

Oshawa



PUC Networks Inc.

100 Simcoe Street South, Oshawa, Ontario L1H 7M7 • Tel. (905) 723-4623 • Fax (905) 723-7947 • E-mail contactus@opuc.on.ca

September 21, 2011

Board Secretary
Ontario Energy Board
P.O. Box 2319
27th Floor 2300 Yonge Street
Toronto, Ontario
M4P 1E4

Dear Ms. Walli:

Re: Oshawa PUC Networks Inc. (ED-2002-0560)
Board File Number EB-2011-0073

Pursuant to our submission of September 20, 2011, Oshawa PUC Networks has prepared redacted versions of the Interrogatory Responses which were filed in confidence for the above mentioned rate application. These redacted Responses have been filed using the RESS system. Two (2) paper copies of the submission are enclosed for your files.

If you have any questions about this submission please contact the undersigned.

Yours truly,

A handwritten signature in black ink, appearing to read 'Phil Martin', is written over a large, stylized, looped signature line that extends from the 'Yours truly,' text.

Phil Martin, VP Finance & Regulatory Compliance
Email: pmartin@opuc.on.ca
Phone: (905) 723-4626 ext 5250

Encl(2)

Appendix D

METSCO Proposal Acceptance

in response to

School Energy Coalition Interrogatory # 15

OSHAWA PUC NETWORKS INC

**100 SIMCOE STREET SOUTH
OSHAWA, ONTARIO
L1H 7M7**

STATEMENT OF WORK

ASSET CONDITION ASSESSMENT AND ASSET MANAGEMENT PLAN

OCTOBER 16, 2010

OVERVIEW

OSHAWA PUC NETWORKS (OPUCN) OWNS AND MANAGES INFRASTRUCTURE TO DELIVER SAFE, RELIABLE AND EFFICIENT ENERGY SERVICES TO MEET THE NEEDS OF OUR CUSTOMERS AND THE ENVIRONMENT. OPUCN HAS A SERVICE AREA OF APPROXIMATELY 149 SQ KM WITH APPROXIMATELY 52,553 CUSTOMERS. PRESENT PEAK DEMAND IS 210MW.

OPUCN WILL BE FILING A COST OF SERVICE APPLICATION TO THE ONTARIO ENERGY BOARD (OEB) AND ONE OF THEIR REQUIREMENTS IS TO PROVIDE AN ASSET MANAGEMENT PLAN SUPPORTED BY AN ASSET CONDITION ASSESSMENT. TO THIS END WE ARE INVITING INTERESTED PARTIES TO SUBMIT QUOTATIONS TO DELