.141900

Description	Quantity	Unit Cost
CONDUIT (1")	1000 FT	0.3400
HANGERS	100	8.5000
BOX	10	1.8000
CONN	10	0.2500
		<u>1210.5000</u>

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	22.294300	6.688290	28.982590
Material Cost \$	1210.500000		1210.500000
Equipment Hours			14.491295

Components In This Task: 1118800

TASK DATA FORM

Task Code: 1119101

Component: METERS,DARS., GALVANOMETER System: SERVICE AND DIST. Subsystem: SPECIAL SYSTEMS  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 10.00 L: 15.00  
 Persons per Team: 1 Task Duration: 4.9998 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs
1.REPAIR METER	3.846000

Description	Quantity	Unit Cost
MOVEMENT	1	550.0000
		<u>550.0000</u>

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.846000	1.153800	4.999800
Material Cost \$	550.000000		550.000000
Equipment Hours			4.999800

Components In This Task: 1119100



TASK DATA FORM

Task Code: 1119102

Component: METERS, DARS, GALVANOMETER System: SERVICE AND DIST. Subsystem: SPECIAL SYSTEMS  
 Task Description: REPLACE REPLACE METER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 15.00 A: 20.00 L: 25.00  
 Persons per Team: 1 Task Duration: 0.9750 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE METER	0.750000	METER	1	1401.0000 1401.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.750000	0.225000	0.975000
Material Cost \$	1401.000000		1401.000000
Equipment Hours			0.975000

Components In This Task: 1119100

TASK DATA FORM

Task Code: 1119301

Component: INVERTER System: SERVICE AND DIST. Subsystem: SPECIAL SYSTEMS  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.50 A: 1.00 L: 2.00  
 Persons per Team: 2 Task Duration: 2.4700 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPAIR INVERTER COMPONENT	3.800000	COMPONENT	1	3.0000 3.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.800000	1.140000	4.940000
Material Cost \$	3.000000		3.000000
Equipment Hours			2.470000

Components In This Task: 1119300

TASK DATA FORM

Task Code: 1119302

Component: INVERTER System: SERVICE AND DIST. Subsystem: SPECIAL SYSTEMS  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.25 A: 0.25 L: 0.25  
 Persons per Team: 1 Task Duration: 1.3000 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.CHECK CONNECT.CONTRLS & RELAYS	1.000000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.000000	0.300000	1.300000
Material Cost \$	0.000000		0.000000
Equipment Hours			1.300000

Components In This Task: 1119300

TASK DATA FORM

Task Code: 1119303

Component: INVERTER System: SERVICE AND DIST. Subsystem: SPECIAL SYSTEMS  
 Task Description: REPLACE REPLACE INVERTER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 10.00 A: 20.00 L: 40.00  
 Persons per Team: 2 Task Duration: 1.0498 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE INVERTER	1.615000	INVERTER	1	1615.0000 1615.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.615000	0.484500	2.099500
Material Cost \$	1615.000000		1615.000000
Equipment Hours			1.049750

Components In This Task: 1119300

TASK DATA FORM

Task Code: 1119401

Component: RECTIFIER, < 600V. System: SERVICE AND DIST. Subsystem: SPECIAL SYSTEMS  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 1.00 A: 2.00 L: 4.00  
 Persons per Team: 1 Task Duration: 3.1200 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR RECTIFIER	2.400000	COMPONENT	1	161.0000 161.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.400000	0.720000	3.120000
Material Cost \$	161.000000		161.000000
Equipment Hours			3.120000

Components In This Task: 1119400

TASK DATA FORM

Task Code: 1119402

Component: RECTIFIER, < 600V. System: SERVICE AND DIST. Subsystem: SPECIAL SYSTEMS  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.33 A: 0.33 L: 0.33  
 Persons per Team: 1 Task Duration: 1.6900 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.CHECK CONNECT.CONTRL & RELAYS	1.300000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.300000	0.390000	1.690000
Material Cost \$	0.000000		0.000000
Equipment Hours			1.690000

Components In This Task: 1119400

TASK DATA FORM

Task Code: 1119401

Component: RECTIFIER, < 600V. System: SERVICE AND DIST. Subsystem: SPECIAL SYSTEMS  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 1.00 A: 2.00 L: 4.00  
 Persons per Team: 1 Task Duration: 3.1200 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR RECTIFIER	2.400000	COMPONENT	1	161.0000
				161.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.400000	0.720000	3.120000
Material Cost \$	161.000000		161.000000
Equipment Hours			3.120000

Components In This Task: 1119400

TASK DATA FORM

Task Code: 1119402

Component: RECTIFIER, < 600V. System: SERVICE AND DIST. Subsystem: SPECIAL SYSTEMS  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.33 A: 0.33 L: 0.33  
 Persons per Team: 1 Task Duration: 1.6900 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.CHECK CONNECT.CONTRL & RELAYS	1.300000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.300000	0.390000	1.690000
Material Cost \$	0.000000		0.000000
Equipment Hours			1.690000

Components In This Task: 1119400

TASK DATA FORM

Task Code: 1122102

Component: SAFETY SWITCH, ENCLOSED System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: PH PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 1.00 A: 1.00 L: 1.00  
 Persons per Team: 1 Task Duration: 0.7930 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.INSPECT & CLEAN SAFETY SWITCH	0.610000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.610000	0.183000	0.793000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.793000

Components In This Task: 1122100

TASK DATA FORM

Task Code: 1122103

Component: SAFETY SWITCH, ENCLOSED System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: REPLACE REPLACE SAFETY SWITCH  
 Unit of Measure: COUNT Frequency of Occurrence: H: 12.00 A: 25.00 L: 50.00  
 Persons per Team: 2 Task Duration: 0.2827 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.DISCONNECT CONDUCT FROM YERMIN.	0.028800	SAFETY SW.	1	38.9700
2.LOOSEN LOCKNUTS ON CONDUITS	0.017400			38.9700
3.REMOVE LOCKNUT-CONDUIT ENDS	0.021800			
4.STRAIGHTEN CIRCUIT WIRES	0.033300			
5.REMOVE 1 HOLE CLAMP OR CLIP	0.021800			
6.REMOVE SAFETY SWITCH INTACT	0.040500			
7.MOUNT SAFETY SWITCH ON WOOD	0.134900			
8.CUT, FORM & ALIGN CIRCUIT WIRES	0.111600			
9.INSTALL PLUG OR CARTRIDGE FUSES	0.010700			
10.CHECK OPERATION OF SWITCH	0.014100			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.434900	0.130470	0.565370
Material Cost \$	38.970000		38.970000
Equipment Hours			0.282685

Components In This Task: 1122100

TASK DATA FORM

Task Code: 1122311

Component: CIR. BKR. M.C.< 599V 1P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 10.00 A: 20.00 L: 40.00  
 Persons per Team: 1 Task Duration: 0.8970 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources	
Subtask Description	Labor Hrs	Description	Unit Cost
T.TIGHTEN CONNECTIONS	0.690000		0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.690000	0.207000	0.897000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.897000

Components In This Task: 1122310 1122320 1122330

TASK DATA FORM

Task Code: 1122312

Component: CIR. BKR. M.C.< 599V 1P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.50 A: 0.50 L: 0.50  
 Persons per Team: 1 Task Duration: 0.4030 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources	
Subtask Description	Labor Hrs	Description	Unit Cost
T.INSPECT, TIGHTEN WIRING	0.310000		0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.310000	0.093000	0.403000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.403000

Components In This Task: 1122310 1122320 1122330

TASK DATA FORM

Task Code: 1122313

Component: CIR. BKR. M.C. < 599V 1P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: REPLACE REPLACE CIRCUIT BREAKER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 125.00 A: 250.00 L: 400.00  
 Persons per Team: 1 Task Duration: 0.7505 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE COVER PLATE	0.035400	BREAKER	1	200.0000
2.DISCONNECT CONDUCTORS FROM TERM	0.028800			200.0000
3.REMOVE BREAKER UNIT FROM CASING	0.049000			
4.LOOSEN LOCKNUTS ON CONDUIT	0.017400			
5.REMOVE LOCKNUTS FROM CON.CASING	0.021800			
6.STRAIGHTEN CIRCUIT WIRES	0.033300			
7.REMOVE 1 HOLE CLAIM OR CLIP	0.021800			
8.REMOVE CASING FROM WOOD SURF.	0.040500			
9.MOUNT CIRCUIT BREAKER	0.134900			
10.REMOVE BREAKER UNIT FROM CARTON	0.015400			
11.INSTALL BREAKER UNIT TO CASING	0.048900			
12.CUT,FORM,ALIGN CONNECT WIRES	0.116000			
13.CHECK OPERATION OF BREAKER	0.014100			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.577300	0.173190	0.750490
Material Cost \$	200.000000		200.000000
Equipment Hours			0.750490

Components In This Task: 1122310 1122320 1122330

TASK DATA FORM

Task Code: 1122321

Component: CIR. BKR. M.C. < 599V 2P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 10.00 A: 20.00 L: 40.00  
 Persons per Team: 1 Task Duration: 0.8970 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.TIGHTEN CONNECTIONS	0.690000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.690000	0.207000	0.897000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.897000

Components In This Task: 1122310 1122320

TASK DATA FORM

Task Code: 1112001

Component: OVERHEAD SERVICE, SPLICE System: SERVICE AND DIST. Subsystem: OVERHEAD SERVICE FEEDER  
 Task Description: M/R REPAIR CABLE SPLICE  
 Unit of Measure: 1000 LINEAR FEET Frequency of Occurrence: H: 6.00 A: 12.00 L: 36.00  
 Persons per Team: 1 Task Duration: 7.5750 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor-Hrs	Description	Quantity	Unit Cost
1.SPLICE CABLE,POLYTHYLENE JACKET	5.826900	TAPE	10 FT	0.1000 1.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	5.826900	1.748070	7.574970
Material Cost \$	1.000000		1.000000
Equipment Hours			7.574970

Components In This Task: 1112000

TASK DATA FORM

Task Code: 1112002

Component: OVERHEAD SERVICE, SPLICE System: SERVICE AND DIST. Subsystem: OVERHEAD SERVICE FEEDER  
 Task Description: PH CABLE INSPECTION  
 Unit of Measure: 1000 LINEAR FEET Frequency of Occurrence: H: 5.00 A: 5.00 L: 5.00  
 Persons per Team: 1 Task Duration: 0.6500 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.CHECK CABLES FOR DAMAGE	0.500000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.650000

Components In This Task: 1112000



TASK DATA FORM

Task Code: 1112003

Component: OVERHEAD SERVICE, SPLICE System: SERVICE AND DIST. Subsystem: OVERHEAD SERVICE FEEDER  
 Task Description: REPLACE REPLACE SERVICE CABLE  
 Unit of Measure: 1000 LINEAR FEET Frequency of Occurrence: H: 15.00 A: 30.00 L: 90.00  
 Persons per Team: 2 Task Duration: 10.9579 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE CLIMBING GEAR, CLIMB UP/D	0.375500
2.CLIMB UP/DOWN THRU.OBSTRUC.AREA	0.013700
3.CHANGE TO RUBBER GLOVES/SLEEVES	0.044100
4.INSTALL/REMOVE 6 RUBBER HOSE	0.147100
5.REMOVE 3 CONDUCTORS FROM TERMI.	0.730900
6.REMOVE TIE WIRE FROM INSULATORS	0.110400
7.SET REEL JACKS & POSITION REEL	0.374300
8.REEL IN CONDUCTOR MANUALLY	0.532800
9.LOAD/UNLOAD HEAVY REELS OF COND	1.178000
10.MATERIAL HANDLING (EMPTY REELS)	0.069100
11.LOAD/UNLOAD PARTIAL REEL	4.559400
12.PULL OUT CONDUCTOR & REEVE	0.916400
13.PULL OUT 3 CONDUCTORS MANUALLY	0.532800
14.RAISE CONDUCTORS OVER X-ARM	2.720600
15.INSTALL 3 CONDUCTORS AT TERMN.	0.730900
16.INSTALL CONDUCTORS TO INSULAT.	0.481300
17.TAKE UP SLACK IN 3 CONDUCTORS	0.566500
18.INSTALL/REMOVE SAG GAUGE	0.519500
19.INSTALL 3 CONDUCTORS TO INSULA.	1.431400
20.MAKE UP & INSTALL 3 CONNT.JUMP.	0.755900
21.RAISE 2 BUNDLES MATERIAL	0.033200
22.MATERIAL HANDLING	0.034500

Material Resources

Description	Quantity	Unit Cost
CABLE	3000 FT	0.1380
		414.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	16.858300	5.057490	21.915790
Material Cost \$	414.000000		414.000000
Equipment Hours			10.957895

Components In This Task: 1112000

TASK DATA FORM

Task Code: 1113101

Component: SWITCHGEAR, MAINFR., 1200a. System: SERVICE AND DIST. Subsystem: MAIN PROTECTION EQUIP.  
 Task Description: M/R REPAIR SWITCHGEAR  
 Unit of Measure: PER CIRCUIT Frequency of Occurrence: H: 3.00 A: 5.00 L: 10.00  
 Persons per Team: 1 Task Duration: 6.7002 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE RELAY	5.154000

Material Resources

Description	Quantity	Unit Cost
RELAY	1	607.0000
		607.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	5.154000	1.546200	6.700200
Material Cost \$	607.000000		607.000000
Equipment Hours			6.700200

Components In This Task: 1113100

TASK DATA FORM

Task Code: 1113102

Component: SWITCHGEAR, MAINFR., 1200a. System: SERVICE AND DIST. Subsystem: MAIN PROTECTION EQUIP.  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: PER CIRCUIT Frequency of Occurrence: H: 0.50 A: 1.00 L: 2.00  
 Persons per Team: 1 Task Duration: 0.7800 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.CHECK & RETIGHTEN CONNECTIONS	0.600000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.600000	0.180000	0.780000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.780000

Components In This Task: 1113100

TASK DATA FORM

Task Code: 1113103

Component: SWITCHGEAR, MAINFR., 1200a. System: SERVICE AND DIST. Subsystem: MAIN PROTECTION EQUIP.  
 Task Description: REPLACE REPLACE SWITCHGEAR 1200 AMP  
 Unit of Measure: PER CIRCUIT Frequency of Occurrence: H: 10.00 A: 20.00 L: 40.00  
 Persons per Team: 3 Task Duration: 0.6338 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE COVER (SIX SCREWS)	0.035400	SWITCHGEAR	1	1243.5000
2.DISCONNECT LOAD CONDUCTORS	0.014500			1243.5000
3.REMOVE LINE CONDUCTS.FROM TERM.	0.048000			
4.REMOVE LOCK NUTS FROM CONDU.END	0.008900			
5.REMOVE BUSHING FROM CONDUIT END	0.010900			
6.LOOSEN NUTS ON COND.AT CASING	0.006700			
7.LOOSEN NUTS ON COND. AT CASING	0.006700			
8.STRAIGHTEN WIRES (LINE SIDE)	0.024100			
9.STRAIGHTEN WIRES (LOAD SIDE)	0.085000			
10.REMOVE 40 LB.OR HEAVIER BOARD	0.040500			
11.MOUNT PANEL BOARD ON WOOD SURF.	0.930300			
12.CUT,SEPARATE FORM & ALIGN LEADS	0.085100			
13.INSTALL BOLT TYPE CONNECTORS	0.089900			
14.CUT,SEPARATE, FORM, ALIGN WIRES	0.058000			
15.INSTALL PLUG/CARTRIDGE TY.FUSES	0.004600			
16.LOCATE & TEST CIRCUIT	0.014100			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.462700	0.438810	1.901510
Material Cost \$	1243.500000		1243.500000
Equipment Hours			0.633837

Components In This Task: 1113100

TASK DATA FORM

Task Code: 1113201

Component: FUSES System: SERVICE AND DIST. Subsystem: MAIN PROTECTION EQUIP.  
 Task Description: REPLACE REPLACE FUSE  
 Unit of Measure: COUNT Frequency of Occurrence: H: 25.00 A: 50.00 L: 100.00  
 Persons per Team: 1 Task Duration: 0.4030 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE FUSE.	0.310000	FUSE	1	250.0000
				250.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.310000	0.093000	0.403000
Material Cost \$	250.000000		250.000000
Equipment Hours			0.403000

Components In This Task: 1113200

TASK DATA FORM

Task Code: 1114101

Component: TRANS., LIQUID FILLED >600V System: SERVICE AND DIST. Subsystem: PRIMARY TRANSFORMERS  
 Task Description: H/R REPAIR TRANSFORMER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 10.00 L: 20.00  
 Persons per Team: 1 Task Duration: 3.9000 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE PRESS. RELAY	3.000000	PRESS RELAY	1	1785.0000
				1785.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	3.000000	0.900000	3.900000
Material Cost \$	1785.000000		1785.000000
Equipment Hours			3.900000

Components In This Task: 1114100

TASK DATA FORM

Task Code: 1114102

Component: TRANS., LIQUID FILLED >600V System: SERVICE AND DIST. Subsystem: PRIMARY TRANSFORMERS  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION.  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.50 A: 0.50 L: 0.50  
 Persons per Team: 1 Task Duration: 0.3845 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.TEST LAP ENERGIZED TRANSFORME	0.295800			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.295800	0.088740	0.384540
Material Cost \$	0.000000		0.000000
Equipment Hours			0.384540

Components In This Task: 1114100

TASK DATA FORM

Task Code: 1114103

Component: TRANS., LIQUID FILLED >600V System: SERVICE AND DIST. Subsystem: PRIMARY TRANSFORMERS  
 Task Description: REPLACE REPLACE TRANSFORMER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 15.00 A: 30.00 L: 60.00  
 Persons per Team: 3 Task Duration: 5.3300 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE TRANSFORMER,	12.300000	TRANSFORMER	1	16328.0000 16328.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	12.300000	3.690000	15.990000
Material Cost \$	16328.000000		16328.000000
Equipment Hours			5.330000

Components In This Task: 1114100

TASK DATA FORM

Task Code: 1114201

Component: TRANS., DRY, > 15,000V. System: SERVICE AND DIST. Subsystem: PRIMARY TRANSFORMERS  
 Task Description: M/R REPAIR TRANSFORMER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 8.00 A: 15.00 L: 30.00  
 Persons per Team: 1 Task Duration: 1.9500 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPAIR TERMINAL	1.500000	TERMINAL	1	25.0000
				25.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.500000	0.450000	1.950000
Material Cost \$	25.000000		25.000000
Equipment Hours			1.950000

Components In This Task: 1114200

TASK DATA FORM

Task Code: 1114202

Component: TRANS., DRY, > 15,000V. System: SERVICE AND DIST. Subsystem: PRIMARY TRANSFORMERS  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION.  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.50 A: 0.50 L: 0.50  
 Persons per Team: 1 Task Duration: 0.3845 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.TEST ENERGIZED TRANSFORMER	0.295800			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.295800	0.088740	0.384540
Material Cost \$	0.000000		0.000000
Equipment Hours			0.384540

Components In This Task: 1114200

TASK DATA FORM

Task Code: 1114203

Component: TRANS, DRY, > 15,000V. System: SERVICE AND DIST. Subsystem: PRIMARY TRANSFORMERS  
 Task Description: REPLACE REPLACE TRANSFORMER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 7.50 A: 30.00 L: 60.00  
 Persons per Team: 3 Task Duration: 10.3133 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE TRANSFORMER	23.800000	TRANSFORMER	1	19742.0000 19742.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	23.800000	7.140000	30.940000
Material Cost \$	19742.000000		19742.000000
Equipment Hours			10.313333

Components In This Task: 1114200

TASK DATA FORM

Task Code: 1115101

Component: SWITCHGEAR, INDOOR, < 600V. System: SERVICE AND DIST. Subsystem: POWER PROTECTION EQUIP.  
 Task Description: M/R REPAIR SWITCHGEAR  
 Unit of Measure: PER CIRCUIT Frequency of Occurrence: H: 5.00 A: 10.00 L: 20.00  
 Persons per Team: 1 Task Duration: 0.1040 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE CIRCUIT BREAKER (5X)	0.080000	CIR.BREAKER	1	3.2500 3.2500

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.080000	0.024000	0.104000
Material Cost \$	3.250000		3.250000
Equipment Hours			0.104000

Components In This Task: 1115100

TASK DATA FORM

Task Code: 1115102

Component: SWITCHGEAR, INDOOR, < 600V. System: SERVICE AND DIST. Subsystem: POWER PROTECTION EQUIP.  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: PER CIRCUIT Frequency of Occurrence: H: 2.00 A: 3.00 L: 4.00  
 Persons per Team: 1 Task Duration: 0.0130 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources	
Subtask Description	Labor Hrs	Description	Unit Cost
1. INSPECT AND CLEAN PANEL	0.010000		0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.010000	0.003000	0.013000
Material Cost \$	0.001900		0.000000
Equipment Hours			0.013000

Components In This Task: 1115100

TASK DATA FORM

Task Code: 1115103

Component: SWITCHGEAR, INDOOR, < 600V. System: SERVICE AND DIST. Subsystem: POWER PROTECTION EQUIP.  
 Task Description: REPLACE REPLACE SWITCHGEAR  
 Unit of Measure: PER CIRCUIT Frequency of Occurrence: H: 25.00 A: 30.00 L: 35.00  
 Persons per Team: 1 Task Duration: 1.1248 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources	
Subtask Description	Labor Hrs	Description	Unit Cost
1. REMOVE COVER (SIX SCREWS)	0.035400	SWITCHGEAR	115.7500
2. DISCONNECT LEAD CONDUCTORS	0.014500		115.7500
3. REMOVE LINE CONDUCTS. FROM TERM.	0.036000		
4. REMOVE LOCKNUTS FROM CONDUIT BOX	0.008900		
5. REMOVE BUSHING FROM CONDUIT END	0.010900		
6. LOOSEN NUTS ON CONDUIT AT CAS.	0.006900		
7. LOOSEN NUTS ON CONDUIT CASING	0.006900		
8. STRAIGHTEN WIRES (LINE SIDE)	0.024100		
9. STRAIGHTEN WIRES, (LOAD SIDE)	0.032900		
10. REMOVE 40 LB. OR HEAVIER CARD	0.040500		
11. MOUNT PANEL BOARD ON WOOD SURF.	0.527800		
12. CUT, SEPARATE FORM & ALIGN LEAD	0.033000		
13. INSTALL SOLT-TYPE CONNECTORS	0.067500		
14. CUT, SEPARATE, FORM, ALIGN WIRES	0.005200		
15. LOCATE & TEST CIRCUITS	0.014100		

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.285200	0.259560	1.124760
Material Cost \$	115.750000		115.750000
Equipment Hours			1.124760

Components In This Task: 1115100

TASK DATA FORM

Task Code: 1115201

Component: SWITCHGEAR, INDOOR, > 600V. System: SERVICE AND DIST. Subsystem: POWER PROTECTION EQUIP.  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: PER CIRCUIT Frequency of Occurrence: H: 5.00 A: 10.00 L: 20.00  
 Persons per Team: 1 Task Duration: 0.1040 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE FUSE (5%)	0.080000	FUSE	1	8.2500 8.2500

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.080000	0.024000	0.104000
Material Cost \$	8.250000		8.250000
Equipment Hours			0.104000

Components In This Task: 1115200

TASK DATA FORM

Task Code: 1115202

Component: SWITCHGEAR, INDOOR, > 600V. System: SERVICE AND DIST. Subsystem: POWER PROTECTION EQUIP.  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: PER CIRCUIT Frequency of Occurrence: H: 2.00 A: 3.00 L: 4.00  
 Persons per Team: 1 Task Duration: 0.0130 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.INSPECT AND CLEAN PANELS	0.010000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.010000	0.003000	0.013000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.013000

Components In This Task: 1115200



TASK DATA FORM

Task Code: 1115203

Component: SWITCHGEAR, INDOOR, > 600V. System: SERVICE AND DIST. Subsystem: POWER PROTECTION EQUIP.  
 Task Description: REPLACE SWITCHGEAR  
 Unit of Measure: PER CIRCUIT Frequency of Occurrence: H: 25.00 A: 30.00 L: 35.00  
 Persons per Team: 2 Task Duration: 0.9508 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE COVER (SIX SCREWS)	0.035400
2.DISCONNECT LOAD CONDUCTORS	0.014500
3.REMOVE LINE CONDUCTS.FROM TERM.	0.048000
4.REMOVE LOCK NUTS FROM CONDU.END	0.008900
5.REMOVE BUSHING FROM CONDUIT END	0.010900
6.LOOSEN NUTS ON COND. AT CASING	0.006700
7.LOOSEN NUTS ON COND AT CASING	0.006700
8.STRAIGHTEN WIRES (LINE SIDE)	0.024100
9.STRAIGHTEN WIRES (LOAD SIDE)	0.085000
10.REMOVE 40 LB.OR HEAVIER BOARD	0.040500
11.MOUNT PANEL BOARD ON WOOD SURF.	0.930300
12.CUT, SEPARATE FORM & ALIGN LEADS	0.085100
13.INSTALL BOLT TYP.CONNECTORS	0.089900
14.CUT, SEPARATE, FORM, ALIGN WIRES	0.058000
15.INSTALL PLUG OR CARTR.TYP.FUSES	0.004600
16.LOCATE & TEST CIRCUITS	0.014100

Material Resources

Description	Quantity	Unit Cost
SWITCHGEAR	1	167.2500
		167.2500

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.462700	0.438810	1.901510
Material Cost \$	167.250000		167.250000
Equipment Hours			0.950755

Components In This Task: 1115200

TASK DATA FORM

Task Code: 1116101

Component: TRANS., LIQUID FILLED <600V System: SERVICE AND DIST. Subsystem: SECONDARY TRANSFORMER  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 12.00 A: 25.00 L: 50.00  
 Persons per Team: 1 Task Duration: 1.3000 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE TERMINAL	1.000000

Material Resources

Description	Quantity	Unit Cost
TERMINAL	1	25.0000
		25.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.000000	0.300000	1.300000
Material Cost \$	25.000000		25.000000
Equipment Hours			1.300000

Components In This Task: 1116100

TASK DATA FORM

Task Code: 1116102

Component: TRANS., LIQUID FILLED <600V System: SERVICE AND DIST. Subsystem: SECONDARY TRANSFORMER  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.50 A: 0.50 L: 0.50  
 Persons per Team: 1 Task Duration: 0.6500 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.CHECK CONNECTIONS & FLUID	0.500000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.650000

Components In This Task: 1116100

TASK DATA FORM

Task Code: 1116103

Component: TRANS., LIQUID FILLED <600V System: SERVICE AND DIST. Subsystem: SECONDARY TRANSFORMER  
 Task Description: REPLACE REPLACE TRANSFORMER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 25.00 A: 50.00 L: 100.00  
 Persons per Team: 2 Task Duration: 1.3128 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1. RAISE TRANSFORMER TO INS. POSIT.	0.033200	TRANSFORMER	1	7213.0000
2. INSTALL/REMOVE ONE TRANSFORMER	1.779300			7213.0000
3. MATERIAL HANDLING	0.207200			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.019700	0.605910	2.625610
Material Cost \$	7213.000000		7213.000000
Equipment Hours			1.312805

Components In This Task: 1116100

TASK DATA FORM

Task Code: 1116201

Component: TRANS., DRY, < 15,000V. System: SERVICE AND DIST. Subsystem: SECONDARY TRANSFORMER  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 10.00 L: 20.00  
 Persons per Team: 1 Task Duration: 1.3000 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPLACE TERMINAL	1.000000	TERMINAL	1	75.0000
				75.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.000000	0.300000	1.300000
Material Cost \$	75.000000		75.000000
Equipment Hours			1.300000

Components In This Task: 1116200

TASK DATA FORM

Task Code: 1116202

Component: TRANS., DRY, < 15,000V. System: SERVICE AND DIST. Subsystem: SECONDARY TRANSFORMER  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.50 A: 0.50 L: 0.50  
 Persons per Team: 1 Task Duration: 0.0390 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.INSPECT CONNECTION & TIGHTEN	0.030000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.030000	0.009000	0.039000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.039000

Components In This Task: 1116200

TASK DATA FORM

Task Code: 1116203

Component: TRANS., DRY, < 15,000V. System: SERVICE AND DIST. Subsystem: SECONDARY TRANSFORMER  
 Task Description: REPLACE REPLACE TRANSFORMER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 15.00 A: 30.00 L: 60.00  
 Persons per Team: 2 Task Duration: 1.3128 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1. RAISE TRANSFORMER TO INST. POSIT	0.033200	TRANSFORMER	1	4182.0000
2. INSTALL/REMOVE ONE TRANSFORMER	1.779300			4182.0000
3. MATERIAL HANDLING	0.207200			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.019700	0.605910	2.625610
Material Cost \$	4182.000000		4182.000000
Equipment Hours			1.312805

Components In This Task: 1116200

TASK DATA FORM

Task Code: 1117101

Component: SWITCHGEAR, INDOOR, <600V. System: SERVICE AND DIST. Subsystem: LIGHTING PROTECTION  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: PER CIRCUIT Frequency of Occurrence: H: 5.00 A: 10.00 L: 20.00  
 Persons per Team: 1 Task Duration: 0.1040 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1. REPLACE CIRCUIT BREAKER (5X)	0.080000	CIRC. BREAKER	1	3.2500
				3.2500

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.080000	0.024000	0.104000
Material Cost \$	3.250000		3.250000
Equipment Hours			0.104000

Components In This Task: 1117100

TASK DATA FORM

Task Code: 1117102

Component: SWITCHGEAR, INDOOR, <600V. System: SERVICE AND DIST. Subsystem: LIGHTING PROTECTION  
 Task Description: PH PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: PER CIRCUIT Frequency of Occurrence: H: 2.00 A: 3.00 L: 4.00  
 Persons per Team: 1 Task Duration: 0.0130 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.INSPECT AND CLEAN PANEL	0.010000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.010000	0.003000	0.013000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.013000

Components In This Task: 1117100

TASK DATA FORM

Task Code: 1117103

Component: SWITCHGEAR, INDOOR, <600V. System: SERVICE AND DIST. Subsystem: LIGHTING PROTECTION  
 Task Description: REPLACE REPLACE SWITCHGEAR.  
 Unit of Measure: PER CIRCUIT Frequency of Occurrence: H: 25.00 A: 30.00 L: 35.00  
 Persons per Team: 2 Task Duration: 0.5621 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE COVER (SIX SCREWS)	0.035400	SWITCHGEAR	1	115.7500
2.DISCONNECT LEAD CONDUCTORS	0.014500			115.7500
3.REMOVE LINE CONDUCTORS	0.036000			
4.REMOVE LOCK NUTS FROM CONDU.END	0.008900			
5.REMOVE BUSHING FROM CONDUIT END	0.010900			
6.LOOSEN NUTS ON CONDUIT AT CAS.	0.006700			
7.LOOSEN NUTS ON CONDUIT AT CAS.	0.006700			
8.STRAIGHTEN WIRES (LINE SIDE)	0.024100			
9.STRAIGHTEN WIRES (LOAD SIDE)	0.032900			
10.REMOVE 40 LB.OR HEAVIER P.BOARD	0.040500			
11.MOUNT PANEL BOARD ON WOOD SURF.	0.527800			
12.CUT, SEPARATE, FORM & ALIGN LEAD	0.033000			
13.INSTALL BOLT-TY.CONNECTORS	0.067500			
14.CUT, SEPARATE, FORM, ALIGN WIRES	0.005800			
15.LOCATE AND TEST CIRCUIT	0.014100			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.864800	0.259440	1.124240
Material Cost \$	115.750000		115.750000
Equipment Hours			0.562120

Components In This Task: 1117100

TASK DATA FORM

Task Code: 1117201

Component: SWITCHGEAR, INDOOR, > 600V. System: SERVICE AND DIST. Subsystem: LIGHTING PROTECTION  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: PER CIRCUIT Frequency of Occurrence: H: 5.00 A: 10.00 L: 20.00  
 Persons per Team: 1 Task Duration: 0.1040 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPLACE CIRCUIT BREAKER (5%)	0.080000	CIRC.BREAKER	1	12.5000 12.5000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.080000	0.024000	0.104000
Material Cost \$	12.500000		12.500000
Equipment Hours			0.104000

Components In This Task: 1117200

TASK DATA FORM

Task Code: 1117202

Component: SWITCHGEAR, INDOOR, > 600V. System: SERVICE AND DIST. Subsystem: LIGHTING PROTECTION  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: PER CIRCUIT Frequency of Occurrence: H: 1.00 A: 1.00 L: 1.00  
 Persons per Team: 1 Task Duration: 0.0130 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.INSPECT AND CLEAN PANELS	0.010000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.010000	0.003000	0.013000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.013000

Components In This Task: 1117200

TASK DATA FORM

Task Code: 1117203

Component: SWITCHGEAR, INDOOR, > 600V. System: SERVICE AND DIST. Subsystem: LIGHTING PROTECTION  
 Task Description: REPLACE REPLACE SWITCHGEAR  
 Unit of Measure: PER CIRCUIT Frequency of Occurrence: H: 25.00 A: 30.00 L: 35.00  
 Persons per Team: 2 Task Duration: 0.9508 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs
1.REMOVE COVER ( SIX SCREWS)	0.035400
2.DISCONNECT CONDUCTORS FROM TER.	0.014500
3.REMOVE LINE CONDUCTS.FROM TERM.	0.048000
4.REMOVE LOCKNUTS FROM CONDU.END	0.008900
5.REMOVE BUSHING FROM CONDU.ENDS	0.010900
6.LOOSEN NUTS ON COND. AT CASING	0.006700
7.LOOSEN NUTS ON CONDU.AT CASING	0.006700
8.STRAIGHTEN WIRES (LINE SIDE)	0.024100
9.STRAIGHTEN WIRES (LOAD SIDE)	0.085000
10.REMOVE 40-LB OR HEAVIER P.BOARD	0.040500
11.MOUNT PANEL BOARD ON WOOD SURF.	0.930300
12.CUT, SEPARATE, FORM & ALIGN LEADS	0.085100
13.INSTALL BOLT TY.CONNECTORS	0.089900
14.CUT, SEPARATE, FORM, ALIGN WIRES	0.058000
15.INSTALL PLUT/CARTRIDGE TY.FUSES	0.004600
16.LOCATE AND TEST CIRCUITS	0.014100

Description	Quantity	Unit Cost
SWITCHGEAR	1	167.2500
		167.2500

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.462700	0.438810	1.901510
Material Cost \$	167.250000		167.250000
Equipment Hours			0.950755

Components In This Task: 1117200

TASK DATA FORM

Task Code: 1118101

Component: CABLE, THRMPLST., <15,000V. System: SERVICE AND DIST. Subsystem: POWER & LIGHTING DIST.  
 Task Description: REPLACE REPLACE CABLE  
 Unit of Measure: 1000 LINEAR FEET Frequency of Occurrence: H: 130.00 A: 260.00 L: 350.00  
 Persons per Team: 2 Task Duration: 3.6814 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs
1.SHUT OFF POWER, LAYER TURN ON	0.014100
2.REMOVE COVER PLATE	0.046600
3.REMOVE SWITCH OR TERMINAL	0.008200
4.PULL WIRE SPLICES OUT	0.006000
5.REMOVE TAPE FROM SPLICES IN BOX	0.024900
6.CUT CONDUCTOR LEADS IN BOX	0.019600
7.CUT CABLE ADJACENT TO BOX	0.009300
8.REMOVE CABLE END FROM CONNECTOR	0.031700
9.REMOVE CABLES AND STAPLES	1.613200
10.REMOVE EXISTING TERMINAL BOXES	0.019800
11.PUSH RETAPED LEADS BACK IN BOX	0.006000
12.INSTALL COVER PLATE TO BOX	0.012900
13.LADDER TIME, ADDITIONAL, PER BOX	1.414000
14.INSTALL BOXES TO WOOD SURFACE	0.137500
15.INSTALL FOOTAGE OF CABLE	1.259500
16.REMOVE EXISTING BOX COVER PLATE	0.012900
17.REMOVE KNOCKOUT PLUGS IN BOXES	0.122200
18.FASTEN CABLE TO BOXES	0.897000
19.MOVE EXISTING WIRE SPLICE ASIDE	0.008300

Description	Quantity	Unit Cost
WIRE(#12)	1000FT	0.0500
STAPLES	200	0.0200
BOX	10	1.8000
		72.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	5.663700	1.699110	7.362810
Material Cost \$	72.000000		72.000000
Equipment Hours			3.681405

Components In This Task: 1118100

TASK DATA FORM

Task Code: 1122322

Component: CIR. BKR. M.C.< 599V 2P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.50 A: 0.50 L: 0.50  
 Persons per Team: 1 Task Duration: 0.4030 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources	
Subtask Description	Labor Hrs	Description	Unit Cost
1.INSPECT, TIGHTEN WIRING	0.310000		0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.310000	0.093000	0.403000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.403000

Components In This Task: 1122310 1122320 1122330

TASK DATA FORM

Task Code: 1122323

Component: CIR. BKR. M.C.< 599V 2P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: REPLACE REPLACE CIRCUIT BREAKER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 125.00 A: 250.00 L: 400.00  
 Persons per Team: 1 Task Duration: 0.7505 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources	
Subtask Description	Labor Hrs	Description	Unit Cost
1.REMOVE COVER PLATE	0.035400	BREAKER	212.0000
2.DISCONNECT CONDUCTORS FROM TERM	0.028800		212.0000
3.REMOVE BREAKER UNIT FROM CASING	0.049000		
4.LOOSEN LOCKNUTS ON CONDUIT	0.017400		
5.REMOVE LOCKNUTS FROM CON.CASING	0.021800		
6.STRAIGHTEN CIRCUIT WIRES	0.033300		
7.REMOVE 1 HOLE CLAIM OR CLIP	0.021800		
8.REMOVE CASING FROM WOOD SURF.	0.040500		
9.MOUNT CIRCUIT BREAKER	0.134900		
10.REMOVE BREAKER UNIT FROM CARTON	0.015400		
11.INSTALL BREAKER UNIT TO CASING	0.048900		
12.CUT, FORM, ALIGN CONNECT WIRES	0.116000		
13.CHECK OPERATION OF BREAKER	0.014100		

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.577300	0.173190	0.750490
Material Cost \$	212.000000		212.000000
Equipment Hours			0.750490

Components In This Task: 1122310 1122320 1122330



TASK DATA FORM

Task Code: 1122331

Component: CIR. BKR. M.C. < 599V 3P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 10.00 A: 20.00 L: 40.00  
 Persons per Team: 1 Task Duration: 0.8970 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.TIGHTEN CONNECTIONS	0.690000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.690000	0.207000	0.897000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.897000

Components In This Task: 1122310 1122320 1122330

TASK DATA FORM

Task Code: 1122332

Component: CIR. BKR. M.C. < 599V 3P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: PH PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.50 A: 0.50 L: 0.50  
 Persons per Team: 1 Task Duration: 0.4030 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.INSPECT, TIGHTEN WIRING	0.310000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.310000	0.093000	0.403000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.403000

Components In This Task: 1122310 1122320 1122330

TASK DATA FORM

Task Code: 1122333

Component: CIR. BKR. M.C.< 599V 3P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: REPLACE REPLACE CIRCUIT BREAKER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 125.00 A: 250.00 L: 400.00  
 Persons per Team: 1 Task Duration: 0.7505 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE COVER PLATE	0.035400
2.DISCONNECT CONDUCTORS FROM TERM	0.028800
3.REMOVE BREAKER UNIT FROM CASING	0.049000
4.LOOSEN LOCKNUTS ON CONDUIT	0.017400
5.REMOVE LOCKNUTS FROM CON.CASING	0.021800
6.STRAIGHTEN CIRCUIT WIRES	0.033300
7.REMOVE 1 HOLE CLAIM OR CLIP	0.021800
8.REMOVE CASING FROM WOOD SURF.	0.040500
9.MOUNT CIRCUIT BREAKER	0.134900
10.REMOVE BREAKER UNIT FROM CARTON	0.015400
11.INSTALL BREAKER UNIT TO CASING	0.048900
12.CUT,FORM,ALIGN CONNECT WIRES	0.116000
13.CHECK OPERATION OF BREAKER	0.014100

Material Resources

Description	Quantity	Unit Cost
BREAKER	1	69.0000
		69.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.577300	0.173190	0.750490
Material Cost \$	69.000000		69.000000
Equipment Hours			0.750490

Components In This Task: 1122310 1122320 1122330

TASK DATA FORM

Task Code: 1122341

Component: CIR. BKR. M.C.> 600V 1P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: M/R REPAIR FAILED BREAKER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 10.00 L: 20.00  
 Persons per Team: 1 Task Duration: 2.0995 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE TRIP SWITCH	1.615000

Material Resources

Description	Quantity	Unit Cost
TRIP SWITCH	1	79.8000
		79.8000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.615000	0.484500	2.099500
Material Cost \$	79.800000		79.800000
Equipment Hours			2.099500

Components In This Task: 1122340 1122350 1122360

TASK DATA FORM

Task Code: 1122342

Component: CIR. BKR. M.C. > 600V 1P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.33 A: 0.33 L: 0.33  
 Persons per Team: 1 Task Duration: 0.4030 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.INSPECT CIRCUIT BREAKER	0.310000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.310000	0.093000	0.403000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.403000

Components In This Task: 1122340 1122350 1122360

TASK DATA FORM

Task Code: 1122343

Component: CIR. BKR. M.C. > 600V 1P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: REPLACE REPLACE CIRCUIT BREAKER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 100.00 A: 200.00 L: 400.00  
 Persons per Team: 1 Task Duration: 0.9729 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE COVER PLATE	0.035400	BREAKER	1	242.0000
2.REMOVE SOLDERLESS SCREW TY.LUGS	0.007200			242.0000
3.REMOVE BREAKER UNI.FROM CASING	0.048900			
4.LOOSEN LOCKNUTS ON COND.ENDS	0.017400			
5.REMOVE LOCKNUTS FROM COND.ENDS	0.021800			
6.STRAIGHTEN CIRCUIT WIRES	0.060600			
7.REMOVE 2 HOLE CLAMP OR CLIP	0.039600			
8.REMOVE CASING FROM WOOD SURF.	0.040500			
9.MOUNT CIRCUIT BREAKER CASING	0.134900			
10.REMOVE BREAKER UNIT FROM CARTON	0.015400			
11.INSTALL BREAKER UNIT TO CASING	0.048900			
12.CUT, SEPARATE, FORM & ALIGH CIR.	0.129000			
13.INSTALL SOLDERLESS SCREW TY.LUG	0.134700			
14.CHECK OPERATION OF BREAKERS	0.014100			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.748400	0.224520	0.972920
Material Cost \$	242.000000		242.000000
Equipment Hours			0.972920

Components In This Task: 1122340 1122350 1122360

TASK DATA FORM

Task Code: 1122351

Component: CIR. BKR., M.C. > 600V 2P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: M/R REPAIR FAILED BREAKER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 10.00 L: 20.00  
 Persons per Team: 1 Task Duration: 2.0995 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE TRIP SWITCH	1.615000	TRIP SWITCH	1	79.8000
				79.8000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.615000	0.484500	2.099500
Material Cost \$	79.800000		79.800000
Equipment Hours			2.099500

Components In This Task: 1122340 1122350 1122360

TASK DATA FORM

Task Code: 1122352

Component: CIR. BKR., M.C. > 600V 2P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.35 A: 0.3 L: 0.35  
 Persons per Team: 1 Task Duration: 0.4030 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.INSPECT CIRCUIT BREAKER	0.310000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.310000	0.093000	0.403000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.403000

Components In This Task: 1122340 1122350 1122360

TASK DATA FORM

Task Code: 1122353

Component: CIR. BKR., M.C. > 600V 2P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: REPLACE REPLACE CIRCUIT BREAKER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 100.00 A: 200.00 L: 400.00  
 Persons per Team: 1 Task Duration: 0.9729 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources

Material Resources

Task Description	Labor Hrs
1. REMOVE COVER PLATE	0.035400
2. REMOVE SOLDERLESS SCREW TY. LUGS	0.072800
3. REMOVE BREAKER UNI. FROM CASING	0.048900
4. LOOSEN LOCKNUTS ON COND. ENDS	0.017400
5. REMOVE LOCKNUTS FROM COND. ENDS	0.021800
6. STRAIGHTEN CIRCUIT WIRES	0.060600
7. REMOVE 2 HOLE CLAMP OR CLIP	0.039600
8. REMOVE CASING FROM WOOD SURF.	0.040500
9. MOUNT CIRCUIT BREAKER CASING	0.134900
10. REMOVE BREAKER UNIT FROM CARTON	0.015400
11. INSTALL BREAKER UNIT TO CASING	0.048900
12. CUT, SEPARATE, FORM & ALIGN CIR.	0.129000
13. INSTALL SOLDERLESS SCREW TY. LUG	0.134700
14. CHECK OPERATION OF BREAKERS	0.014100

Description	Quantity	Unit Cost
BREAKER	1	540.0000
		540.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor hours	0.748400	0.224520	0.972920
Material Cost \$	540.000000		540.000000
Equipment Hours			0.972920

Components In This Task: 1122340 1122350 1122360

TASK DATA FORM

Task Code: 1122361

Component: CIR. BKR., M.C. > 600V 3P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: M/R REPAIR FAILED BREAKER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 10.00 L: 20.00  
 Persons per Team: 1 Task Duration: 2.0995 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs
1. REPLACE TRIP SWITCH	1.615000

Description	Quantity	Unit Cost
TRIP SWITCH	1	79.8000
		79.8000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.615000	0.484500	2.099500
Material Cost \$	79.800000		79.800000
Equipment Hours			2.099500

Components In This Task: 1122340 1122350 1122360

TASK DATA FORM

Task Code: 1122362

Component: CIR. BKR., M.C. > 600V 3P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: PH PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.33 A: 0.33 L: 0.33  
 Persons per Team: 1 Task Duration: 0.4030 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.INSPECT CIRCUIT BREAKER	0.310000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.310000	0.093000	0.403000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.403000

Components In This Task: 1122340 1122350 1122360

TASK DATA FORM

Task Code: 1122363

Component: CIR. BKR., M.C. > 600V 3P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: REPLACE REPLACE CIRCUIT BREAKER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 100.00 A: 200.00 L: 400.00  
 Persons per Team: 1 Task Duration: 0.9729 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE COVER PLATE	0.035400	BREAKER	1	871.0000
2.REMOVE SOLDERLESS,SCREW TY.LUGS	0.007200			
3.REMOVE BREAKER UNI.FROM CASING	0.048900			
4.LOSEN LOCKNUTS ON COND.ENDS	0.017400			
5.REMOVE LOCKNUTS FROM COND.ENDS	0.021800			
6.STRAIGHTEN CIRCUIT WIRES	0.060600			
7.REMOVE 2 HOLE CLAMP OR CLIP	0.039600			
8.REMOVE CASING FROM WOOD SURF.	0.040500			
9.MOUNT CIRCUIT BREAKER CASING	0.134900			
10.REMOVE BREAKER UNIT FROM CARTON	0.015400			
11.INSTALL BREAKER UNIT TO CASING	0.048900			
12.CUT,SEPARATE,FORM & ALIGN CIR.	0.129000			
13.INSTALL SOLDERLESS SCREW TY.LUG	0.134700			
14.CHECK OPERATION OF BREAKERS	0.014100			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.748400	0.224520	0.972920
Material Cost \$	871.000000		871.000000
Equipment Hours			0.972920

Components In This Task: 1122340 1122350 1122360

TASK DATA FORM

Task Code: 1122371

Component: CIR. BKR. FIXED <599V 1P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 50.00 A: 100.00 L: 250.00  
 Persons per Team: 1 Task Duration: 0.8970 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.TIGHTEN CONNECTIONS	0.690000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.690000	0.207000	0.897000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.897000

Components In This Task: 1122370 1122380 1122390

TASK DATA FORM

Task Code: 1122372

Component: CIR. BKR. FIXED <599V 1P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 1.00 A: 1.00 L: 1.00  
 Persons per Team: 1 Task Duration: 0.4030 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.INSPECT & TIGHTEN WIRING	0.310000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.310000	0.093000	0.403000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.403000

Components In This Task: 1122370 1122380 1122390

TASK DATA FORM

Task Code: 1122373

Component: CIR. BKR. FIXED <599V 1P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: REPLACE REPLACE CIRCUIT BREAKER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 125.00 A: 250.00 L: 400.00  
 Persons per Team: 1 Task Duration: 0.7505 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs
1.REMOVE COVER PLATES	0.035400
2.DISCONNECT CONDUCTORS FROM TERM	0.028800
3.REMOVE BREAKER UNIT FROM CASING	0.048900
4.LOOSEN LOCKNUTS ON COND.CASING	0.017400
5.REMOVE LOCKNUTS FROM COND.CAS.	0.021800
6.STRAIGHTEN CIRCUIT WIRES	0.033300
7.REMOVE ONE HOLE CLAMP OR CLIP	0.021800
8.REMOVE CASING FROM WOOD SURF.	0.040500
9.MOUNT CIRCUIT BREAKER CASING	0.134900
10.REMOVE BREAKER UNIT FROM CARTON	0.015400
11.INSTALL BREAKER UNIT IN CASING	0.049000
12.CUT, FORM, ALIGN & CONNECT WIRES	0.116000
13.CHECK OPERATION OF BREAKER	0.014100

Description	Quantity	Unit Cost
BREAKER	1	10.6000
		10.6000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.577300	0.173190	0.750490
Material Cost \$	10.600000		10.600000
Equipment Hours			0.750490

Components In This Task: 1122370 1122380 1122390

TASK DATA FORM

Task Code: 1122381

Component: CIR. BKR. FIXED <599V 2P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 50.00 A: 100.00 L: 200.00  
 Persons per Team: 1 Task Duration: 0.8970 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs
1.TIGHTEN CONNECTIONS	0.690000

Description	Quantity	Unit Cost
		0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.690000	0.207000	0.897000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.897000

Components In This Task: 1122370 1122380 1122390



TASK DATA FORM

Task Code: 1122382

Component: CIR. BKR., FIXED <599V 2P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: PH PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 1.00 A: 1.00 L: 1.00  
 Persons per Team: 1 Task Duration: 0.4030 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.INSPECT & TIGHTEN WIRING	0.310000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.310000	0.093000	0.403000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.403000

Components In This Task: 1122370 1122380 1122390

TASK DATA FORM

Task Code: 1122383

Component: CIR. BKR., FIXED <599V 2P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: REPLACE REPLACE CIRCUIT BREAKER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 125.00 A: 250.00 L: 400.00  
 Persons per Team: 1 Task Duration: 0.7505 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE COVER PLATES	0.035400	BREAKER	1	24.1000
2.DISCONNECT CONDUCTORS FROM TERM	0.028800			24.1000
3.REMOVE BREAKER UNIT FROM CASING	0.048900			
4.LOOSEN LOCKNUTS ON COND.CASING	0.017400			
5.REMOVE LOCKNUTS FROM COND.CAS.	0.021800			
6.STRAIGHTEN CIRCUIT WIRES	0.033300			
7.REMOVE ONE HOLE CLAMP OR CLIP	0.021800			
8.REMOVE CASING FROM WOOD SURF.	0.040500			
9.MOUNT CIRCUIT BREAKER CASING	0.134900			
10.REMOVE BREAKER UNIT FROM CARTON	0.015400			
11.INSTALL BREAKER UNIT IN CASING	0.049000			
12.CUT, FORM, ALIGN & CONNECT WIRES	0.116000			
13.CHECK OPERATION OF BREAKER	0.014100			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.577300	0.173190	0.750490
Material Cost \$	24.100000		24.100000
Equipment Hours			0.750490

Components In This Task: 1122370 1122380 1122390

TASK DATA FORM

Task Code: 1122391

Component: CIR. BKR., FIXED <599V 3P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 50.00 A: 100.00 L: 200.00  
 Persons per Team: 1 Task Duration: 0.8970 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.TIGHTEN CONNECTIONS	0.690000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.690000	0.207000	0.897000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.897000

Components In This Task: 1122370 1122380 1122390

TASK DATA FORM

Task Code: 1122392

Component: CIR. BKR., FIXED <599V 3P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 1.00 A: 1.00 L: 1.00  
 Persons per Team: 1 Task Duration: 0.4030 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.INSPECT & TIGHTEN WIRING	0.310000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.310000	0.093000	0.403000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.403000

Components In This Task: 1122370 1122380 1122390

TASK DATA FORM

Task Code: 1122393

Component: CIR. BKR., FIXED <599V 3P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: REPLACE REPLACE CIRCUIT BREAKER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 125.00 A: 250.00 L: 400.00  
 Persons per Team: 1 Task Duration: 0.7505 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE COVER PLATES	0.035400	BREAKER	1	83.0000
2.DISCONNECT CONDUCTORS FROM TERM	0.028800			83.0000
3.REMOVE BREAKER UNIT FROM CASING	0.048900			
4.LOOSEN LOCKNUTS ON COND.CASING	0.017400			
5.REMOVE LOCKNUTS FROM COND.CAS.	0.021800			
6.STRAIGHTEN CIRCUIT WIRES	0.033300			
7.REMOVE ONE HOLE CLAMP OR CLIP	0.021800			
8.REMOVE CASING FROM WOOD SURF.	0.040500			
9.MOUNT CIRCUIT BREAKER CASING	0.134900			
10.REMOVE BREAKER UNIT FROM CARTON	0.015400			
11.INSTALL BREAKER UNIT IN CASING	0.049000			
12.CUT, FORM, ALIGN & CONNECT WIRES	0.116000			
13.CHECK OPERATION OF BREAKER	0.014100			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.577300	0.173190	0.750490
Material Cost \$	83.000000		83.000000
Equipment Hours			0.750490

Components In This Task: 1122370 1122380 1122390

TASK DATA FORM

Task Code: 11223A1

Component: CIR. BKR., FIXED >600V 1P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: M/R REPAIR FAILED BREAKER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 2.00 A: 4.00 L: 8.00  
 Persons per Team: 1 Task Duration: 2.0995 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.MINOR REPAIRS	1.615000	COMPONENT	1	250.0000
				250.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.615000	0.4500	2.099500
Material Cost \$	250.000000		250.000000
Equipment Hours			2.099500

Components In This Task: 11223A0 1122380 11223C0

TASK DATA FORM

Task Code: 11223A2

Component: CIR. BKR., FIXED >600V 1P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.33 A: 0.33 L: 0.33  
 Persons per Team: 1 Task Duration: 0.4030 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.INSPECT CIRCUIT BREAKER	0.310000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.310000	0.093000	0.403000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.403000

Components In This Task: 11223A0 11223B0 11223C0

TASK DATA FORM

Task Code: 11223A3

Component: CIR. BKR., FIXED >600V 1P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: REPLACE REPLACE CIRCUIT BREAKER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 6.00 A: 12.00 L: 24.00  
 Persons per Team: 1 Task Duration: 0.9729 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE COVER PLATE	0.035400	BREAKER	1	65.0000
2.REMOVE SOLDERLESS,SCR,TYPE LUGS	0.007200			65.0000
3.REMOVE BREAKER UNIT FROM CASING	0.048900			
4.LOUSEN LOCKNUTS ON CONDU.ENDS	0.017400			
5.REMOVE LOCKNUTS FROM COND.ENDS	0.021800			
6.STRAIGHTEN CIRCUIT WIRES	0.060600			
7.REMOVE TWO HOLE CLAMP OR CLIP	0.039600			
8.REMOVE CASING FROM WOOD SURF.	0.040500			
9.MOUNT CIRCUIT BREAKER CASING	0.134900			
10.REMOVE BREAKER UNIT FROM CARTON	0.015400			
11.INSTALL BREAKER UNIT TO CASING	0.048900			
12.CUT,SEPARATE,FORM & ALIGN WIRES	0.129000			
13.INSTALL SOLDERLESS SCR.TYPE LUG	0.134700			
14.CHECK OPERATION OF BREAKER	0.014100			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.748400	0.224520	0.972920
Material Cost \$	65.000000		65.000000
Equipment Hours			0.972920

Components In This Task: 11223A0 11223B0 11223C0

TASK DATA FORM

Task Code: 1122381

Component: CIR. BKR. FIXED >600V 2P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: M/R REPAIR FAILED BREAKER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 2.00 A: 4.00 L: 8.00  
 Persons per Team: 1 Task Duration: 2.0995 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.MINOR REPAIRS	1.615000	COMPONENT	1	250.0000 250.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.615000	0.484500	2.099500
Material Cost \$	250.000000		250.000000
Equipment Hours			2.099500

Components In This Task: 11223A0 1122380 11223C0

TASK DATA FORM

Task Code: 1122382

Component: CIR. BKR. FIXED >600V 2P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.33 A: 0.33 L: 0.33  
 Persons per Team: 1 Task Duration: 0.4030 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.INSPECT CIRCUIT BREAKER	0.310000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.310000	0.093000	0.403000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.403000

Components In This Task: 11223A0 1122380 11223C0

TASK DATA FORM

Task Code: 1122383

Component: CIR. BKR., FIXED >600V 2P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: REPLACE REPLACE CIRCUIT BREAKER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 6.00 A: 12.00 L: 24.00  
 Persons per Team: 1 Task Duration: 0.9729 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs
1.REMOVE COVER PLATE	0.035400
2.REMOVE SOLDERLESS,SCR,TYPE LUGS	0.007200
3.REMOVE BREAKER UNIT FROM CASING	0.048900
4.LOOSEN LOCKNUTS ON CONDU.ENDS	0.017400
5.REMOVE LOCKNUTS FROM COND.ENDS	0.021800
6.STRAIGHTEN CIRCUIT WIRES	0.060600
7.REMOVE TWO HOLE CLAMP OR CLIP	0.039600
8.REMOVE CASING FROM WOOD SURF.	0.040500
9.MOUNT CIRCUIT BREAKER CASING	0.134900
10.REMOVE BREAKER UNIT FROM CARTON	0.015400
11.INSTALL BREAKER UNIT TO CASING	0.048900
12.CUT,SEPARATE,FORM & ALIGN WIRES	0.129000
13.INSTALL SOLDERLESS SCR,TYPE LUG	0.134700
14.CHECK OPERATION OF BREAKER	0.014100

Description	Quantity	Unit Cost
BREAKER	1	242.0000
		242.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.748400	0.224520	0.972920
Material Cost \$	242.000000		242.000000
Equipment Hours			0.972920

Components In This Task: 11223A0 1122380 11223C0

TASK DATA FORM

Task Code: 11223C1

Component: CIR. BKR., FIXED >600V 3P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: M/R REPAIR FAILED BREAKER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 2.00 A: 4.00 L: 8.00  
 Persons per Team: 1 Task Duration: 2.0995 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs
1.MINOR REPAIRS	1.615000

Description	Quantity	Unit Cost
COMPONENT	1	250.0000
		250.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.615000	0.484500	2.099500
Material Cost \$	250.000000		250.000000
Equipment Hours			2.099500

Components In This Task: 11223A0 1122380 11223C0

TASK DATA FORM

Task Code: 11223C2

Component: CIR. BKR. FIXED >600V 3P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.33 A: 0.33 L: 0.33  
 Persons per Team: 1 Task Duration: 0.4030 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.INSPECT CIRCUIT BREAKER	0.310000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.310000	0.093000	0.403000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.403000

Components In This Task: 11223A0 11223B0 11223C0

TASK DATA FORM

Task Code: 11223C3

Component: CIR. BKR. FIXED >600V 3P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: REPLACE REPLACE CIRCUIT BREAKER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 6.00 A: 12.00 L: 24.00  
 Persons per Team: 1 Task Duration: 1.0572 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE COVER PLATE	0.035400	BREAKER	1	310.0000
2.REMOVE SOLDERLESS,SCR.TYPE LUGS	0.072000			310.0000
3.REMOVE BREAKER UNIT FROM CASING	0.048900			
4.LOOSEN LOCKNUTS ON CONDU.ENDS.	0.017400			
5.REMOVE LOCKNUTS FROM CONDU.ENDS	0.021800			
6.STRAIGHTEN CIRCUIT WIRES	0.060600			
7.REMOVE TWO HOLE CLAMP OR CLIP	0.039600			
8.REMOVE CASING FROM WOOD SURF.	0.040500			
9.MOUNT CIRCUIT BREAKER CASING	0.134900			
10.REMOVE BREAKER UNIT FROM CARTON	0.015400			
11.INSTALL BREAKER UNIT TO CASTING	0.048900			
12.CUT,SEPARATE,FORM & ALIGN WIRES	0.129000			
13.INSTALL SOLDERLESS SCR.TYPE LUG	0.134700			
14.CHECK OPERATION OF BREAKER	0.014100			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.813200	0.243960	1.057160
Material Cost \$	310.000000		310.000000
Equipment Hours			1.057160

Components In This Task: 11223A0 11223B0 11223C0

TASK DATA FORM

Task Code: 1122411

Component: SAFETY SWITCH, FUSED, 1P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 4.00 A: 8.00 L: 16.00  
 Persons per Team: 1 Task Duration: 0.5005 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.RESECURE LUGS	0.385000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.385000	0.115500	0.500500
Material Cost \$	0.000000		0.000000
Equipment Hours			0.500500

Components In This Task: 1122100 1122410 1122420 1122430

TASK DATA FORM

Task Code: 1122412

Component: SAFETY SWITCH, FUSED, 1P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: PH PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 1.00 A: 1.00 L: 1.00  
 Persons per Team: 1 Task Duration: 0.7930 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.INSPECT & CLEAN SAFETY SWITCH	0.610000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.610000	0.183000	0.793000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.793000

Components In This Task: 1122100 1122410 1122420 1122430



TASK DATA FORM

Task Code: 1122413

Component: SAFETY SWITCH, FUSED, 1P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: REPLACE REPLACE SAFETY SWITCH  
 Unit of Measure: COUNT Frequency of Occurrence: H: 12.00 A: 25.00 L: 50.00  
 Persons per Team: 2 Task Duration: 0.2827 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.DISCONNECT CONDUCT FROM TERMIN.	0.028800	SAFETY SW.	1	15.0000
2.LOOSEN LOCKNUTS ON CONDUITS	0.017400			15.0000
3.REMOVE LOCKNUT-CONDUIT ENDS	0.021800			
4.STRAIGHTEN CIRCUIT WIRES	0.033300			
5.REMOVE 1 HOLE CLAMP OR CLIP	0.021800			
6.REMOVE SAFETY SWITCH INTACT	0.040500			
7.MOUNT SAFETY SWITCH ON WOOD	0.134900			
8.CUT, FORM & ALIGN CIRCUIT WIRES	0.111600			
9.INSTALL PLUG OR CARTRIDGE FUSES	0.010700			
10.CHECK OPERATION OF SWITCH	0.014100			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.434900	0.130470	0.565370
Material Cost \$	15.000000		15.000000
Equipment Hours			0.282685

Components In This Task: 1122410

TASK DATA FORM

Task Code: 1122421

Component: SAFETY SWITCH, FUSED, 2P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: H/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 4.00 A: 8.00 L: 16.00  
 Persons per Team: 1 Task Duration: 0.5005 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.RESECURE LUGS	0.385000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.385000	0.115500	0.500500
Material Cost \$	0.000000		0.000000
Equipment Hours			0.500500

Components In This Task: 1122100 1122410 1122420 1122430

TASK DATA FORM

Task Code: 1122422

Component: SAFETY SWITCH, FUSED, 2P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: PH PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 1.00 A: 1.00 L: 1.00  
 Persons per Team: 1 Task Duration: 0.7930 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.INSPECT & CLEAN SAFETY SWITCH	0.610000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.610000	0.183000	0.793000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.793000

Components In This Task: 1122100 1122410 1122420 1122430

TASK DATA FORM

Task Code: 1122423

Component: SAFETY SWITCH, FUSED, 2P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: REPLACE REPLACE SAFETY SWITCH  
 Unit of Measure: COUNT Frequency of Occurrence: H: 12.00 A: 25.00 L: 50.00  
 Persons per Team: 2 Task Duration: 0.2827 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.DISCONNECT CONDUCT FROM TERMIN.	0.028800	SAFETY SW.	1	42.0000
2.LOOSEN LOCKNUTS ON CONDUITS	0.017400			42.0000
3.REMOVE LOCKNUT-CONDUIT ENDS	0.021800			
4.STRAIGHTEN CIRCUIT WIRES	0.033300			
5.REMOVE 1 HOLE CLAMP OR CLIP	0.021800			
6.REMOVE SAFETY SWITCH INTACT	0.040500			
7.MOUNT SAFETY SWITCH ON WOOD	0.134900			
8.CUT, FORM & ALIGN CIRCUIT WIRES	0.111600			
9.INSALL PLUG OR CARTRIDGE FUSES	0.010700			
10.CHECK OPERATION OF SWITCH	0.014100			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.434900	0.130470	0.565370
Material Cost \$	42.000000		42.000000
Equipment Hours			0.282685

Components In This Task: 1122420

TASK DATA FORM

Task Code: 1122431

Component: SAFETY SWITCH, FUSED, 3P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: m/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 4.00 A: 8.00 L: 16.00  
 Persons per Team: 1 Task Duration: 0.5005 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources	
Subtask Description	Labor Hrs	Description	Unit Cost
T.RESECURE LUGS	0.385000		0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.385000	0.115500	0.500500
Material Cost \$	0.000000		0.000000
Equipment Hours			0.500500

Components In This Task: 1122100 1122410 1122420 1122430

TASK DATA FORM

Task Code: 1122432

Component: SAFETY SWITCH, FUSED, 3P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: PH PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 1.00 A: 1.00 L: 1.00  
 Persons per Team: 1 Task Duration: 0.7930 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources	
Subtask Description	Labor Hrs	Description	Unit Cost
T.INSPECT & CLEAN SAFETY SWITCH	0.610000		0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.610000	0.183000	0.793000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.793000

Components In This Task: 1122100 1122410 1122420 1122430

TASK DATA FORM

Task Code: 1122433

Component: SAFETY SWITCH, FUSED, 3P System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: REPLACE REPLACE SAFETY SWITCH  
 Unit of Measure: COUNT Frequency of Occurrence: H: 12.00 A: 25.00 L: 50.00  
 Persons per Team: 2 Task Duration: 0.2827 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs
1.DISCONNECT CONDUCTY FROM TERMIN.	0.028800
2.LOOSEN LOCKNUTS ON CONDUITS	0.017400
3.REMOVE LOCKNUT-CONDUIT ENDS	0.021800
4.STRAIGHTEN CIRCUIT WIRES	0.033300
5.REMOVE 1 HOLE CLAMP OR CLIP	0.021800
6.REMOVE SAFETY SWITCH INTACT	0.040500
7.MOUNT SAFETY SWITCH ON WOOD	0.134900
8.CUT, FORM & ALIGN CIRCUIT WIRES	0.111600
9.INSTALL PLUG OR CARTRIDGE FUSES	0.010700
10.CHECK OPERATION OF SWITCH	0.014100

Description	Quantity	Unit Cost
SAFETY SW.	1	95.0000
		95.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.434900	0.130470	0.565370
Material Cost \$	95.000000		95.000000
Equipment Hours			0.282685

Components In This Task: 1122430

TASK DATA FORM

Task Code: 1122441

Component: LOW VOLTAGE CARTRIDGE System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: REPLACE REPLACE LOW VOLTAGE CARTRIDGE  
 Unit of Measure: COUNT Frequency of Occurrence: H: 25.00 A: 50.00 L: 100.00  
 Persons per Team: 1 Task Duration: 0.0650 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs
1.REPLACE CARTRIDGE	0.050000

Description	Quantity	Unit Cost
CARTRIDGE	1	0.7900
		0.7900

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.050000	0.015000	0.065000
Material Cost \$	0.790000		0.790000
Equipment Hours			0.065000

Components In This Task: 1122440

TASK DATA FORM

Task Code: 1122451

Component: PLUG FUSE System: POWER SYSTEM Subsystem: SAFETY SWITCH  
 Task Description: REPLACE REPLACE PLUG FUSE  
 Unit of Measure: COUNT Frequency of Occurrence: H: 20.00 A: 35.00 L: 75.00  
 Persons per Team: 1 Task Duration: 0.1040 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE FUSE	0.080000	FUSE	1	0.3000 0.3000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.080000	0.024000	0.104000
Material Cost \$	0.300000		0.300000
Equipment Hours			0.104000

Components In This Task: 1122450

TASK DATA FORM

Task Code: 1123601

Component: MOTOR STARTER, < 600V. System: POWER SYSTEM Subsystem: MOTOR STARTER  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 3.00 A: 5.00 L: 10.00  
 Persons per Team: 1 Task Duration: 1.9500 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE COIL	1.500000	COIL	1	25.0000 25.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.500000	0.450000	1.950000
Material Cost \$	25.000000		25.000000
Equipment Hours			1.950000

Components In This Task: 1123600

TASK DATA FORM

Task Code: 1123602

Component: MOTOR STARTER, < 600V. System: POWER SYSTEM Subsystem: MOTOR STARTER  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.50 A: 0.50 L: 0.50  
 Persons per Team: 1 Task Duration: 0.6500 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.INSPECT & CLEAN MOTOR STARTER	0.500000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.650000

Components In This Task: 1123600

TASK DATA FORM

Task Code: 1123603

Component: MOTOR STARTER, < 600V. System: POWER SYSTEM Subsystem: MOTOR STARTER  
 Task Description: REPLACE REPLACE STARTER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 9.00 A: 18.00 L: 36.00  
 Persons per Team: 1 Task Duration: 0.8382 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.DISCONNECT CONDUCTORS -TERMIN.	0.202900	STARTER	1	95.1600
2.LOOSEN LOCKNUTS ON CONDUIT CAS.	0.017400			95.1600
3.REMOVE LOCKNUTS FROM CONDU.ENDS	0.021800			
4.STRAIGHTEN CIRCUIT WIRES	0.011100			
5.REMOVE ONE HOLE CLAMP ON CLIP	0.021800			
6.REMOVE SAFETY SWITCH INTACT	0.040500			
7.MOUNT CIRCUIT BREAKER CASING	0.134900			
8.REMOVE BREAKER UNIT FROM CARTON	0.015400			
9.INSTALL BREAKER UNIT TO CASING	0.048900			
10.CUT,FORM,ALIGN & CONNECT CIRCU.	0.116000			
11.CHECK OPERATION OF BREAKER	0.014100			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.644800	0.193440	0.838240
Material Cost \$	95.160000		95.160000
Equipment Hours			0.838240

Components In This Task: 1123600

TASK DATA FORM

Task Code: 1123701

Component: MOTOR STARTER, 601-15,000V. System: POWER SYSTEM Subsystem: MOTOR STARTER  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 2.00 A: 3.00 L: 6.00  
 Persons per Team: 1 Task Duration: 6.7002 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE COIL	5.154000	COIL	1	75.0000
				75.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	5.154000	1.546200	6.700200
Material Cost \$	75.000000		75.000000
Equipment Hours			6.700200

Components In This Task: 1123700

TASK DATA FORM

Task Code: 1123702

Component: MOTOR STARTER, 601-15,000V. System: POWER SYSTEM Subsystem: MOTOR STARTER  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.25 A: 0.25 L: 0.25  
 Persons per Team: 1 Task Duration: 0.6500 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.INSPECT & CLEAN MOTOR STARTER	0.500000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.650000

Components In This Task: 1123700

TASK DATA FORM

Task Code: 1123703

Component: MOTOR STARTER, 601-15,000V. System: POWER SYSTEM Subsystem: MOTOR STARTER  
 Task Description: REPLACE REPLACE STARTER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 9.00 A: 18.00 L: 36.00  
 Persons per Team: 2 Task Duration: 0.4505 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources

Subtask Description	Labor Hrs
1.REMOVE SOLDERLESS, SCR. TYPE LUG	0.028800
2.LOOSEN LOCKNUTS ON CONDUIT CAS.	0.017400
3.REMOVE LOCKNUTS - CONDUIT ENDS	0.021800
4.STRAIGHTEN CIRCUIT WIRES	0.068100
5.REMOVE 2 HOLE CLAMP OR CLIP	0.039600
6.REMOVE STARTER INTACT	0.040500
7.MOUNT STARTER CASING	0.134900
8.REMOVE STARTER UNIT FROM CARTON	0.015400
9.INSTALL STARTER UNIT TO CASING	0.048900
10.CUT, SEPARATE, FORM & ALIGN WIRES	0.128900
11.INSTALL SOLDERLESS SCR.TY. LUGS	0.134700
12.CHECK OPERATION OF BREAKER	0.014100

Material Resources

Description	Quantity	Unit Cost
STARTER	1	2304.0000
		2304.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.693100	0.207930	0.901030
Material Cost \$	2304.000000		2304.000000
Equipment Hours			0.450515

Components In This Task: 1123700

TASK DATA FORM

Task Code: 1124001

Component: CONTACTORS AND RELAYS System: POWER SYSTEM Subsystem: CONTACTORS AND RELAYS  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 2.00 A: 3.00 L: 6.00  
 Persons per Team: 1 Task Duration: 2.6000 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources

Subtask Description	Labor Hrs
1.REPLACE COIL	2.000000

Material Resources

Description	Quantity	Unit Cost
COIL	1	15.0000
		15.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.000000	0.600000	2.600000
Material Cost \$	15.000000		15.000000
Equipment Hours			2.600000

Components In This Task: 1124000



TASK DATA FORM

Task Code: 1124002

Component: CONTACTORS AND RELAYS System: POWER SYSTEM Subsystem: CONTACTORS AND RELAYS  
 Task Description: PM PREVENTIVE MAINTENANCE  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.50 A: 0.50 L: 0.50  
 Persons per Team: 1 Task Duration: 0.2080 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.INSPECT AND CLEAN CONTACTS	0.160000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.160000	0.048000	0.208000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.208000

Components In This Task: 1124000

TASK DATA FORM

Task Code: 1124003

Component: CONTACTORS AND RELAY System: POWER SYSTEM Subsystem: CONTACTORS AND RELAYS  
 Task Description: REPLACE REPLACE CONTACTOR/RELAY  
 Unit of Measure: COUNT Frequency of Occurrence: H: 9.00 A: 18.00 L: 36.00  
 Persons per Team: 1 Task Duration: 0.7505 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE COVER PLATE	0.035400	RELAY	1	190.0000
2.DISCONNECT CONDUCTORS FROM TERM	0.028800			190.0000
3.REMOVE RELAY UNIT FROM CASING	0.048900			
4.LOOSEN LOCKNUTS ON CONDUITS	0.017400			
5.REMOVE LOCKNUTS FROM CONDUITS	0.021800			
6.STRAIGHTEN CIRCUIT WIRES	0.033300			
7.REMOVE 1 HOLE CLAMP OR CLIP	0.021800			
8.REMOVE CASING FROM WOOD SURF.	0.040500			
9.MOUNT RELAY CASING	0.134900			
10.REMOVE RELAY UNIT	0.015400			
11.INSTALL RELAY UNIT TO CASING	0.049000			
12.CUT,FORM,ALIGN & CONNECT WIRES	0.116000			
13.CHECK OPERATION OF RELAY	0.014100			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.577300	0.173190	0.750490
Material Cost \$	190.000000		190.000000
Equipment Hours			0.750490

Components In This Task: 1124000

TASK DATA FORM

Task Code: 1127101

Component: WIRING DEVICES, SWITCHES System: POWER SYSTEM Subsystem: RECEPTACLES AND PLUGS  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 10.00 L: 15.00  
 Persons per Team: 1 Task Duration: 0.5005 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR SWITCH.	0.385000	COVER	1	1.5000 1.5000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.385000	0.115500	0.500500
Material Cost \$	1.500000		1.500000
Equipment Hours			0.500500

Components In This Task: 1127100

TASK DATA FORM

Task Code: 1127102

Component: WIRING DEVICES, SWITCHES System: POWER SYSTEM Subsystem: RECEPTACLES AND PLUGS  
 Task Description: REPLACE REPLACE SWITCH  
 Unit of Measure: COUNT Frequency of Occurrence: H: 8.00 A: 15.00 L: 30.00  
 Persons per Team: 1 Task Duration: 0.4774 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.TURN POWER SWITCH OFF/ON	0.014100	SWITCH	1	4.2300 4.2300
2.REMOVE & INSTALL COVER PLATES	0.125900			
3.REMOVE UNIT MOUNTING SCREWS	0.021900			
4.P.L.L CONNECTED UNIT OUT OF BOX	0.013100			
5.DISCONNECT WIRES FROM TERMINAL	0.009600			
6.TAPE WIRE ENDS	0.014000			
7.TURN POWER SWITCH OFF/ON	0.014100			
8.UNPACK UNIT FROM CARTON	0.015400			
9.CUT,FORM,ALIGN & CONNECT WIRES	0.020200			
10.POSITION CONNECTED UNIT	0.031300			
11.FASTEN UNIT TO BOX	0.012900			
12.TEST FOR OPERATION	0.011200			
13.INSTALL COVER PLATE	0.029000			
14.MATERIAL HANDLING	0.034500			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.367200	0.110160	0.477360
Material Cost \$	4.230000		4.230000
Equipment Hours			0.477360

Components In This Task: 1127100

TASK DATA FORM

Task Code: 112701

Component: RECEPTACLES AND PLUGS System: POWER SYSTEM Subsystem: RECEPTACLES AND PLUGS  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 15.00 A: 20.00 L: 25.00  
 Persons per Team: 1 Task Duration: 0.5109 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPAIR RECEPTACLE	0.393000	COVER	1	1.5000 1.5000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.393000	0.117900	0.510900
Material Cost \$	1.500000		1.500000
Equipment Hours			0.510900

Components In This Task: 1127200

TASK DATA FORM

Task Code: 1127202

Component: RECEPTACLES AND PLUGS System: POWER SYSTEM Subsystem: RECEPTACLES AND PLUGS  
 Task Description: REPLACE REPLACE RECEPTACLE/PLUG  
 Unit of Measure: COUNT Frequency of Occurrence: H: 10.00 A: 20.00 L: 40.00  
 Persons per Team: 1 Task Duration: 0.4774 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.TURN POWER SWITCH OFF/ON	0.014100	RECEPTACLE	1	5.5500
2.REMOVE/REINSTALL COVER PLATES	0.125900			5.5500
3.REMOVE UNIT MOUNTING SCREWS	0.021900			
4.PULL CONNECTED UNIT OUT OF BOX.	0.013100			
5.DISCONNECT WIRES FROM TERMINAL	0.009600			
6.TAPE WIRE ENDS	0.014000			
7.TURN POWER SWITCH OFF/ON	0.014100			
8.UNPACK UNIT FROM CARTON	0.015400			
9.CUT, FORM, ALIGN & CONNECT WIRES	0.020200			
10.POSITION CONNECTED UNIT	0.031300			
11.FASTEN UNIT TO BOX	0.012900			
12.TEST FOR OPERATION	0.011200			
13.INSTALL COVER PLATE	0.029000			
14.MATERIAL HANDLING	0.034500			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.367200	0.110160	0.477360
Material Cost \$	5.550000		5.550000
Equipment Hours			0.477360

Components In This Task: 1127200

TASK DATA FORM

Task Code: 1127301

Component: SWITCH, PULL CORD System: POWER SYSTEM Subsystem: RECEPTACLES AND PLUGS  
 Task Description: M/R MAINTANENCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 5.00 L: 7.00  
 Persons per Team: 1 Task Duration: 0.5005 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR SWITCH	0.385000	COVER PLATE	1 UNIT	1.5000 1.5000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.385000	0.115500	0.500500
Material Cost \$	1.500000		1.500000
Equipment Hours			0.500500

Components In This Task: \_\_\_\_\_

TASK DATA FORM

Task Code: 1127302

Component: SWITCH, PULL CORD System: POWER SYSTEM Subsystem: RECEPTACLES AND PLUGS  
 Task Description: REPLACE REPLACE SWITCH  
 Unit of Measure: COUNT Frequency of Occurrence: H: 8.00 A: 15.00 L: 30.00  
 Persons per Team: 1 Task Duration: 0.4774 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.TURN POWER SWITCH OFF/ON	0.014100	SWITCH	1 UNIT	4.2300 4.2300
2.REMOVE & INSTALL COVER PLATES	0.125900			
3.REMOVE UNIT MOUNTING SCREWS	0.021900			
4.PULL CONNECTED UNIT OUT OF BOX	0.013100			
5.DISCONNECT WIRES FROM TERMINAL	0.009600			
6.TAPE WIRE ENDS	0.014000			
7.TURN POWER SWITCH OFF/ON	0.014100			
8.UNPACK UNIT FROM CARTON	0.015400			
9.CUT, FORM, ALIGN & CONNECT WIRES	0.020200			
10.POSITION CONNECTED UNIT	0.031300			
11.FASTEN UNIT TO BOX	0.012900			
12.TEST FOR OPERATION	0.011200			
13.INSTALL COVER PLATE	0.029000			
14.MATERIAL HANDLING	0.034500			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.367200	0.110160	0.477360
Material Cost \$	4.230000		4.230000
Equipment Hours			0.477360

Components In This Task: \_\_\_\_\_

TASK DATA FORM

Task Code: 1131101

Component: INCANDESCENT LIGHTING FIXT System: LIGHTING SYSTEM Subsystem: LIGHTING FIXTURES  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 10.00 A: 20.00 L: 30.00  
 Persons per Team: 1 Task Duration: 0.3900 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE GLASS GLOBE	0.300000	GLOBE	1	10.0000 10.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.300000	0.090000	0.390000
Material Cost \$	10.000000		10.000000
Equipment Hours			0.390000

Components In This Task: 1131100

TASK DATA FORM

Task Code: 1131102

Component: INCANDESCENT LIGHTING FIXT System: LIGHTING SYSTEM Subsystem: LIGHTING FIXTURES  
 Task Description: M/R LAMPS  
 Unit of Measure: COUNT Frequency of Occurrence: H: 2.00 A: 5.00 L: 8.00  
 Persons per Team: 1 Task Duration: 0.0686 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.CHANGE LAMP IN FLUSH TYPE	0.052800	LAMP	1	0.9000 0.9000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.052800	0.015840	0.068640
Material Cost \$	0.900000		0.900000
Equipment Hours			0.068640

Components In This Task: 1131100

TASK DATA FORM

Task Code: 1131103

Component: INCANDESCENT LIGHTING FIXT System: LIGHTING SYSTEM Subsystem: LIGHTING FIXTURES  
 Task Description: REPLACE LIGHTING FIXTURE  
 Unit of Measure: COUNT Frequency of Occurrence: H: 10.00 A: 20.00 L: 40.00  
 Persons per Team: 1 Task Duration: 0.4485 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.TURN CIRCUIT OFF/ON FOR FIXTURE	0.014100	FIXTURE	1	16.0000
2.INSTALL OUTLET BOX COVER PLATE	0.012900			16.0000
3.CUT LEADS IN BOX/TAPE ENDS	0.016600			
4.DISASSEMBLE/REMOVE FIXTURES	0.090700			
5.REMOVE/UNPACK PARTS FOR FIXTURE	0.015400			
6.INSTALL MOUNTING BRACKETS	0.032100			
7.ASSEMBLE AND HANG FIXTURES	0.163200			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.345000	0.103500	0.448500
Material Cost \$	16.000000		16.000000
Equipment Hours			0.448500

Components In This Task: 1131100

TASK DATA FORM

Task Code: 1131201

Component: QUARTZ FIXTURE System: LIGHTING SYSTEM Subsystem: LIGHTING FIXTURES  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 10.00 L: 20.00  
 Persons per Team: 1 Task Duration: 0.3900 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR GLASS LENS	0.300000	COVER	1	1.1600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.300000	0.090000	0.390000
Material Cost \$	1.160000		1.160000
Equipment Hours			0.390000

Components In This Task: 1131200

TASK DATA FORM

Task Code: 1131202

Component: QUARTZ FIXTURE System: LIGHTING SYSTEM Subsystem: LIGHTING FIXTURES  
 Task Description: H/R REPLACE LAMP  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 10.00 L: 15.00  
 Persons per Team: 1 Task Duration: 0.0328 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE AND REINSTALL LAMP	0.025200	.AMP	1	45.0000
				45.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.025200	0.007560	0.032760
Material Cost \$	45.000000		45.000000
Equipment Hours			0.032760

Components In This Task: 1131200

TASK DATA FORM

Task Code: 1131203

Component: QUARTZ FIXTURE System: LIGHTING SYSTEM Subsystem: LIGHTING FIXTURES  
 Task Description: REPLACE REPLACE FIXTURE  
 Unit of Measure: COUNT Frequency of Occurrence: H: 10.00 A: 20.00 L: 40.00  
 Persons per Team: 1 Task Duration: 0.4485 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.TURN BRANCH CIRCUIT OFF/ON	0.014100	FIXTURE	1	55.0000
2.INSTALL OUTLET BOX COVER PLATE	0.012900			55.0000
3.CUT LEADS IN BOX AND TAPE ENDS	0.016600			
4.DISASSEMBLE AND REMOVE FIXTURES	0.090700			
5.REMOVE AND UNPACK PARTS	0.015400			
6.INSTALL MOUNTING BRACKETS	0.022100			
7.ASSEMBLE AND HANG FIXTURES	0.163200			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.345000	0.103500	0.448500
Material Cost \$	55.000000		55.000000
Equipment Hours			0.448500

Components In This Task: 1131200

TASK DATA FORM

Task Code: 1131301

Component: FLOUR. LIGHTING FIXT. 80W. System: LIGHTING SYSTEM Subsystem: LIGHTING FIXTURES  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 10.00 L: 20.00  
 Persons per Team: 1 Task Duration: 0.8325 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources	
Subtask Description	Labor Hrs	Description	Unit Cost
1.REMOVE AND REINSTALL LOUVER	0.004100	BALLAST	15.0000
2.REMOVE/INSTALL 4 TUBES/FIXTURES	0.238200		15.0000
3.REMOVE OLD/REINSTALL BALLAST	0.384000		
4.TEST FIXTURE	0.014100		

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.640400	0.192120	0.832520
Material Cost \$	15.000000		15.000000
Equipment Hours			0.832520

Components In This Task: 1131300

TASK DATA FORM

Task Code: 1131302

Component: FLOUR. LIGHTING FIXT. 80W. System: LIGHTING SYSTEM Subsystem: LIGHTING FIXTURES  
 Task Description: M/R REPLACE LAMPS (2)  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 10.00 L: 15.00  
 Persons per Team: 1 Task Duration: 0.0459 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources	
Subtask Description	Labor Hrs	Description	Unit Cost
1.CHANGE LAMPS IN FIXTURE	0.035300	LAMPS	2.2500
			4.5000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.035300	0.010590	0.045890
Material Cost \$	4.500000		4.500000
Equipment Hours			0.045890

Components In This Task: 1131300



TASK DATA FORM

Task Code: 1131303

Component: FLOUR. LIGHTING FIXT. 80W. System: LIGHTING SYSTEM Subsystem: LIGHTING FIXTURES  
 Task Description: REPLACE REPLACE FIXTURE  
 Unit of Measure: COUNT Frequency of Occurrence: H: 10.00 A: 20.00 L: 40.00  
 Persons per Team: 1 Task Duration: 0.7413 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.TURN BRANCH CIRCUIT OFF/ON	0.014100	FIXTURE	1	64.0000
2.REMOVE AND REINSTALL BOX COVER	0.025700			64.0000
3.CUT LEADS IN BOX AND TAPE ENDS	0.016500			
4.REMOVE CABLE CONNECTOR	0.081000			
5.INSTALL KNOCKOUT HOLE PLUG	0.012800			
6.REMOVE/REINSTALL LOUVER	0.004100			
7.DISASSEMBLE/REMOVE FIXTURES	0.102900			
8.REMOVE AND UNPACK PARTS	0.030200			
9.INSTALL MOUNTING BRACKETS	0.064300			
10.ASSEMBLE/HANG OPEN REFLECTOR	0.218600			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.570200	0.171060	0.741260
Material Cost \$	64.000000		64.000000
Equipment Hours			0.741260

Components In This Task: 1131300

TASK DATA FORM

Task Code: 1131411

Component: MERCURY VAPOR FIXT. 175W. System: LIGHTING SYSTEM Subsystem: LIGHTING FIXTURES  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 10.00 L: 20.00  
 Persons per Team: 1 Task Duration: 0.6154 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE AND REINSTALL LOUVER	0.004100	BALLAST	1	50.0000
2.REMOVE AND REINSTALL 1 TUBE	0.071200			50.0000
3.REMOVE OLD/REINSTALL BALLAST	0.384000			
4.TEST FIXTURES	0.014100			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.473400	0.142020	0.615420
Material Cost \$	50.000000		50.000000
Equipment Hours			0.615420

Components In This Task: 1131410

TASK DATA FORM

Task Code: 1131412

Component: MERCURY VAPOR FIXT. 175W. System: LIGHTING SYSTEM Subsystem: LIGHTING FIXTURES  
 Task Description: M/R REPLACE LAMP  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 10.00 L: 15.00  
 Persons per Team: 1 Task Duration: 0.0686 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.CHANGE LAMP IN FLUSH FIXTURE	0.052800	LAMP	1	27.0000 27.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.052800	0.015840	0.068640
Material Cost \$	27.000000		27.000000
Equipment Hours			0.068640

Components In This Task: 1131410

TASK DATA FORM

Task Code: 1131413

Component: MERCURY VAPOR FIXT. 175W. System: LIGHTING SYSTEM Subsystem: LIGHTING FIXTURES  
 Task Description: REPLACE REPLACE FIXTURE  
 Unit of Measure: COUNT Frequency of Occurrence: H: 10.00 A: 20.00 L: 40.00  
 Persons per Team: 1 Task Duration: 0.5816 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.TURN BRANCH CIRCUIT OFF AND ON	0.014100	FIXTURE	1	127.0000
2.INSTALL OUTLET BOX COVER PLATE	0.012900			127.0000
3.CUT LEADS IN BOX AND TAPE ENDS	0.016600			
4.DISASSEMBLE/REMOVE FIXTURES	0.090700			
5.REMOVE AND UNPACK PARTS	0.030200			
6.INSTALL MOUNTING BRACKETS	0.064300			
7.ASSEMBLE AND HA'IG REFLECTOR	0.218600			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.447400	0.134220	0.581620
Material Cost \$	127.000000		127.000000
Equipment Hours			0.581620

Components In This Task: 1131410

TASK DATA FORM

Task Code: 1131421

Component: METAL-HALIDE FIXT. 175W. System: LIGHTING SYSTEM Subsystem: LIGHTING FIXTURES  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 10.00 L: 20.00  
 Persons per Team: 1 Task Duration: 0.6154 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE AND REINSTALL LOUVER	0.004100	BALLAST	1	65.0000
2.REMOVE AND REINSTALL 1 TUBE	0.071200			65.0000
3.REMOVE OLD/INSTALL NEW BALLAST	0.384000			
4.TEST FIXTURE	0.014100			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.473400	0.142020	0.615420
Material Cost \$	65.000000		65.000000
Equipment Hours			0.615420

Components In This Task: 1131420

TASK DATA FORM

Task Code: 1131422

Component: METAL-HALIDE FIXT. 175W. System: LIGHTING SYSTEM Subsystem: LIGHTING FIXTURES  
 Task Description: M/R REPLACE LAMP  
 Unit of Measure: COUNT Frequency of Occurrence: H: 3.00 A: 5.00 L: 8.00  
 Persons per Team: 1 Task Duration: 0.0686 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.CHANGE LAMP IN FIXTURE	0.052800	LAMP	1	40.0000
				40.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.052800	0.015840	0.068640
Material Cost \$	40.000000		40.000000
Equipment Hours			0.068640

Components In This Task: 1131420

TASK DATA FORM

Task Code: 1131423

Component: METAL-HALIDE FIXT. 175W. System: LIGHTING SYSTEM Subsystem: LIGHTING FIXTURES  
 Task Description: REPLACE REPLACE FIXTURE  
 Unit of Measure: COUNT Frequency of Occurrence: H: 10.00 A: 20.00 L: 40.00  
 Persons per Team: 1 Task Duration: 0.4355 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.TURN BRANCH CIRCUIT OFF AND ON	0.014100	FIXTURE	1	186.0000
2.INSTALL OUTLET BOX COVER PLATE	0.012900			186.0000
3.CUT LEADS IN BOX AND TAPE ENDS	0.016600			
4.DISASSEMBLE AND REMOVE FIXTURES	0.090700			
5.REMOVE AND UNPACK PARTS	0.015400			
6.INSTALL MOUNTING BRACKETS	0.032100			
7.ASSEMBLE AND HANG FIXTURES	0.153200			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.335000	0.100500	0.435500
Material Cost \$	186.000000		186.000000
Equipment Hours			0.435500

Components In This Task: 1131420

TASK DATA FORM

Task Code: 1131501

Component: EMERGENCY LIGHTING FIXT. System: LIGHTING SYSTEM Subsystem: LIGHTING FIXTURES  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 10.00 L: 20.00  
 Persons per Team: 1 Task Duration: 0.3900 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPLACE LENS	0.300000	LENS	1	1.1600
				1.1600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.300000	0.090000	0.390000
Material Cost \$	1.160000		1.160000
Equipment Hours			0.390000

Components In This Task: 1131500

TASK DATA FORM

Task Code: 1131502

Component: EMERGENCY LIGHTING FIXT. System: LIGHTING SYSTEM Subsystem: LIGHTING FIXTURES  
 Task Description: M/R REPLACE LAMP  
 Unit of Measure: COUNT Frequency of Occurrence: H: 3.00 A: 2.00 L: 3.00  
 Persons per Team: 1 Task Duration: 0.0686 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.CHANGE LAMP IN FIXTURES	0.052800	LAMP	1	1.1400
				1.1400

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.052800	0.015840	0.068640
Material Cost \$	1.140000		1.140000
Equipment Hours			0.068640

Components in This task: 1131500

TASK DATA FORM

Task Code: 1131503

Component: EMERGENCY LIGHTING FIXT. System: LIGHTING SYSTEM Subsystem: LIGHTING FIXTURES  
 Task Description: REPLACE REPLACE FIXTURE  
 Unit of Measure: COUNT Frequency of Occurrence: H: 10.00 A: 20.00 L: 40.00  
 Persons per Team: 1 Task Duration: 3.1478 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.TURN BRANCH CIRCUIT OFF AND ON	0.014100	FIXTURE	1	95.0000
2.INSTALL OUTLET BOX COVER PLATE	0.012900			95.0000
3.CUT LEADS IN BOX AND TAPE ENDS	0.016600			
4.DISASSEMBLE AND REMOVE FIXTURES	0.090700			
5.INSTALL CONDUIT TO WALL	1.797000			
6.MOUNT ADJACENT TO RECEPTACLE	0.490100			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.421400	0.726420	3.147820
Material Cost \$	95.000000		95.000000
Equipment Hours			3.147820

Components in This Task: 1131500

TASK DATA FORM

Task Code: 1131611

Component: H.P. SODIUM FIXT. 250W. System: LIGHTING SYSTEM Subsystem: LIGHTING FIXTURES  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 10.00 L: 20.00  
 Persons per Team: 2 Task Duration: 0.3077 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE AND REINSTALL LOUVER	0.004100	BALLAST	1	220.0000
2.REMOVE AND REINSTALL 1 TUBE	0.071200			220.0000
3.REMOVE OLD/INSTALL NEW BALLAST	0.384000			
4.TEST FIXTURE	0.014100			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.473400	0.142020	0.615420
Material Cost \$	220.000000		220.000000
Equipment Hours			0.307710

Components In This Task: 1131610

TASK DATA FORM

Task Code: 1131612

Component: H.P. SODIUM FIXT. 250W. System: LIGHTING SYSTEM Subsystem: LIGHTING FIXTURES  
 Task Description: M/R REPLACE LAMP  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 10.00 L: 15.00  
 Persons per Team: 2 Task Duration: 0.1002 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE AND REINSTALL FLOODLIGHT	0.154200	LAMP	1	140.0000
				140.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.154200	0.046260	0.200460
Material Cost \$	140.000000		140.000000
Equipment Hours			0.100230

Components In This Task: 1131610

TASK DATA FORM

Task Code: 1131613

Component: H.P. SODIUM FIXT. 250W. System: LIGHTING SYSTEM Subsystem: LIGHTING FIXTURES  
 Task Description: REPLACE REPLACE FIXTURE  
 Unit of Measure: COUNT Frequency of Occurrence: H: 10.00 A: 20.00 L: 40.00  
 Persons per Team: 2 Task Duration: 0.2243 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1. TURN BRANCH CIRCUIT OFF AND ON	0.014100	FIXTURE	1	412.0000
2. INSTALL OUTLET BOX COVER PLATE	0.012900			412.0000
3. CUT LEADS IN BOX AND TAPE ENDS	0.016600			
4. DISASSEMBLE AND REMOVE FIXTURES	0.090700			
5. REMOVE AND UNPACK PARTS	0.015400			
6. INSTALL MOUNTING BRACKETS	0.032100			
7. ASSEMBLE AND HANG FIXTURES	0.163200			

SUMMARY

Resources UOH	Direct	Indirect	Total
Labor Hours	0.345000	0.103500	0.448500
Material Cost \$	412.000000		412.000000
Equipment Hours			0.224250

Components In This Task: 1131610

TASK DATA FORM

Task Code: 1131621

Component: L.P. SODIUM FIXT. 200W. System: LIGHTING SYSTEM Subsystem: LIGHTING FIXTURES  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 10.00 L: 20.00  
 Persons per Team: 2 Task Duration: 0.3077 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1. REMOVE AND REINSTALL COVER	0.004100	BALLAST	1	160.0000
2. REMOVE AND REINSTALL 1 TUBE	0.071200			160.0000
3. REMOVE OLD/REINSTALL BALLAST	0.384000			
4. TEST FIXTURES	0.014100			

SUMMARY

Resources UOH	Direct	Indirect	Total
Labor Hours	0.473400	0.142020	0.615420
Material Cost \$	160.000000		160.000000
Equipment Hours			0.307710

Components In This Task: 1131620

TASK DATA FORM

Task Code: 1131622

Component: L.P. SODIUM FIXT. 200W. System: LIGHTING SYSTEM Subsystem: LIGHTING FIXTURES  
 Task Description: M/R REPLACE LAMP  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 10.00 L: 15.00  
 Persons per Team: 2 Task Duration: 0.1002 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE/INSTALL LAMP	0.154200	LAMP	1	25.0000 25.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.154200	0.046260	0.200460
Material Cost \$	25.000000		25.000000
Equipment Hours			0.100230

Components In This Task: 1131620

TASK DATA FORM

Task Code: 1131623

Component: L.P. SODIUM FIXT. 200W. System: LIGHTING SYSTEM Subsystem: LIGHTING FIXTURES  
 Task Description: REPLACE REPLACE FIXTURE  
 Unit of Measure: COUNT Frequency of Occurrence: H: 10.00 A: 20.00 L: 40.00  
 Persons per Team: 2 Task Duration: 0.2243 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.TURN BRANCH CIRCUIT OFF AND ON	0.014100	FIXTURE	1	322.0000 322.0000
2.INSTALL OUTLET BOX COVER PLATE	0.012900			
3.CUT LEADS IN BOX AND TAPE ENDS	0.016600			
4.DISASSEMBLE AND REMOVE FIXTURES	0.090700			
5.REMOVE AND UNPACK PARTS	0.015400			
6.INSTALL MOUNTING BRACKETS	0.032100			
7.ASSEMBLE AND HANG FIXTURES	0.163200			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.345000	0.103500	0.448500
Material Cost \$	322.000000		322.000000
Equipment Hours			0.224250

Components In This Task: 1131620



TASK DATA FORM

Task Code: 1131701

Component: EXIT LIGHT System: LIGHTING SYSTEM Subsystem: LIGHTING FIXTURES  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 10.00 A: 20.00 L: 30.00  
 Persons per Team: 1 Task Duration: 0.3900 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE GLASS GLOBE	0.300000	GLOBE	1	10.0000 10.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.300000	0.090000	0.390000
Material Cost \$	10.000000		10.000000
Equipment Hours			0.390000

Components In This Task: 1131700

TASK DATA FORM

Task Code: 1131702

Component: EXIT LIGHT System: LIGHTING SYSTEM Subsystem: LIGHTING FIXTURES  
 Task Description: M/R LAMPS  
 Unit of Measure: COUNT Frequency of Occurrence: H: 2.00 A: 5.00 L: 8.00  
 Persons per Team: 1 Task Duration: 0.0686 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.CHANGE LAMP	0.052800	LAMP	1	4.5000 4.5000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.052800	0.015840	0.068640
Material Cost \$	4.500000		4.500000
Equipment Hours			0.068640

Components In This Task: 1131700

TASK DATA FORM

Task Code: 1131703

Component: EXIT LIGHT System: LIGHTING SYSTEM Subsystem: LIGHTING FIXTURES  
 Task Description: REPLACE REPLACE LIGHTING FIXTURE  
 Unit of Measure: COUNT Frequency of Occurrence: H: 10.00 A: 20.00 L: 40.00  
 Persons per Team: 1 Task Duration: 0.4485 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1. TURN CIRCUIT OFF/ON FOR FIXTURE	0.012100	FIXTURE	1	12.7000
2. INSTALL OUTLET BOX COVER PLATE	0.012900			12.7000
3. CUT LEADS IN BOX/TAPE ENDS	0.016600			
4. DISASSEMBLE/REMOVE FIXTURES	0.090700			
5. REMOVE/UNPACK PARTS FOR FIXTURE	0.015400			
6. INSTALL MOUNTING BRACKETS	0.032100			
7. ASSEMBLE AND HANG FIXTURES	0.163200			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.345000	0.103500	0.448500
Material Cost \$	12.700000		12.700000
Equipment Hours			0.448500

Components In This Task: 1131703

TASK DATA FORM

Task Code: 1141001

Component: ELECTRICAL SERVICE GROUND System: GROUNDING SYSTEM Subsystem: ELECTRICAL SERVICE GRD.  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: 1000 LINEAR FEET Frequency of Occurrence: H: 12.00 A: 25.00 L: 75.00  
 Persons per Team: 1 Task Duration: 1.0548 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1. REPAIR 1 STORAGE GROUNDING TERM	0.811400	CLAMP	1	2.2200
				2.2200

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.811400	0.243420	1.054820
Material Cost \$	2.220000		2.220000
Equipment Hours			1.054820

Components In This Task: 1141000

TASK DATA FORM

Task Code: 1141002

Component: ELECTRICAL SERVICE GROUND System: GROUNDING SYSTEM Subsystem: ELECTRICAL SERVICE GRD.  
 Task Description: REPLACE REPLACE ELECTRICAL SERVICE GROUND  
 Unit of Measure: 1000 LINEAR FEET Frequency of Occurrence: H: 25.00 A: 50.00 L: 150.00  
 Persons per Team: 1 Task Duration: 11.9712 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.EXCAVATE HOLE FOR GROUND ROD	1.718400	GR. ROD	10	16.0000
2.DRIVE GROUND ROD INTO GROUND	1.855600	CLAMP	10	2.2200
3.CONNECT GROUND WIRE TO ROD	0.224900	WIRE(#6)	1000 FT	0.1200
4.BACKFILL OVER TOP OF GROUND	0.828800			302.2000
5.MATERIAL HANDLING	0.345300			
6.PULL NO.6 TO NO.2 WIRES THROUGH	4.235600			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	9.205600	2.762580	11.971180
Material Cost \$	302.200000		302.200000
Equipment Hours			11.971180

Components In This Task: 1141000

TASK DATA FORM

Task Code: 1142001

Component: BUILDING STRUCTURE GROUND System: GROUNDING SYSTEM Subsystem: BLDG. STRUCTURE GROUND  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: 1000 LINEAR FEET Frequency of Occurrence: H: 4.00 A: 7.00 L: 21.00  
 Persons per Team: 1 Task Duration: 1.0548 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR 1 STORAGE GROUNDING TERM	0.811400	CLAMP	1	2.2200
				2.2200

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.811400	0.243420	1.054820
Material Cost \$	2.220000		2.220000
Equipment Hours			1.054820

Components In This Task: 1142000

TASK DATA FORM

Task Code: 1142002

Component: BUILDING STRUCTURE GROUND System: GROUNDING SYSTEM Subsystem: BLDG. STRUCTURE GROUND  
 Task Description: REPLACE REPLACE BUILDING SERVICE GROUND  
 Unit of Measure: 1000 LINEAR FEET Frequency of Occurrence: H: 75.00 A: 150.00 L: 300.00  
 Persons per Team: 1 Task Duration: 11.9712 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs
1.EXCAVATE HOLE FOR GROUND ROD	1.718400
2.DRIVE GROUND ROD INTO GROUND	1.855600
3.CONNECT GROUND WIRE TO ROD	0.224900
4.BACKFILL OVER TOP OF GROUND	0.828800
5.MATERIAL HANDLING	0.345300
6.PULL NO.6 TO NO.2 WIRES THROUGH	4.235600

Description	Quantity	Unit Cost
GR. ROD	10	18.0000
CLAMP	10	2.2200
WIRE(#4)	1000FT	0.1800
		<u>362.2000</u>

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	9.208600	2.762580	11.971180
Material Cost \$	362.200000		362.200000
Equipment Hours			11.971180

Components In This Task: 1142000

TASK DATA FORM

Task Code: 1143111

Component: LIGHTNING PROTECTION SYS. System: GROUNDING SYSTEM Subsystem: LIGHTNING PROTECTION  
 Task Description: M/R MAINTENANCE AND REPAIR OF GENERAL WIRING  
 Unit of Measure: 1000 LINEAR FEET Frequency of Occurrence: H: 0.50 A: 1.00 L: 3.00  
 Persons per Team: 1 Task Duration: 1.0548 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs
1.REPAIR 1 STORAGE GROUNDING TERM	0.811400

Description	Quantity	Unit Cost
CONNECTION	1	3.5500
		<u>3.5500</u>

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.811400	0.243420	1.054820
Material Cost \$	3.550000		3.550000
Equipment Hours			1.054820

Components In This Task: 1143110

TASK DATA FORM

Task Code: 1143112

Component: LIGHTNING PROTECTION SYS. System: GROUNDING SYSTEM Subsystem: LIGHTNING PROTECTION  
 Task Description: REPLACE REPLACE LIGHTNING PROTECTION GENERAL WIRING  
 Unit of Measure: 1000 LINEAR FEET Frequency of Occurrence: H: 12.00 A: 25.00 L: 75.00  
 Persons per Team: 2 Task Duration: 5.7633 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.CUT/PULL WIRES NO.6 TO 2 OUT	1.174400	GR. ROD	10	16.0000
2.EXCAVATE HOLE FOR GROUND ROD	0.202000	CADWELD	10	33.0000
3.DRIVE GROUND ROD INTO GROUND	1.855600	WIRE(#4)	1000 FT	0.1800
4.CONNECT GROUND WIRE TO ROD	0.224900	AIR TERM.	10	1.7600
5.BACKFILL OVER TOP OF GROUND	0.828800	BASE	10	4.8100
6.MATERIAL HANDLING	0.345300			735.7000
7.PULL NO.6 TO NO.2 WIRES THRU	4.235600			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	8.866600	2.659980	11.526580
Material Cost \$	735.700000		735.700000
Equipment Hours			5.763290

Components In This Task: 1143110

TASK DATA FORM

Task Code: 1143511

Component: LIGHTNING GR. ROD System: GROUNDING SYSTEM Subsystem: LIGHTNING PROTECTION  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.50 A: 1.00 L: 3.00  
 Persons per Team: 1 Task Duration: 1.0548 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR TERMINAL	0.811400	CONNECTOR	1	3.5500
				3.5500

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.811400	0.243420	1.054820
Material Cost \$	3.550000		3.550000
Equipment Hours			1.054820

Components In This Task: 1143511

TASK DATA FORM

Task Code: 1143512

Component: LIGHTNING GR. ROD System: GROUNDING SYSTEM Subsystem: LIGHTNING PROTECTION  
 Task Description: REPLACE REPLACE LIGHTNING GROUND ROD  
 Unit of Measure: COUNT Frequency of Occurrence: H: 12.00 A: 25.00 L: 75.00  
 Persons per Team: 2 Task Duration: 1.3000 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPLACE GROUNDING ROD	2.000000	ROD	1	9.8500
		CONNECTOR	1	3.5500
				13.4000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.000000	0.600000	2.600000
Material Cost \$	13.400000		13.400000
Equipment Hours			1.300000

Components In This Task: 1143510

TASK DATA FORM

Task Code: 1144001

Component: COMPUTER GROUND SYSTEM System: GROUNDING SYSTEM Subsystem: COMPUTER GROUND SYSTEM  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: 1000 LINEAR FEET Frequency of Occurrence: H: 2.00 A: 4.00 L: 12.00  
 Persons per Team: 1 Task Duration: 0.2638 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.TEST BONDING OF GROUNDING SYS.	0.202900	CONN	1	1.3600
				1.3600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.202900	0.060870	0.263770
Material Cost \$	1.360000		1.360000
Equipment Hours			0.263770

Components In This Task: 1144000

TASK DATA FORM

Task Code: 1144002

Component: COMPUTER GROUND SYSTEM System: GROUNDING SYSTEM Subsystem: COMPUTER GROUND SYSTEM  
 Task Description: REPLACE REPLACE COMPUTER GROUND SYSTEM  
 Unit of Measure: 1000 LINEAR FEET Frequency of Occurrence: H: 30.00 A: 60.00 L: 180.00  
 Persons per Team: 1 Task Duration: 7.0330 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1. CUT/PULL WIRES NO.6 TO 2 OUT	1.174400	WIRE(#8)	1000FT	0.0800
2. PULL NO.6 TO NO.2 WIRES THROUGH	4.235600	CONN.	10	1.3600
				93.6000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	5.410000	1.623000	7.033000
Material Cost \$	93.600000		93.600000
Equipment Hours			7.033000

Components In This Task: 1144000

TASK DATA FORM

Task Code: 1145001

Component: SPECIAL GROUND SYSTEM System: GROUNDING SYSTEM Subsystem: SPECIAL GROUND SYSTEM  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: 1000 LINEAR FEET Frequency of Occurrence: H: 2.00 A: 4.00 L: 12.00  
 Persons per Team: 1 Task Duration: 0.2638 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1. TEST BONDING OF GROUNDING SYS.	0.202900	CONN	1	1.3600
				1.3600

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.202900	0.060870	0.263770
Material Cost \$	1.360000		1.360000
Equipment Hours			0.263770

Components In This Task: 1145000

TASK DATA FORM

Task Code: 1145002

Component: SPECIAL GROUND SYSTEM System: GROUNDING SYSTEM Subsystem: SPECIAL GROUND SYSTEM  
 Task Description: REPLACE REPLACE SPECIAL GROUND SYSTEM  
 Unit of Measure: 1000 LINEAR FEET Frequency of Occurrence: H: 30.00 A: 60.00 L: 180.00  
 Persons per Team: 2 Task Duration: 3.5165 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.CUT/PULL WIRES NO.6 TO 2 OUT	1.174400	WIRE(#8)	1000FT	0.0800
2.PULL NO.6 TO NO.2 WIRES THROUGH	4.235600	CONN	10	1.3600
				<u>93.6000</u>

SUMMARY

Resources	UOM	Direct	Indirect	Total
Labor	Hours	5.410000	1.623000	7.033000
Material	Cost \$	93.600000		93.600000
Equipment	Hours			3.516500

Components In This Task: 1145000



TASK DATA FORM

Task Code: 1211101

Component: 4-PIN RECEPTACLE System: SOUND SYSTEM Subsystem: TELEPHONE SYSTEM  
 Task Description: M/R REPAIR 4-PIN RECEPTACLE  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 10.00 L: 20.00  
 Persons per Team: 1 Task Duration: 0.6906 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPAIR RECEPTACLE	0.462000	COVER	1	0.9000 0.9000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.462000	0.138600	0.600600
Material Cost \$	0.900000		0.900000
Equipment Hours			0.600600

Components In This Task: 1211100

TASK DATA FORM

Task Code: 1211102

Component: 4-PIN RECEPTACLE System: SOUND SYSTEM Subsystem: TELEPHONE SYSTEM  
 Task Description: REPLACE REPLACE 4-PIN RECEPTACLE  
 Unit of Measure: COUNT Frequency of Occurrence: H: 10.00 A: 20.00 L: 40.00  
 Persons per Team: 1 Task Duration: 0.8060 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE RECEPTACLE	0.620000	RECEPTACLE	1	2.5700 2.5700

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.620000	0.186000	0.806000
Material Cost \$	2.570000		2.570000
Equipment Hours			0.806000

Components In This Task: 1211100

TASK DATA FORM

Task Code: 1211201

Component: TELEPHONE CABLE System: SOUND SYSTEM Subsystem: TELEPHONE SYSTEM  
 Task Description: M/R REPAIR CABLE, 22 AWG, 4 PAIR  
 Unit of Measure: 1000 LINEAR FEET Frequency of Occurrence: H: 5.00 A: 8.00 L: 10.00  
 Persons per Team: 1 Task Duration: 0.5512 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.CUT WIRES	0.062000	THERMAL SLV.	6 IN	0.0100
2.SPLICE AND INSULATE	0.362000	TERMINAL	8	0.0300
		TAPE	12 IN	0.0100
				<u>0.4200</u>

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.424000	0.127200	0.551200
Material Cost \$	0.420000		0.420000
Equipment Hours			0.551200

Components In This Task: 1211200

TASK DATA FORM

Task Code: 1211202

Component: TELEPHONE CABLE System: SOUND SYSTEM Subsystem: TELEPHONE SYSTEM  
 Task Description: REPLACE REPLACE TELEPHONE CABLE, 22 AWG, 4 PAIR  
 Unit of Measure: 1000 LINEAR FEET Frequency of Occurrence: H: 25.00 A: 50.00 L: 100.00  
 Persons per Team: 2 Task Duration: 6.7737 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.SHUT OFF POWER	0.014000	WIRE, 22 AWG	1000 FT	0.2800
2.REMOVE COVER PLATES	0.048000	STAPLES	250	0.0100
3.REMOVE RECEPTACLES	0.216000			<u>282.5000</u>
4.PULL WIRE SPLICES	0.006000			
5.REMOVE TAPE	0.025000			
6.CUT CONDUCTORS	0.019000			
7.CUT CABLE	0.090000			
8.REMOVE CABLE	0.032000			
9.REMOVE STAPLES	1.613000			
10.REMOVE BOXES	0.198000			
11.RETAPE LEADS	0.006000			
12.INSTALL COVER PLATES	0.012000			
13.LADDER TIME	1.414000			
14.INSTALL NEW BOXES	0.138000			
15.INSTALL CABLE	4.960000			
16.REMOVE BOX COVERS	0.012000			
17.REMOVE PLUGS	0.111000			
18.FASTEN CABLE	1.359000			
19.MOVE WIRE SPLICES	0.008000			
20.LADDER TIME	0.140000			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	10.421000	3.126300	13.547300
Material Cost \$	282.500000		282.500000
Equipment Hours			6.773650

Components In This Task: 1211200

TASK DATA FORM

Task Code: 1215001

Component: DOOR BELL System: SOUND SYSTEM Subsystem: DOOR BELL  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 10.00 L: 15.00  
 Persons per Team: 1 Task Duration: 0.6500 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE TRANSFORMER	0.500000	TRANSFORMER	1	8.0000 8.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.500000	0.150000	0.650000
Material Cost \$	8.000000		8.000000
Equipment Hours			0.650000

Components In This Task: 1215000

TASK DATA FORM

Task Code: 1215002

Component: DOOR BELL System: SOUND SYSTEM Subsystem: DOOR BELL  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 1.00 A: 1.00 L: 1.00  
 Persons per Team: 1 Task Duration: 0.3250 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.CHECK OPERATION	0.250000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.250000	0.075000	0.325000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.325000

Components In This Task: 1215000

TASK DATA FORM

Task Code: 1215003

Component: DOOR BELL System: SOUND SYSTEM Subsystem: DOOR BELL  
 Task Description: REPLACE REPLACE DOOR BELL  
 Unit of Measure: COUNT Frequency of Occurrence: H: 10.00 A: 15.00 L: 20.00  
 Persons per Team: 1 Task Duration: 3.2500 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE DOORBELL SYSTEM	2.500000	BUTTON	1	4.5000
		TRANS.	1	8.0000
		BL'L	1	24.5000
				<u>37.0000</u>

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.500000	0.750000	3.250000
Material Cost \$	37.000000		37.000000
Equipment Hours			3.250000

Components In This Task: 1215000

TASK DATA FORM

Task Code: 1221101

Component: MANUAL PULL STATION System: ALARM SYSTEM Subsystem: FIRE ALARM SYSTEM  
 Task Description: R/R CHECK AND REPAIR MANUAL PULL STATION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 10.00 L: 15.00  
 Persons per Team: 1 Task Duration: 0.5200 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE GLASS ROD	0.400000	GLASS ROD	1	0.7500
				<u>0.7500</u>

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.400000	0.120000	0.520000
Material Cost \$	0.750000		0.750000
Equipment Hours			0.520000

Components In This Task: 1221103

TASK DATA FORM

Task Code: 1221102

Component: MANUAL PULL STATION System: ALARM SYSTEM Subsystem: FIRE ALARM SYSTEM  
 Task Description: REPLACE REPLACE MANUAL PULL STATION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 10.00 A: 15.00 L: 25.00  
 Persons per Team: 1 Task Duration: 0.2834 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1. TURN POWER SWITCH OFF AND ON	0.028000	PULL STATION	1	38.0000
2. REMOVE/INSTALL COVER PLATE	0.025000			38.0000
3. REMOVE UNIT MTG. SCREWS	0.012000			
4. PULL UNIT OUT OF BOX	0.013000			
5. DISCONNECT WIRES	0.010000			
6. TAPE WIRE ENDS	0.013000			
7. UNPACK UNIT FROM CARTON	0.015000			
8. ALIGN WIRES	0.019000			
9. POSITION UNIT	0.012000			
10. FASTEN UNIT TO BOX	0.012000			
11. TEST OPERATION	0.011000			
12. INSTALL COVER PLATE	0.012000			
13. MATERIAL HANDLING	0.035000			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.218000	0.065400	0.283400
Material Cost \$	38.000000		38.000000
Equipment Hours			0.283400

Components In This Task: 1221100

TASK DATA FORM

Task Code: 1221201

Component: SMOKE DETECTOR System: ALARM SYSTEM Subsystem: FIRE ALARM SYSTEM  
 Task Description: M/R REPAIR SMOKE DETECTOR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 10.00 L: 15.00  
 Persons per Team: 1 Task Duration: 0.5200 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1. REPLACE LAMP	0.400000	LAMP	1	2.5000
				2.5000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.400000	0.120000	0.520000
Material Cost \$	2.500000		2.500000
Equipment Hours			0.520000

Components In This Task: 1221200

TASK DATA FORM

Task Code: 1221202

Component: SMOKE DETECTOR System: ALARM SYSTEM Subsystem: FIRE ALARM SYSTEM  
 Task Description: PM CHECK OPERATION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 1.00 A: 1.00 L: 1.00  
 Persons per Team: 1 Task Duration: 0.1950 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.CHECK OPERATION	0.150000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.150000	0.045000	0.195000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.195000

Components In This Task: 1221500 1221200

TASK DATA FORM

Task Code: 1221203

Component: SMOKE DETECTOR System: ALARM SYSTEM Subsystem: FIRE ALARM SYSTEM  
 Task Description: REPLACE REPLACE SMOKE DETECTOR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 10.00 A: 15.00 L: 20.00  
 Persons per Team: 1 Task Duration: 0.4147 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.UNPACK UNIT	0.030000	DETECTOR	1	74.0000
2.TURN CONTROL ON AND OFF	0.028000			74.0000
3.REMOVE COVER PLATES	0.017000			
4.TURN POWER OFF	0.060000			
5.DISCONNECT LEADS	0.014000			
6.REMOVE OLD INSTALL NEW	0.076000			
7.CONNECT LEADS	0.057000			
8.ADJUST UNIT	0.013000			
9 INSTALL COVER	0.008000			
10.CHECK OPERATION	0.016000			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.319000	0.095700	0.414700
Material Cost \$	74.000000		74.000000
Equipment Hours			0.414700

Components In This Task: 1221200

TASK DATA FORM

Task Code: 1221301

Component: FIRE ALARM BELL System: ALARM SYSTEM Subsystem: FIRE ALARM SYSTEM  
 Task Description: REPLACE REPLACE FIRE ALARM BELL, 6"  
 Unit of Measure: COUNT Frequency of Occurrence: H: 10.00 A: 20.00 L: 30.00  
 Persons per Team: 1 Task Duration: 0.2873 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources	
Subtask Description	Labor Hrs
1.TURN POWER ON AND OFF	0.028000
2.REMOVE/INSTALL COVER PLATES	0.025000
3.REMOVE UNIT SCREWS	0.014000
4.REMOVE UNIT	0.013000
5.DISCONNECT WIRES	0.010000
6.TAPE WIRES	0.013000
7.UNPACK UNIT	0.015000
8.CUT WIRES	0.020000
9.POSITION UNIT	0.013000
10.FASTEN UNIT TO BOX	0.012000
11.TEST OPERATION	0.011000
12.INSTALL COVER PLATE	0.012000
13.MATERIAL HANDLING	0.035000

Material Resources		
Description	Quantity	Unit Cost
ALARM BELL	1	33.0000
		33.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.221000	0.066300	0.287300
Material Cost \$	33.000000		33.000000
Equipment Hours			0.287300

Components In This Task: 1221300

TASK DATA FORM

Task Code: 1221401

Component: ANNUNCIATION PANEL System: ALARM SYSTEM Subsystem: FIRE ALARM SYSTEM  
 Task Description: M/R MINOR REPAIRS TO ANNUNCIATION PANEL  
 Unit of Measure: COUNT Frequency of Occurrence: H: 2.00 A: 5.00 L: 8.00  
 Persons per Team: 1 Task Duration: 0.4082 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources	
Subtask Description	Labor Hrs
1.CHECK COMPONENTS	0.126000
2.TEST PARTS	0.045000
3.REMOVE/INSTALL NEW PARTS	0.143000

Material Resources		
Description	Quantity	Unit Cost
RELAY	1	25.0000
		25.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.314000	0.094200	0.408200
Material Cost \$	25.000000		25.000000
Equipment Hours			0.408200

Components In This Task: 1221400

TASK DATA FORM

Task Code: 1221402

Component: ANNUNCIATION PANEL System: ALARM SYSTEM Subsystem: FIRE ALARM SYSTEM  
 Task Description: PH PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.50 A: 0.50 L: 0.50  
 Persons per Team: 1 Task Duration: 0.5200 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.CHECK PANEL,PULL STATIONS/BELLS	0.400000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.400000	0.120000	0.520000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.520000

Components In This Task: 1221400

TASK DATA FORM

Task Code: 1221403

Component: ANNUNCIATION PANEL System: ALARM SYSTEM Subsystem: FIRE ALARM SYSTEM  
 Task Description: REPLACE REPLACE ANNUNCIATION PANEL  
 Unit of Measure: COUNT Frequency of Occurrence: H: 10.00 A: 15.00 L: 25.00  
 Persons per Team: 1 Task Duration: 1.7615 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE COVER	0.035000	PANEL	1	300.0000
2.DISCONNECT LEADS	0.056000			300.0000
3.REMOVE LINE CONDUCTOR	0.036000			
4.REMOVE LOCK NUTS FROM CONDUIT	0.009000			
5.REMOVE BUSHING	0.011000			
6.LOOSEN NUTS	0.014000			
7.STRAIGHTEN WIRES	0.121000			
8.REMOVE PANEL	0.040000			
9.MOUNT PANEL	0.639000			
10.SET WIRES	0.042000			
11.INSTALL CONNECTORS	0.067000			
12.CONNECT WIRES	0.229000			
13.TEST CIRCUITS	0.056000			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.355000	0.406500	1.761500
Material Cost \$	300.000000		300.000000
Equipment Hours			1.761500

Components In This Task: 1221400



TASK DATA FORM

Task Code: 1221501

Component: HEAT DETECTOR System: ALARM SYSTEM Subsystem: FIRE ALARM SYSTEM  
 Task Description: REPAIR REPAIR HEAT DETECTOR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 10.00 L: 15.00  
 Persons per Team: 1 Task Duration: 0.5200 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE ELEMENT	0.400000	ELEMENT	1	4.5000
				4.5000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.400000	0.120000	0.520000
Material Cost \$	4.500000		4.500000
Equipment Hours			0.520000

Components In This Task: 1221500

TASK DATA FORM

Task Code: 1221502

Component: HEAT DETECTOR System: ALARM SYSTEM Subsystem: FIRE ALARM SYSTEM  
 Task Description: PH CHECK OPERATION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 1.00 A: 1.00 L: 1.00  
 Persons per Team: 1 Task Duration: 0.1950 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.CHECK OPERATION	0.150000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.150000	0.045000	0.195000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.195000

Components In This Task: 1221500 1221200

TASK DATA FORM

Task Code: 1221503

Component: HEAT DETECTOR System: ALARM SYSTEM Subsystem: FIRE ALARM SYSTEM  
 Task Description: REPLACE REPLACE HEAT DETECTOR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 10.00 A: 15.00 L: 20.00  
 Persons per Team: 1 Task Duration: 0.4147 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources	
Subtask Description	Labor Hrs	Description	Unit Cost
1.UNPACK UNIT	0.030000	DETECTOR	19.0000
2.TURN CONTROL ON AND OFF	0.028000		19.0000
3.REMOVE COVER PLATES	0.017000		
4.TURN POWER OFF	0.060000		
5.DISCONNECT LEADS	0.014000		
6.REMOVE OLD INSTALL NEW	0.076000		
7.CONNECT LEADS	0.057000		
8.ADJUST UNIT	0.013000		
9.INSTALL COVER	0.008000		
10.CHECK OPERATION	0.016000		

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.319000	0.095700	0.414700
Material Cost \$	19.000000		19.000000
Equipment Hours			0.414700

Components In This Task: 1221500

TASK DATA FORM

Task Code: 1221601

Component: FIRE ALARM CONT. PANEL System: ALARM SYSTEM Subsystem: FIRE ALARM SYSTEM  
 Task Description: M/R MINOR REPAIRS TO FIRE ALARM  
 Unit of Measure: COUNT Frequency of Occurrence: H: 2.00 A: 5.00 L: 8.00  
 Persons per Team: 1 Task Duration: 0.4082 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources	
Subtask Description	Labor Hrs	Description	Unit Cost
1.CHECK COMPONENTS	0.126000	RELAY	25.0000
2.TEST PARTS	0.045000		25.0000
3.REMOVE/INSTALL NEW PARTS	0.143000		

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.314000	0.094200	0.408200
Material Cost \$	25.000000		25.000000
Equipment Hours			0.408200

Components In This Task: 1221600

TASK DATA FORM

Task Code: 1221602

Component: FIRE ALARM CONT. PANEL System: ALARM SYSTEM Subsystem: FIRE ALARM SYSTEM  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.50 A: 0.50 L: 0.50  
 Persons per Team: 1 Task Duration: 0.5200 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.CHECK PANEL,PULL STATTONS/BELLS	0.400000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.400000	0.120000	0.520000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.520000

Components In This Task: 1221400 1221600

TASK DATA FORM

Task Code: 1221603

Component: FIRE ALARM CONT. PANEL System: ALARM SYSTEM Subsystem: FIRE ALARM SYSTEM  
 Task Description: REPLAC REPLACE FIRE ALARM PANEL  
 Unit of Measure: COUNT Frequency of Occurrence: H: 10.00 A: 15.00 L: 25.00  
 Persons per Team: 1 Task Duration: 1.7615 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE COVER	0.035000	PANEL	1	800.0000
2.DISCONNECT LEADS	0.056000			800.0000
3.REMOVE LINE CONDUCTOR	0.036000			
4.REMOVE LOCK NUTS FROM CONDUIT	0.009000			
5.REMOVE BUSHING	0.011000			
6.LOOSEN NUTS	0.014000			
7.STRAIGHTEN WIRES	0.121000			
8.REMOVE PANEL	0.040000			
9.MOUNT PANEL	0.639000			
10.SET WIRES	0.042000			
11.INSTALL CONNECTORS	0.067000			
12.CONNECT WIRES	0.229000			
13.TEST CIRCUITS	0.056000			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.355000	0.406500	1.761500
Material Cost \$	800.000000		800.000000
Equipment Hours			1.761500

Components In This Task: 1221600

TASK DATA FORM

Task Code: 1233001

Component: TV CABLE OUTLET System: TELEVISION SYSTEM Subsystem: TELEVISION SYSTEM  
 Task Description: M/R TV CABLE OUTLET  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 10.00 L: 20.00  
 Persons per Team: 1 Task Duration: 0.06 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPATR RECEPTACLE	0.462000	COVER	1	0.9000 0.9000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.462000	0.138600	0.600600
Material Cost \$	0.900000		0.900000
Equipment Hours			0.600600

Components In This Task: 1233000

TASK DATA FORM

Task Code: 1233002

Component: TV CABLE OUTLET System: TELEVISION SYSTEM Subsystem: TELEVISION SYSTEM  
 Task Description: REPLACE TV CABLE OUTLET  
 Unit of Measure: COUNT Frequency of Occurrence: H: 10.00 A: 20.00 L: 40.00  
 Persons per Team: 1 Task Duration: 0.8060 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE RECEPTACLE	0.620000	RECEPTACLE	1	12.5000 12.5000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.620000	0.186000	0.806000
Material Cost \$	12.500000		12.500000
Equipment Hours			0.806000

Components In This Task: 1233000

TASK DATA FORM

Task Code: 1243001

Component: LIGHT DIMMING PANEL System: CONTROL SYSTEM Subsystem: CONTROL SYSTEM  
 Task Description: M/R MINOR REPAIRS TO LIGHT DIMMING PANEL  
 Unit of Measure: COUNT Frequency of Occurrence: H: 2.00 A: 5.00 L: 8.00  
 Persons per Team: 1 Task Duration: 0.4082 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources	
Subtask Description	Labor Hrs	Description	Quantity
1.CHECK COMPONENTS	0.126000	REOSTAT	1
2.TEST PARTS	0.045000		
3.REMOVE/INSTALL NEW PARTS	0.143000		
			Unit Cost
			35.0000
			35.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.314000	0.094200	0.408200
Material Cost \$	35.000000		35.000000
Equipment Hours			0.408200

Components In This Task: 1243000

TASK DATA FORM

Task Code: 1243002

Component: LIGHT DIMMING PANEL System: CONTROL SYSTEM Subsystem: CONTROL SYSTEM  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 1.00 A: 1.00 L: 1.00  
 Persons per Team: 1 Task Duration: 0.3250 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources	
Subtask Description	Labor Hrs	Description	Quantity
1.CHECK PANEL	0.250000		
			Unit Cost
			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.250000	0.075000	0.325000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.325000

Components In This Task: 1243000

TASK DATA FORM

Task Code: 1243003

Component: LIGHT DIMMING PANEL System: CONTROL SYSTEM Subsystem: CONTROL SYSTEM  
 Task Description: REPLACE REPLACE LIGHT DIMMING PANEL  
 Unit of Measure: COUNT Frequency of Occurrence: H: 10.00 A: 15.00 L: 25.00  
 Persons per Team: 1 Task Duration: 1.7615 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE COVER	0.035000	PANEL	1	250.0000
2.DISCONNECT LEADS	0.056000			250.0000
3.REMOVE LINE CONDUCTOR	0.036000			
4.REMOVE LOCK NUTS FROM CONDUIT	0.009000			
5.REMOVE BUSHING	0.011000			
6.LOOSEN NUTS	0.014000			
7.STRAIGHTEN WIRES	0.121000			
8.REMOVE PANEL	0.040000			
9.MOUNT PANEL	0.639000			
10.SET WIPES	0.042000			
11.INSTALL CONNECTORS	0.067000			
12.CONNECT WIRES	0.229000			
13.TEST CIRCUITS	0.056000			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.355000	0.406500	1.761500
Material Cost \$	250.000000		250.000000
Equipment Hours			1.761500

Components In This Task: 1243000

TASK DATA FORM

Task Code: 1261101

Component: TIME CONTROL CLOCK System: TIME SYSTEMS Subsystem: CLOCK & PROGRAM SYSTEM  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 10.00 L: 15.00  
 Persons per Team: 1 Task Duration: 1.3000 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPLACE CLOCK MOTOR	1.000000	MOTOR	1	12.5000
				12.5000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.000000	0.300000	1.300000
Material Cost \$	12.500000		12.500000
Equipment Hours			1.300000

Components In This Task: 1261100

TASK DATA FORM

Task Code: 1261102

Component: TIME CONTROL CLOCK System: TIME SYSTEMS Subsystem: CLOCK & PROGRAM SYSTEM  
 Task Description: PH CHECK OPERATION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 1.00 A: 1.00 L: 1.00  
 Persons per Team: 1 Task Duration: 0.3250 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.CHECK OPERATION	0.250000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.250000	0.075000	0.325000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.325000

Components In This Task: 1261100

TASK DATA FORM

Task Code: 1261103

Component: TIME CONTROL CLOCK System: TIME SYSTEMS Subsystem: CLOCK & PROGRAM SYSTEM  
 Task Description: REPLACE REPLACE TIME CONTROL CLOCK  
 Unit of Measure: COUNT Frequency of Occurrence: H: 10.00 A: 15.00 L: 20.00  
 Persons per Team: 1 Task Duration: 1.5600 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE CONTROL CLOCK	1.200000	CLOCK	1	58.7000
				58.7000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.200000	0.360000	1.560000
Material Cost \$	58.700000		58.700000
Equipment Hours			1.560000

Components In This Task: 1261100

TASK DATA FORM

Task Code: 1271001

Component: BASEBOARD HEATING UNITS System: ELECTIC HEATING SYSTEM Subsystem: BASEBOARD HEATING UNIT.  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 1.00 A: 2.00 L: 4.00  
 Persons per Team: 1 Task Duration: 0.6006 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources	
Subtask Description	Labor Hrs
1.REPAIR WIRING CONNECTION	0.462000

Material Resources		
Description	Quantity	Unit Cost
		0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.462000	0.138600	0.600600
Material Cost \$	0.000000		0.000000
Equipment Hours			0.600600

Components In This Task: 1271000

TASK DATA FORM

Task Code: 1271002

Component: BASEBOARD HEATING UNITS System: ELECTIC HEATING SYSTEM Subsystem: BASEBOARD HEATING UNIT.  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.50 A: 0.50 L: 0.50  
 Persons per Team: 1 Task Duration: 1.0998 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources	
Subtask Description	Labor Hrs
1.INSPECT AND CLEAN BASE HEATER	0.846000

Material Resources		
Description	Quantity	Unit Cost
		0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.846000	0.253800	1.099800
Material Cost \$	0.000000		0.000000
Equipment Hours			1.099800

Components In This Task: 1271000



TASK DATA FORM

Task Code: 1271003

Component: BASEBOARD HEATING UNITS System: ELECTIC HEATING SYSTEM Subsystem: BASEBOARD HEATING UNIT.  
 Task Description: REPLACE REPELACE BASEBOARD HEATER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 10.00 A: 20.00 L: 30.00  
 Persons per Team: 1 Task Duration: 2.4999 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE ELECTRIC HEATER	1.923000	FIN. TUBE	4F	56.0000
				224.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.923000	0.576900	2.499900
Material Cost \$	224.000000		224.000000
Equipment Hours			2.499900

Components In This Task: 1271000

TASK DATA FORM

Task Code: 1272101

Component: WALL MTD./RECESS., WITH FAN System: ELECTIC HEATING SYSTEM Subsystem: WALL AND CEILING HEATERS  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 5.00 L: 7.00  
 Persons per Team: 1 Task Duration: 0.9750 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE FAN	0.750000	FAN	1	35.0000
				35.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.750000	0.225000	0.975000
Material Cost \$	35.000000		35.000000
Equipment Hours			0.975000

Components In This Task: \_\_\_\_\_

TASK DATA FORM

Task Code: 1272102

Component: WALL MTD./RECESS., WITH FAN System: ELECTIC HEATING SYSTEM Subsystem: WALL AND CEILING HEATERS  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 1.00 A: 1.00 L: 1.00  
 Persons per Team: 1 Task Duration: 1.0998 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.INSPECTION OF WALL FAN HEATER	0.846000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.846000	0.253800	1.099800
Material Cost \$	0.000000		0.000000
Equipment Hours			1.099800

Components In This Task: 1272100

TASK DATA FORM

Task Code: 1272103

Component: WALL MTD./RECESS., WITH FAN System: ELECTIC HEATING SYSTEM Subsystem: WALL AND CEILING HEATERS  
 Task Description: REPLACE REPLACE HEATER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 10.00 A: 20.00 L: 40.00  
 Persons per Team: 1 Task Duration: 2.4999 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPLACE HEATER WITH FAN	1.923000	HEATER	1	130.0000 130.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.923000	0.576900	2.499900
Material Cost \$	130.000000		130.000000
Equipment Hours			2.499900

Components In This Task: 1272100

TASK DATA FORM

Task Code: 1272201

Component: RADIANT SUSPENDED, COMM. System: ELECTRIC HEATING SYSTEM Subsystem: WALL AND CEILING HEATERS  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 1.00 A: 2.00 L: 4.00  
 Persons per Team: 1 Task Duration: 0.6006 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPAIR WIRING CONNECTIONS	0.462000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.462000	0.138600	0.600600
Material Cost \$	0.000000		0.000000
Equipment Hours			0.600600

Components In This Task: 1272200

TASK DATA FORM

Task Code: 1272202

Component: RADIANT SUSPENDED, COMM. System: ELECTRIC HEATING SYSTEM Subsystem: WALL AND CEILING HEATERS  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.50 A: 0.50 L: 0.50  
 Persons per Team: 1 Task Duration: 1.0998 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.INSPECTION AND PM OF HEATER	0.846000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.846000	0.253800	1.099800
Material Cost \$	0.000000		0.000000
Equipment Hours			1.099800

Components In This Task: 1272200

TASK DATA FORM

Task Code: 1272203

Component: RADIANT SUSPENDED, COMM. System: ELECTRIC HEATING SYSTEM Subsystem: WALL AND CEILING HEATERS  
 Task Description: REPLACE REPLACE HEATER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 8.00 A: 15.00 L: 20.00  
 Persons per Team: 1 Task Duration: 2.4999 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPLACE RADIANT HEATER	1.923000	HEATER	1	250.0000 250.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.923000	0.576900	2.499900
Material Cost \$	250.000000		250.000000
Equipment Hours			2.499900

Components In This Task: 1272200

TASK DATA FORM

Task Code: 1272301

Component: INFRARED SUSPENDED, COMM. System: ELECTRIC HEATING SYSTEM Subsystem: WALL AND CEILING HEATERS  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.50 A: 1.00 L: 2.00  
 Persons per Team: 1 Task Duration: 0.6666 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPAIR WIRING CONNECTIONS	0.662000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.662000	0.138600	0.800600
Material Cost \$	0.000000		0.000000
Equipment Hours			0.800600

Components In This Task: 1272300

TASK DATA FORM

Task Code: 1272302

Component: INFARED SUSPENDE, COMM. System: ELECTIC HEATING SYSTEM Subsystem: WALL AND CEILING HEATERS  
 Task Description: PH PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.50 A: 0.50 L: 0.50  
 Persons per Team: 1 Task Duration: 1.0998 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.INSPECTION AND PH OF IR HEATER	0.846000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.846000	0.253800	1.099800
Material Cost \$	0.000000		0.000000
Equipment Hours			1.099800

Components In This Task: 1272300

TASK DATA FORM

Task Code: 1272303

Component: INFARED SUSPENDE, COMM. System: ELECTIC HEATING SYSTEM Subsystem: WALL AND CEILING HEATERS  
 Task Description: REPLACE REPLACE IR HEATER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 8.00 A: 15.00 L: 20.00  
 Persons per Team: 1 Task Duration: 2.4999 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE IR HEATER.	1.923000	IR HEATER	1	159.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.923000	0.576900	2.499900
Material Cost \$	159.000000		159.000000
Equipment Hours			2.499900

Components In This Task: 1272300

TASK DATA FORM

Task Code: 1273101

Component: STANDARD SUSPENDED HEATER System: ELECTIC HEATING SYSTEM Subsystem: INDUSTRIAL HEATERS.  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 1.00 A: 2.00 L: 4.00  
 Persons per Team: 1 Task Duration: 0.6006 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE CONTACTOR	0.462000	CONTACTOR	1	25.0000
				25.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.462000	0.138600	0.600600
Material Cost \$	25.000000		25.000000
Equipment Hours			0.600600

Components In This Task: 1273100

TASK DATA FORM

Task Code: 1273102

Component: STANDARD SUSPENDED HEATER System: ELECTIC HEATING SYSTEM Subsystem: INDUSTRIAL HEATERS.  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.50 A: 0.50 L: 0.50  
 Persons per Team: 1 Task Duration: 1.0998 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.INSPECTION AND PM OF HEATER	0.846000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.846000	0.253800	1.099800
Material Cost \$	0.000000		0.000000
Equipment Hours			1.099800

Components In This Task: 1273100

TASK DATA FORM

Task Code: 1273103

Component: STANDARD SUSPENDED HEATER System: ELECTIC HEATING SYSTEM Subsystem: INDUSTRIAL HEATERS.  
 Task Description: REPLACE HEATER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 8.00 A: 15.00 L: 20.00  
 Persons per Team: 1 Task Duration: 2.4999 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE STANDARD HEATER	1.923000	HEATER	1	250.0000 250.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.923000	0.576000	2.499000
Material Cost \$	250.000000		250.000000
Equipment Hours			2.499000

Components In This Task: 1273100

TASK DATA FORM

Task Code: 1273201

Component: EXPLOSION PROOF INDUSTRIAL System: ELECTIC HEATING SYSTEM Subsystem: INDUSTRIAL HEATERS.  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 1.00 A: 2.00 L: 4.00  
 Persons per Team: 1 Task Duration: 0.6006 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE CONTACTOR	0.462000	CONTACTOR	1	50.0000 50.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.462000	0.138600	0.600600
Material Cost \$	50.000000		50.000000
Equipment Hours			0.600600

Components In This Task: 1273200

TASK DATA FORM

Task Code: 1273202

Component: EXPLOSION PROOF INDUSTRIAL System: ELECTIC HEATING SYSTEM Subsystem: INDUSTRIAL HEATERS.  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.50 A: 0.50 L: 0.50  
 Persons per Team: 1 Task Duration: 1.0998 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.INSPECT/PH OF EXPLOSTON HEATER	0.846000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.846000	0.253800	1.099800
Material Cost \$	0.000000		0.000000
Equipment Hours			1.099800

Components In This Task: 1273200

TASK DATA FORM

Task Code: 1273203

Component: EXPLOSION PROOF INDUSTRIAL System: ELECTIC HEATING SYSTEM Subsystem: INDUSTRIAL HEATERS.  
 Task Description: REPLACE REPLACE HEATER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 8.00 A: 15.00 L: 20.00  
 Persons per Team: 1 Task Duration: 2.4999 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE EXPLOSTON PROOF HEATER	1.923000	HEATER	1	500.0000 500.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.923000	0.576900	2.499900
Material Cost \$	500.000000		500.000000
Equipment Hours			2.499900

Components In This Task: 1273200



TASK DATA FORM

Task Code: 1274001

Component: DUCT HEATER System: ELECTIC HEATING SYSTEM Subsystem: DUCT HEATER  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.50 A: 1.00 L: 2.00  
 Persons per Team: 1 Task Duration: 0.6006 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE CONTACTOR	0.462000	CONTACTOR	1	50.0000
				50.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.462000	0.138600	0.600600
Material Cost \$	50.000000		50.000000
Equipment Hours			0.600600

Components In This Task: 1274000

TASK DATA FORM

Task Code: 1274002

Component: DUCT HEATER System: ELECTIC HEATING SYSTEM Subsystem: DUCT HEATER  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.50 A: 0.50 L: 0.50  
 Persons per Team: 1 Task Duration: 1.0998 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.INSPECTION & PM OF DUCT HEATER	0.846000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.846000	0.253800	1.099800
Material Cost \$	0.000000		0.000000
Equipment Hours			1.099800

Components In This Task: 1274000

TASK DATA FORM

Task Code: 1274003

Component: DUCT HEATER System: ELECTIC HEATING SYSTEM Subsystem: DUCT HEATER  
 Task Description: REPLACE REPLACE DUCT HEATER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 8.00 A: 15.00 L: 20.00  
 Persons per Team: 1 Task Duration: 2.4999 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPLACE DUCT HEATER.	1.923000	DUCT HYR	1	263.0000 263.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.923000	0.576900	2.499900
Material Cost \$	263.000000		263.000000
Equipment Hours			2.499900

Components In This Task: 1274000

TASK DATA FORM

Task Code: 1281102

Component: GEN., GASOLINE, 1000KW. System: POWER GENERATION SYSTEM Subsystem: ENGINE GENERATOR SETS  
 Task Description: PM PREVENTIVE MAINTENANCE  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.08 A: 0.08 L: 0.08  
 Persons per Team: 1 Task Duration: 0.7995 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.ELECTRICAL TESTING	0.615000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.615000	0.184500	0.799500
Material Cost \$	0.000000		0.000000
Equipment Hours			0.799500

Components In This Task: 1281100

TASK DATA FORM

Task Code: 1281103

Component: GEN., GASOLINE, 1000KW. System: POWER GENERATION SYSTEM Subsystem: ENGINE GENERATOR SETS  
 Task Description: REPLACE REPLACE GENERATOR COMPONENT  
 Unit of Measure: COUNT Frequency of Occurrence: H: 12.00 A: 25.00 L: 50.00  
 Persons per Team: 2 Task Duration: 140.0100 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE GASOLINE GENERATOR	215.400000	GENERATOR	1	200000.0000 200000.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	215.400000	64.620000	280.020000
Material Cost \$	200000.000000		200000.000000
Equipment Hours			140.010000

Components In This Task: 1281100

TASK DATA FORM

Task Code: 1281202

Component: GENERATOR, DIESEL, 1000KW. System: POWER GENERATION SYSTEM Subsystem: ENGINE GENERATOR SETS  
 Task Description: PM PREVENTIVE MAINTENANCE  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.08 A: 0.08 L: 0.08  
 Persons per Team: 1 Task Duration: 0.7995 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.ELECTRICAL TESTING	0.615000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.615000	0.184500	0.799500
Material Cost \$	0.000000		0.000000
Equipment Hours			0.799500

Components In This Task: 1281200

TASK DATA FORM

Task Code: 1281203

Component: GENERATOR, DIESEL, 1000KW. System: POWER GENERATION SYSTEM Subsystem: ENGINE GENERATOR SETS  
 Task Description: REPLACE REPLACE DIESEL GENERATOR COMPONENT  
 Unit of Measure: COUNT Frequency of Occurrence: H: 12.00 A: 25.00 L: 50.00  
 Persons per Team: 4 Task Duration: 70.0050 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE DIESEL GENERATOR	215.400000	GENERATOR	1	200000.0000 200000.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	215.400000	64.620000	280.020000
Material Cost \$	200000.000000		200000.000000
Equipment Hours			70.005000

Components In This Task: 1281200

TASK DATA FORM

Task Code: 1281302

Component: GEN., VAPOR GAS, 1000KW. System: POWER GENERATION SYSTEM Subsystem: ENGINE GENERATOR SETS  
 Task Description: PM PREVENTIVE MAINTENANCE  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.08 A: 0.08 L: 0.08  
 Persons per Team: 1 Task Duration: 0.7995 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources

Material Resources

Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.ELECTRICAL TESTING	0.615000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.615000	0.184500	0.799500
Material Cost \$	0.000000		0.000000
Equipment Hours			0.799500

Components In This Task: 1281300

TASK DATA FORM

Task Code: 1281303

Component: GEN., VAPOR GAS, 1000KW. System: POWER GENERATION SYSTEM Subsystem: ENGINE GENERATOR SETS  
 Task Description: REPLACE GENERATOR COMPONENT  
 Unit of Measure: COUNT Frequency of Occurrence: H: 12.00 A: 25.00 L: 50.00  
 Persons per Team: 4 Task Duration: 70.0050 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources	
Subtask Description	Labor Hrs	Description	Unit Cost
T.REPLACE VAPOR POWERED GEN.	215.400000	GENERATOR	200000.0000 200000.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	215.400000	64.620000	280.020000
Material Cost \$	200000.000000		200000.000000
Equipment Hours		70.005000	70.005000

Components In This Task: 1281300

TASK DATA FORM

Task Code: 1281412

Component: GEN., STEAM TURBINE, 1000KW System: POWER GENERATION SYSTEM Subsystem: ENGINE GENERATOR SETS  
 Task Description: PM PREVENTIVE MAINTENANCE  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.08 A: 0.08 L: 0.08  
 Persons per Team: 1 Task Duration: 0.7995 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources	
Subtask Description	Labor Hrs	Description	Unit Cost
T.ELECTRICAL TESTING	0.615000		0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.615000	0.184500	0.799500
Material Cost \$	0.000000		0.000000
Equipment Hours		0.799500	0.799500

Components In This Task: 1281410

TASK DATA FORM

Task Code: 1281413

Component: GEN., STEAM TURBINE, 1000KW System: POWER GENERATION SYSTEM Subsystem: ENGINE GENERATOR SETS  
 Task Description: REPLACE GENERATOR COMPONENT  
 Unit of Measure: COUNT Frequency of Occurrence: H: 12.00 A: 25.00 L: 50.00  
 Persons per Team: 4 Task Duration: 50.2450 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE STEAM TURBINE GEN.	154.600000	GENERATOR	1	250000.0000 250000.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	154.600000	46.380000	200.980000
Material Cost \$	250000.000000		250000.000000
Equipment Hours			50.245000

Components In This Task: 1281410

TASK DATA FORM

Task Code: 1281422

Component: GEN., GAS TURBINE, 1000KW. System: POWER GENERATION SYSTEM Subsystem: ENGINE GENERATOR SETS  
 Task Description: PM PREVENTIVE MAINTENANCE  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.08 A: 0.08 L: 0.08  
 Persons per Team: 1 Task Duration: 0.7995 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.ELECTRICAL TESTING	0.615000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.615000	0.184500	0.799500
Material Cost \$	0.000000		0.000000
Equipment Hours			0.799500

Components In This Task: 1281420

TASK DATA FORM

Task Code: 1281423

Component: GEN., GAS TURBINE, 1000KW. System: POWER GENERATION SYSTEM Subsystem: ENGINE GENERATOR SETS  
 Task Description: REPLACE GENERATOR COMPONENT  
 Unit of Measure: COUNT Frequency of Occurrence: H: 12.00 A: 25.00 L: 50.00  
 Persons per Team: 2 Task Duration: 200.0050 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE GAS TURBINE GEN.	307.700000	GENERATOR	1	250000.0000 250000.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	307.700000	92.310000	400.010000
Material Cost \$	250000.000000		250000.000000
Equipment Hours			200.005000

Components In This Task: 1281420

TASK DATA FORM

Task Code: 1281501

Component: TRANSFER SWITCH System: POWER GENERATION SYSTEM Subsystem: ENGINE GENERATOR SETS  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 3.00 A: 5.00 L: 10.00  
 Persons per Team: 1 Task Duration: 2.6000 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE COIL	2.000000	COIL	1	15.0000 15.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.000000	0.600000	2.600000
Material Cost \$	15.000000		15.000000
Equipment Hours			2.600000

Components In This Task: 1281500

TASK DATA FORM

Task Code: 1281502

Component: TRANSFER SWITCH System: POWER GENERATION SYSTEM Subsystem: ENGINE GENERATOR SETS  
 Task Description: PM PREVENTIVE MAINTENANCE  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.50 A: 0.50 L: 0.50  
 Persons per Team: 1 Task Duration: 0.2080 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.INSPECT/CLEAN CONTACTS AND COIL	0.160000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.160000	0.048000	0.208000
Material Cost \$	0.000000		0.000000
Equipment Hours			0.208000

Components In This Task: 1281500

TASK DATA FORM

Task Code: 1281503

Component: TRANSFER SWITCH System: POWER GENERATION SYSTEM Subsystem: ENGINE GENERATOR SETS  
 Task Description: REPLACE REPLACE TRANSFER SWITCH  
 Unit of Measure: COUNT Frequency of Occurrence: H: 9.00 A: 18.00 L: 36.00  
 Persons per Team: 1 Task Duration: 0.7502 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REMOVE COVER PLATE	0.035300	TRANS. SW.	1	442.0000
2.DISCONNECT CONDUCTORS	0.028800			442.0000
3.REMOVE SWITCH UNIT FROM CASING	0.048900			
4.LOOSEN LOCKNUTS ON CONDUIT	0.017400			
5.REMOVE LOCKNUTS FROM CONDUIT	0.021800			
6.STRAIGHTEN CIRCUIT WIRES	0.033300			
7.REMOVE ONE HOLE CLAMP OR CLIP	0.021800			
8.REMOVE CASING FROM SURFACE	0.040500			
9.MOUNT SWITCH CASING	0.134900			
10.REMOVE SWITCH UNIT	0.015400			
11.INSTALL BREAKER UNIT TO CASING	0.048900			
12.CUT,FORM,ALIGN,CONNECT WIRES	0.116000			
13.CHECK OPERATION OF SWITCH	0.014100			

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.577100	0.173130	0.750230
Material Cost \$	442.000000		442.000000
Equipment Hours			0.750230

Components In This Task: 1281500



TASK DATA FORM

Task Code: 1282101

Component: STATIC - CHARGER, BATTERY System: POWER GENERATION SYSTEM Subsystem: UNINTERRUPT.POWER SOURCE  
 Task Description: M/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 1.00 A: 2.00 L: 4.00  
 Persons per Team: 1 Task Duration: 3.1200 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPAIR STATIC-CHARGER.	2.400000	COMPONENT	1	23.0000
				23.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	2.400000	0.720000	3.120000
Material Cost \$	23.000000		23.000000
Equipment Hours			3.120000

Components In This Task: 1282100

TASK DATA FORM

Task Code: 1282102

Component: STATIC - CHARGER, BATTERY System: POWER GENERATION SYSTEM Subsystem: UNINTERRUPT.POWER SOURCE  
 Task Description: PM PREVENTIVE MAINTENANCE AND INSPECTION  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.33 A: 0.33 L: 0.33  
 Persons per Team: 1 Task Duration: 1.6900 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.CHECK CONTROLS, CONN. AND RELAYS	1.300000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.300000	0.390000	1.690000
Material Cost \$	0.000000		0.000000
Equipment Hours			1.690000

Components In This Task: 1282100

TASK DATA FORM

Task Code: 1282103

Component: STATIC - CHARGER, BATTERY System: POWER GENERATION SYSTEM Subsystem: UNINTERRUPT.POWER SOURCE  
 Task Description: REPLACE REPLACE CHARGER  
 Unit of Measure: COUNT Frequency of Occurrence: H: 10.00 A: 20.00 L: 40.00  
 Persons per Team: 1 Task Duration: 2.0995 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPLACE STATIC-CHARGER BATTERYD	1.615000	CHARGER	1	563.0000 563.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	1.615000	0.484500	2.099500
Material Cost \$	563.000000		563.000000
Equipment Hours			2.099500

Components In This Task: 1282100

TASK DATA FORM

Task Code: 1282201

Component: MOTOR - GENERATOR, BATTERY System: POWER GENERATION SYSTEM Subsystem: UNINTERRUPT.POWER SOURCE  
 Task Description: H/R MAINTENANCE AND REPAIR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.20 A: 0.35 L: 1.00  
 Persons per Team: 1 Task Duration: 0.9997 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPLACE BRUSHES	0.769000	BRUSHES	2	9.5000 19.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.769000	0.230700	0.999700
Material Cost \$	19.000000		19.000000
Equipment Hours			0.999700

Components In This Task: 1282200

TASK DATA FORM

Task Code: 1282202

Component: MOTOR - GENERATOR, BATTERY System: POWER GENERATION SYSTEM Subsystem: UNINTERRUPT.POWER SOURCE  
 Task Description: PM PREVENTIVE MAINTENANCE  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.17 A: 0.17 L: 0.17  
 Persons per Team: 1 Task Duration: 0.7995 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.ELECTRICAL TESTING	0.615000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.615000	0.184500	0.799500
Material Cost \$	0.000000		0.000000
Equipment Hours			0.799500

Components In This Task: 1282200

TASK DATA FORM

Task Code: 1282203

Component: MOTOR - GENERATOR, BATTERY System: POWER GENERATION SYSTEM Subsystem: UNINTERRUPT.POWER SOURCE  
 Task Description: REPLACE REPLACE MOTOR GENERATOR  
 Unit of Measure: COUNT Frequency of Occurrence: H: 8.00 A: 15.00 L: 30.00  
 Persons per Team: 1 Task Duration: 5.3300 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE MOTOR GENERATOR	4.100000	MTR. GEN.	1	171.0000
				171.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	4.100000	1.230000	5.330000
Material Cost \$	171.000000		171.000000
Equipment Hours			5.330000

Components In This Task: 1282200

TASK DATA FORM

Task Code: 1283101

Component: BATTERY, PRIMARY WET System: POWER GENERATION SYSTEM Subsystem: EMERGENCY BATTERY SYS.  
 Task Description: PM PREVENTIVE MAINTENANCE  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.02 A: 0.02 L: 0.02  
 Persons per Team: 1 Task Duration: 0.5005 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.CLEAN TERMINALS,ADD WATER,TEST	0.385000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.385000	0.115500	0.500500
Material Cost \$	0.000000		0.000000
Equipment Hours			0.500500

Components In This Task: 1283100

TASK DATA FORM

Task Code: 1283102

Component: BATTERY, PRIMARY WET System: POWER GENERATION SYSTEM Subsystem: EMERGENCY BATTERY SYS.  
 Task Description: REPLACE REPLACE BATTERY  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 10.00 L: 15.00  
 Persons per Team: 1 Task Duration: 0.3991 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
1.REPLACE WET CELL PRIMARY BATT.	0.307000	BATTERY	1	250.0000 250.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.307000	0.092100	0.399100
Material Cost \$	250.000000		250.000000
Equipment Hours			0.399100

Components In This Task: 1283100

TASK DATA FORM

Task Code: 1283201

Component: BATTERY, PRIMARY DRY System: POWER GENERATION SYSTEM Subsystem: EMERGENCY BATTERY SYS.  
 Task Description: PM PREVENTIVE MAINTENANCE  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.08 A: 0.08 L: 0.08  
 Persons per Team: 1 Task Duration: 0.5005 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.CLEAN TERMINALS, AND TEST CELLS	0.385000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.385000	0.115500	0.500500
Material Cost \$	0.000000		0.000000
Equipment Hours			0.500500

Components In This Task: 1283200

TASK DATA FORM

Task Code: 1283202

Component: BATTERY, PRIMARY DRY System: POWER GENERATION SYSTEM Subsystem: EMERGENCY BATTERY SYS.  
 Task Description: REPLACE REPLACE BATTERY  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 5.00 L: 10.00  
 Persons per Team: 1 Task Duration: 0.3991 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE DRY PRIMARY BATTERY	0.307000	BATTERY	1	50.0000 50.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.307000	0.092100	0.399100
Material Cost \$	50.000000		50.000000
Equipment Hours			0.399100

Components In This Task: 1283200

TASK DATA FORM

Task Code: 1283301

Component: BATTERY, SECONDARY WET System: POWER GENERATION SYSTEM Subsystem: EMERGENCY BATTERY SYS.  
 Task Description: PREVENTIVE MAINT. BATTERY SECONDARY WET  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.02 A: 0.02 L: 0.02  
 Persons per Team: 1 Task Duration: 0.5005 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.CLEAN TERMINALS, ADD WATER TEST	0.385000			0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.385000	0.115500	0.500500
Material Cost \$	0.000000		0.000000
Equipment Hours			0.500500

Components In This Task: 1283300

TASK DATA FORM

Task Code: 1283302

Component: BATTERY, SECONDARY WET System: POWER GENERATION SYSTEM Subsystem: EMERGENCY BATTERY SYS.  
 Task Description: REPLACE REPLACE BATTERY, SECONDARY WET  
 Unit of Measure: COUNT Frequency of Occurrence: H: 5.00 A: 10.00 L: 15.00  
 Persons per Team: 1 Task Duration: 0.3991 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources		
Subtask Description	Labor Hrs	Description	Quantity	Unit Cost
T.REPLACE WET CELL, SECONDARY BATT	0.307000	BATTERY, WET	1	350.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.307000	0.092100	0.399100
Material Cost \$	350.000000		350.000000
Equipment Hours			0.399100

Components In This Task: 1283300

TASK DATA FORM

Task Code: 1' 401

Component: BATTERY, SECONDARY DRY System: POWER GENERATION SYSTEM Subsystem: EMERGENCY BATTERY SYS.  
 Task Description: PH PREVENTIVE MAINT. BATTERY SECONDARY DRY  
 Unit of Measure: COUNT Frequency of Occurrence: H: 0.08 A: 0.08 L: 0.08  
 Persons per Team: 1 Task Duration: 0.5005 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 0

Labor Resources		Material Resources	
Subtask Description	Labor Hrs	Description	Unit Cost
T.CLEAN TERMINALS,AND TEST CELLS	0.385000		0.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.385000	0.115500	0.500500
Material Cost \$	0.000000		0.000000
Equipment Hours			0.500500

Components In This Task: 1283400

TASK DATA FORM

Task Code: 1283402

Component: BATTERY, SECONDARY DRY System: POWER GENERATION SYSTEM Subsystem: EMERGENCY BATTERY SYS.  
 Task Description: REPLACE REPLACE BATTERY, SECONDARY DRY  
 Unit of Measure: COUNT Frequency of Occurrence: H: 3.00 A: 5.00 L: 10.00  
 Persons per Team: 1 Task Duration: 0.3991 hours Once every (H,A,L) years  
 Trade: ELECTRICAL, INT. Task Classification: 1

Labor Resources		Material Resources	
Subtask Description	Labor Hrs	Description	Unit Cost
T.REPLACE DRY SECONDARY CELL	0.307000	BATTERY DRY	100.0000
			100.0000

SUMMARY

Resources UOM	Direct	Indirect	Total
Labor Hours	0.307000	0.092100	0.399100
Material Cost \$	100.000000		100.000000
Equipment Hours			0.399100

Components In This Task: 1283400

**APPENDIX D:**

**TASK DATA BASE RESOURCE SUMMARY TABLES**



Army Wide Task/Basic Task Structure List

Tree id: BF Group id: B5

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CACES	UN=Unit of Measure	TRD=Trade Index	Class=Task Classification	HIGH AVE FREQ	UM TRD CLASS FREQ	LOW FREQ	TPMTH=Task Work Performance	LABOR HOURS	Method MATERIAL COSTS	EQUIPMENT HOURS	TPMTH
1	7	110000	INTERIOR ELECTRICAL								
2	1	1110000	SERVICE & DISTRIBUTION								
3	1	1112000	OVERHEAD SERVICE FEEDER								
1112001			REPAIR CABLE SPLICE	4	2	0	6.00	36.00	7.574970	1.000000	7.574970 ICIIII
1112002			CABLE INSPECTION	4	2	0	5.00	5.00	.650000	.000000	.650000 ICIIII
1112003			REPLACE SERVICE CABLE	4	2	0	15.00	90.00	21.915790	414.000000	21.915790 ICIIII
3	2	1113000	MAIN PROTECTION EQUIPMENT								
4	1	1113100	SWITCHGEAR, MAIN FRAME, 1200 A.								

CAGES	DESCRIPTION	UM	TRD	CLASS	FREQ	HIGH AVE	FREQ	LOW FREQ	LABOR HOURS	PERFORMANCE	MATERIAL COSTS	EQUIPMENT HOURS	TWPMTH
1113101	REPAIR SWITCHGEAR	5	2	0	3.00	5.00	10.00	6.700200	607.000000	607.000000	6.700200	IC1111	
1113102	PREVENTIVE MAINTENANCE AND INS	5	2	0	1.00	2.00	780000	1.901510	1243.500000	1243.500000	1.901510	IC1111	
1113103	REPLACE SWITCHGEAR 1200 AMP	5	2	0	10.00	20.00	40.00					IC1111	
4	1113200 FUSE	1	2	0	25.00	50.00	100.00					IC1111	
1113201	REPLACE FUSE	1	2	0	25.00	50.00	100.00					IC1111	
3	1114000 PRIMARY TRANSFORMER	1	2	0	5.00	10.00	20.00					IC1111	
4	1114100 TRANSFORMER, LIQUID FILLED ABOVE 600 V	1	2	0	5.00	10.00	20.00					IC1111	
1114101	REPAIR TRANSFORMER	1	2	0	5.00	10.00	20.00					IC1111	
1114102	PREVENTIVE MAINTENANCE AND INSPECTION.	1	2	0	5.00	10.00	20.00					IC1111	
1114103	REPLACE TRANSFORMER	1	2	0	15.00	30.00	60.00					IC1111	
4	1114200 TRANSFORMER, DRY, ABOVE 15,000 V	1	2	0	8.00	15.00	30.00					IC1111	
1114201	REPAIR TRANSFORMER	1	2	0	8.00	15.00	30.00					IC1111	
1114202	PREVENTIVE MAINTENANCE AND INSPECTION.	1	2	0	8.00	15.00	30.00					IC1111	
1114203	REPLACE TRANSFORMER	1	2	0	7.50	15.00	30.00					IC1111	
3	1115000 POWER PROTECTION EQUIPMENT	1	2	0	5.00	10.00	20.00					IC1111	
4	1115100 SWITCHGEAR, INDOOR, 0-600 V	5	2	0	2.00	3.00	4.00					IC1111	
1115101	REPAIR SWITCHGEAR	5	2	0	2.00	3.00	4.00					IC1111	
1115102	PREVENTIVE MAINTENANCE AND INS	5	2	0	10.00	20.00	40.00					IC1111	
1115103	REPLACE SWITCHGEAR	5	2	0	10.00	20.00	40.00					IC1111	
4	1115200 SWITCHGEAR, INDOOR ABOVE 600 V	5	2	0	5.00	10.00	20.00					IC1111	
1115201	MAINTENANCE AND REPAIR	5	2	0	2.00	3.00	4.00					IC1111	
1115202	PREVENTIVE MAINTENANCE AND INS	5	2	0	2.00	3.00	4.00					IC1111	
1115203	REPLACE SWITCHGEAR	5	2	0	10.00	20.00	40.00					IC1111	
3	1116000 SECONDARY TRANSFORMER	1	2	0	12.00	25.00	50.00					IC1111	
4	1116100 TRANSFORMER, LIQUID FILLED BELOW 600 V	1	2	0	5.00	10.00	20.00					IC1111	
1116101	MAINTENANCE AND REPAIR	1	2	0	5.00	10.00	20.00					IC1111	
1116102	PREVENTIVE MAINTENANCE AND INSPECTION	1	2	0	5.00	10.00	20.00					IC1111	
1116103	REPLACE TRANSFORMER	1	2	0	25.00	50.00	100.00					IC1111	
4	1116200 TRANSFORMER, DRY BELOW 15,000 V	1	2	0	5.00	10.00	20.00					IC1111	
1116201	MAINTENANCE AND REPAIR	1	2	0	5.00	10.00	20.00					IC1111	
1116202	PREVENTIVE MAINTENANCE AND INSPECTION	1	2	0	5.00	10.00	20.00					IC1111	
1116203	REPLACE TRANSFORMER	1	2	0	15.00	30.00	60.00					IC1111	
3	1117000 LIGHTNING PROTECTION	1	2	0	5.00	10.00	20.00					IC1111	
4	1117100 SWITCHGEAR, INDOOR, BELOW 600 V	5	2	0	5.00	10.00	20.00					IC1111	
1117101	MAINTENANCE AND REPAIR	5	2	0	2.00	3.00	4.00					IC1111	
1117102	PREVENTIVE MAINTENANCE AND INS	5	2	0	10.00	20.00	40.00					IC1111	
1117103	REPLACE SWITCHGEAR.	5	2	0	10.00	20.00	40.00					IC1111	
4	1117200 SWITCHGEAR, INDOOR ABOVE 600 V	5	2	0	5.00	10.00	20.00					IC1111	
1117201	MAINTENANCE AND REPAIR	5	2	0	5.00	10.00	20.00					IC1111	
1117202	PREVENTIVE MAINTENANCE AND INSPECTION	5	2	0	1.00	1.00	1.00					IC1111	
1117203	REPLACE SWITCHGEAR	5	2	0	10.00	20.00	40.00					IC1111	
3	1118000 POWER & LIGHTING DISTRIBUTION	1	2	0	130.00	260.00	350.00					IC1111	
4	1118100 CABLE, THERMOPLASTIC, 601-15,000 V	4	2	0	50.00	100.00	200.00					IC1111	
1118101	REPLACE CABLE	4	2	0	50.00	100.00	200.00					IC1111	
4	1118200 CABLE, THERMOSETTING, 601-15,000 V	4	2	0	50.00	100.00	200.00					IC1111	
1118201	REPLACE CABLE	4	2	0	50.00	100.00	200.00					IC1111	
4	1118300 CABLE, LEAD COVERED, 601-15,000 V	4	2	0	50.00	100.00	200.00					IC1111	
1118301	REPLACE CABLE	4	2	0	50.00	100.00	200.00					IC1111	
4	1118400 CABLE, FLEXIBLE METALIC < 600 VOLT	4	2	0	30.00	60.00	120.00					IC1111	
1118401	REPLACE CABLE	4	2	0	30.00	60.00	120.00					IC1111	
4	1118500 BRANCH WIRING, 0-600 V	4	2	0	50.00	100.00	200.00					IC1111	
1118501	REPLACE BRANCH WIRING	4	2	0	50.00	100.00	200.00					IC1111	
4	1118600 BRANCH WIRING, OVER 600 V	4	2	0	50.00	100.00	200.00					IC1111	
1118601	REPLACE BRANCH WIRING	4	2	0	50.00	100.00	200.00					IC1111	

Army Wide Task/Basic Task Structure List

Tree id: BF

Group id: B5

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CACES	DESCRIPTION	UM	TRD	CLASS	FREQ	HIGH FREQ	AVE FREQ	LOW FREQ	Work LAGOR HOURS	Performance HOURS	Method MATERIAL COSTS	EQUIPMENT HOURS	TWPMTH ICI III
1118601	REPLACE BRANCH WIRING	4	2	0	60.00	130.00	250.00	8.686080	8.686080	48.000000	8.686080	ICI III	
4	1118700 BUSS DUCT												
1118701	MAINTENANCE AND REPAIR	3	2	0	3.00	5.00	15.00	.013000	.013000	.000000	.013000	ICI III	
1118702	PREVENTIVE MAINTENANCE AND INSPECTION	3	2	0	1.00	1.00	1.00	.002600	.002600	.000000	.002600	ICI III	
1118703	REPLACE BUSS WUCT	3	2	0	10.00	20.00	60.00	.304200	.304200	34.750000	.304200	ICI III	
4	1118800 CONDUIT EMT												
1118801	REPLACE EMT CONDUIT	4	2	0	150.00	200.00	250.00	28.982590	28.982590	1210.500000	28.982590	ICI III	
3	1119000 SPECIAL EQUIPMENT												
4	1119100 METER DARSONVAL GALVANOMETER	1	2	0	5.00	10.00	15.00	4.999800	4.999800	550.000000	4.999800	ICI III	
1119101	MAINTENANCE AND REPAIR	1	2	0	15.00	20.00	25.00	.975000	.975000	1401.000000	.975000	ICI III	
1119102	REPLACE METER												
4	1119300 INVERTER												
1119301	MAINTENANCE AND REPAIR	1	2	0	.50	1.00	2.00	4.940000	4.940000	3.000000	4.940000	ICI III	
1119302	PREVENTIVE MAINTENANCE AND INSPECTION	1	2	0	.25	.25	.25	1.300000	1.300000	.000000	1.300000	ICI III	
1119303	REPLACE INVERTER	1	2	0	10.00	20.00	40.00	2.099500	2.099500	1615.000000	2.099500	ICI III	
4	1119400 RECTIFIER, UNDER 600 V												
1119401	MAINTENANCE AND REPAIR	1	2	0	1.00	2.00	4.00	3.120000	3.120000	161.000000	3.120000	ICI III	
1119402	PREVENTIVE MAINTENANCE AND INSPECTION	1	2	0	.33	.33	.33	1.690000	1.690000	.000000	1.690000	ICI III	
1119403	REPLACE RECTIFIER	1	2	0	10.00	20.00	40.00	2.099500	2.099500	620.000000	2.099500	ICI III	
2	1120000 POWER SYSTEM												
3	1122000 SAFETY SWITCHES & BREAKERS												
4	1122100 SAFETY SWITCH, ENCLOSED												
1122101	MAINTENANCE AND REPAIR	1	2	0	4.00	8.00	16.00	.500500	.500500	.000000	.500500	ICI III	
1122102	PREVENTIVE MAINTENANCE AND INSPECTION	1	2	0	1.00	1.00	1.00	.793000	.793000	.000000	.793000	ICI III	
1122103	REPLACE SAFETY SWITCH	1	2	0	12.00	25.00	50.00	.565370	.565370	38.970000	.565370	ICI III	
4	1122300 CIRCUIT BREAKERS												
5	1122310 CIRCUIT BREAKER, MC, 0-599 V												
112311	MAINTENANCE AND REPAIR	1	2	0	10.00	20.00	40.00	.897000	.897000	.000000	.897000	ICI III	
112312	PREVENTIVE MAINTENANCE AND INSPECTION	1	2	0	.50	.50	.50	.403000	.403000	.000000	.403000	ICI III	
112313	REPLACE CIRCUIT BREAKER	1	2	0	125.00	250.00	400.00	.750490	.750490	242.000000	.750490	ICI III	
5	1122320 CIRCUIT BREAKER, MC, 600 V AND OVER												
112321	REPAIR FAILED BREAKER	1	2	0	5.00	10.00	20.00	2.099500	2.099500	79.800000	2.099500	ICI III	
112322	PREVENTIVE MAINTENANCE AND INSPECTION	1	2	0	.33	.33	.33	.403000	.403000	.000000	.403000	ICI III	
112323	REPLACE CIRCUIT BREAKER	1	2	0	100.00	200.00	400.00	.972920	.972920	871.000000	.972920	ICI III	
5	1122330 CIRCUIT BREAKER, FIXED, 0-599 V												
112331	MAINTENANCE AND REPAIR	1	2	0	50.00	100.00	200.00	.897000	.897000	.000000	.897000	ICI III	
112332	PREVENTIVE MAINTENANCE AND INSPECTION	1	2	0	1.00	1.00	1.00	.403000	.403000	.000000	.403000	ICI III	
112333	REPLACE CIRCUIT BREAKER	1	2	0	125.00	250.00	400.00	.750490	.750490	69.000000	.750490	ICI III	
5	1122340 CIRCUIT BREAKER, FIXED, 600V AND OVER												
112341	REPAIR FAILED BREAKER	1	2	0	2.00	4.00	8.00	2.099500	2.099500	250.000000	2.099500	ICI III	
112342	PREVENTIVE MAINTENANCE AND INSPECTION	1	2	0	.33	.33	.33	.403000	.403000	.000000	.403000	ICI III	
112343	REPLACE CIRCUIT BREAKER	1	2	0	6.00	12.00	24.00	.972920	.972920	13169.000000	.972920	ICI III	
3	1123000 MOTOR STARTER												
4	1123600 MOTOR STARTER, 0-600 V												
1123601	MAINTENANCE AND REPAIR	1	2	0	3.00	5.00	10.00	1.950000	1.950000	25.000000	1.950000	ICI III	
1123602	PREVENTIVE MAINTENANCE AND INSPECTION	1	2	0	.50	.50	.50	.650000	.650000	.000000	.650000	ICI III	
1123603	REPLACE STARTER	1	2	0	9.00	18.00	36.00	.838240	.838240	95.160000	.838240	ICI III	
4	1123700 MOTOR STARTER, 601-15,000 V												
1123701	MAINTENANCE AND REPAIR	1	2	0	2.00	3.00	6.00	6.700200	6.700200	75.000000	6.700200	ICI III	
1123702	PREVENTIVE MAINTENANCE AND INSPECTION	1	2	0	.25	.25	.25	.650000	.650000	.000000	.650000	ICI III	
1123703	REPLACE STARTER	1	2	0	9.00	18.00	36.00	.901030	.901030	2304.000000	.901030	ICI III	
3	1124000 CONTACTORS AND RELAYS												
1124001	MAINTENANCE AND REPAIR	1	2	0	2.00	3.00	6.00	2.600000	2.600000	15.000000	2.600000	ICI III	

Army Wide Task/Basic Task Structure List

Tree id: BF Group id: B5

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CACES	DESCRIPTION	UM	TRD	CLASS	FREQ	HIGH	AVE	LOW	Task Work	Performance	Method	EQUIPMENT
						FREQ	FREQ	FREQ	HOURS	HOURS	COSTS	HOURS
												TWPMTH
1124002	PREVENTIVE MAINTENANCE	1	2	0	.50			.50	.208000		.000000	.208000
1124003	REPLACE CONTACTOR/RELAY	1	2	0	.50			.50	.750490		190.000000	.750490
3	1127000 RECEPTACLES & PLUGS											
4	1127100 WIRING DEVICE, SWITCH											
1127101	MAINTENANCE AND REPAIR	1	2	0	5.00	10.00	10.00	15.00	.500500		1.500000	.500500
4	1127200 RECEPTACLE AND PLUG	1	2	0	8.00	15.00	15.00	30.00	.477360		4.230000	.477360
1127201	MAINTENANCE AND REPAIR	1	2	0	15.00	20.00	20.00	25.00	.510900		1.500000	.510900
1127202	REPLACE RECEPTACLE/PLUG	1	2	0	10.00	20.00	20.00	40.00	.477360		5.550000	.477360
4	1127300 SWITCH, PULL CORD											
1127301	MAINTENANCE AND REPAIR-SWITCH	1	2	0	3.00	5.00	5.00	7.00	.500500		1.500000	.500500
1127302	REPLACE SWITCH, PULL CORD	1	2	0	8.00	15.00	15.00	30.00	.477360		4.230000	.477360
3	1130000 LIGHTING SYSTEM											
3	1131000 LIGHTING FIXTURES											
4	1131100 INCANDESCENT LIGHTING FIXTURE											
1131101	MAINTENANCE AND REPAIR	1	2	0	10.00	20.00	20.00	30.00	.390000		10.000000	.390000
1131102	LAMPS	1	2	0	2.00	5.00	5.00	8.00	.068640		.900000	.068640
1131103	LIGHTING FIXTURE	1	2	0	10.00	20.00	20.00	40.00	.448500		16.000000	.448500
4	1131200 QUARTZ LIGHTING FIXTURE											
1131201	MAINTENANCE AND REPAIR	1	2	0	5.00	10.00	10.00	20.00	.390000		1.160000	.390000
1131202	REPLACE LAMP	1	2	0	5.00	10.00	10.00	15.00	.032760		45.000000	.032760
1131203	REPLACE FIXTURE	1	2	0	10.00	20.00	20.00	40.00	.448500		55.000000	.448500
4	1131300 FLUORESCENT LIGHTING FIXTURE											
1131301	MAINTENANCE AND REPAIR	1	2	0	5.00	10.00	10.00	20.00	.832520		15.000000	.832520
1131302	REPLACE LAMPS (2)	1	2	0	5.00	10.00	10.00	15.00	.045890		4.500000	.045890
1131303	REPLACE FIXTURE	1	2	0	10.00	20.00	20.00	40.00	.741260		64.000000	.741260
4	1131400 HID											
5	1131410 HID, MERCURY VAPOR FIXTURE, 250-W											
1131411	MAINTENANCE AND REPAIR	1	2	0	5.00	10.00	10.00	20.00	.615420		50.000000	.615420
1131412	REPLACE LAMP	1	2	0	5.00	10.00	10.00	15.00	.068640		27.000000	.068640
1131413	REPLACE FIXTURE	1	2	0	10.00	20.00	20.00	40.00	.581620		127.000000	.581620
5	1131420 HID, METAL HALID FIXTURE, 250-W											
1131421	MAINTENANCE AND REPAIR	1	2	0	5.00	10.00	10.00	20.00	.615420		65.000000	.615420
1131422	REPLACE LAMP	1	2	0	3.00	5.00	5.00	8.00	.068640		40.000000	.068640
1131423	REPLACE FIXTURE	1	2	0	10.00	20.00	20.00	40.00	.435500		186.000000	.435500
4	1131500 EMERGENCY LIGHTING FIXTURE											
1131501	MAINTENANCE AND REPAIR	1	2	0	5.00	10.00	10.00	20.00	.390000		1.160000	.390000
1131502	REPLACE LAMP	1	2	0	1.00	2.00	2.00	3.00	.068640		1.160000	.068640
1131503	REPLACE FIXTURE	1	2	0	10.00	20.00	20.00	40.00	3.147820		95.000000	3.147820
6	1131600 SODIUM FIXTURE											
5	1131610 H.P. 250 WATT											
1131611	MAINTENANCE AND REPAIR	1	2	0	5.00	10.00	10.00	20.00	.615420		220.000000	.615420
1131612	REPLACE LAMP	1	2	0	5.00	10.00	10.00	15.00	.200460		140.000000	.200460
1131613	REPLACE FIXTURE	1	2	0	5.00	20.00	20.00	40.00	.448500		412.000000	.448500
5	1131620 L.P. 200 WATT											
1131621	MAINTENANCE AND REPAIR	1	2	0	5.00	10.00	10.00	20.00	.615420		160.000000	.615420
1131622	REPLACE LAMP	1	2	0	5.00	10.00	10.00	15.00	.200460		25.000000	.200460
1131623	REPLACE FIXTURE	1	2	0	10.00	20.00	20.00	40.00	.448500		322.000000	.448500
3	1140000 GROUNDING SYSTEM											
3	1141000 ELECTRICAL SERVICE GROUND											
1141001	MAINTENANCE AND REPAIR	4	2	0	12.00	25.00	25.00	75.00	1.054820		2.220000	1.054820
1141002	REPLACE ELECTRICAL SERVICE GROUND	4	2	0	25.00	50.00	50.00	150.00	11.971180		302.200000	11.971180
3	1142000 BUILDING STRUCTURE GROUND											

Army Wide Task/Basic Task Structure List

Tree id: BF Group id: B5

CACES	DESCRIPTION	UM	TRD	CLASS	FREQ	HIGH AVE FREQ	LOW FREQ	LABOR HOURS	Method	MATERIAL COSTS	EQUIPMENT HOURS	TWPMTH
2	1250000 HOSPITAL SYSTEM											
3	1251000 NURSE CALL											
4	1251001 MAINTENANCE AND REPAIR											
3	1252000 DOCTOR PAGING											
4	1252001 MAINTENANCE AND REPAIR											
3	1253000 DOCTOR REGISTER											
4	1253001 MAINTENANCE AND REPAIR											
3	1254000 GROUND DETECTION											
4	1254001 MAINTENANCE AND REPAIR											
3	1255000 VARCOTICS ALARM											
4	1255001 MAINTENANCE AND REPAIR											
3	1256000 OXYGEN ALARM											
4	1256001 MAINTENANCE AND REPAIR											
2	1260000 CLOCK & PROGRAM SYSTEM											
3	1261000 CLOCK AND PROGRAM SYSTEM											
4	1261001 MAINTENANCE AND REPAIR											
2	1270000 ELECTRIC HEATING SYSTEM											
3	1271000 BASEBOARD HEATERS											
4	1271001 MAINTENANCE AND REPAIR											
1	1271002 PREVENTIVE MAINTENANCE AND INSPECTION	1	2	0	1.00	2.00	4.00	.600600	.000000	.000000	.600600	ICIIII
1	1271003 REPLACE BASEBOARD HEATER	1	2	0	.50	.50	.50	1.099800	.000000	.000000	1.099800	ICIIII
2	1272000 WALL & CEILING HEATERS											
3	1272100 WALL MOUNTED & RECESSED WITH FAN											
4	1272101 MAINTENANCE AND REPAIR											
1	1272102 PREVENTIVE MAINTENANCE AND INSPECTION	1	2	0	1.00	1.00	1.00	1.099800	.000000	.000000	1.099800	ICIIII
1	1272103 REPLACE HEATER	1	2	0	10.00	20.00	20.00	2.499900	.000000	.000000	2.499900	ICIIII
2	1272200 RADIANT SUSPENDED, COMMERCIAL											
1	1272201 MAINTENANCE AND REPAIR											
1	1272202 PREVENTIVE MAINTENANCE AND INSPECTION	1	2	0	1.00	2.00	4.00	.600600	.000000	.000000	.600600	ICIIII
1	1272203 REPLACE HEATER	1	2	0	.50	.50	.50	1.099800	.000000	.000000	1.099800	ICIIII
2	1272300 INFRARED SUSPENDED, COMMERCIAL											
1	1272301 MAINTENANCE AND REPAIR											
1	1272302 PREVENTIVE MAINTENANCE AND INSPECTION	1	2	0	.50	.50	.50	1.099800	.000000	.000000	1.099800	ICIIII
1	1272303 REPLACE IR HEATER	1	2	0	8.00	15.00	20.00	2.499900	.000000	.000000	2.499900	ICIIII
3	1273000 INDUSTRIAL HEATERS											
1	1273100 STANDARD SUSPENDED HEATER											
1	1273101 MAINTENANCE AND REPAIR											
1	1273102 PREVENTIVE MAINTENANCE AND INSPECTION	1	2	0	1.00	2.00	4.00	.600600	.000000	.000000	.600600	ICIIII
1	1273103 REPLACE HEATER	1	2	0	.50	.50	.50	1.099800	.000000	.000000	1.099800	ICIIII
2	1273200 EXPLOSION PROOF INDUSTRIAL											
1	1273201 MAINTENANCE AND REPAIR											
1	1273202 PREVENTIVE MAINTENANCE AND INSPECTION	1	2	0	1.00	2.00	4.00	.600600	.000000	.000000	.600600	ICIIII
1	1273203 REPLACE HEATER	1	2	0	.50	.50	.50	1.099800	.000000	.000000	1.099800	ICIIII
4	1274000 DUCT HEATERS											
1	1274001 MAINTENANCE AND REPAIR											
1	1274002 PREVENTIVE MAINTENANCE AND INSPECTION	1	2	0	.50	1.00	2.00	.600600	.000000	.000000	.600600	ICIIII
1	1274003 REPLACE DUCT HEATER	1	2	0	.50	.50	.50	1.099800	.000000	.000000	1.099800	ICIIII
2	1280000 POWER GENERATING SYSTEM											
3	1281000 ENGINE GENERATOR SETS											
1	1281100 GENERATOR, GASOLINE POWERED											
1	1281102 PREVENTIVE MAINTENANCE	1	2	0	.08	25.00	50.00	.799500	.000000	.000000	.799500	ICIIII
1	1281103 REPLACE GENERATOR COMPONENT	1	2	0	12.00	200000	200000	280.020000	.000000	.000000	280.020000	ICIIII
2	1281200 GENERATOR, DIESEL											

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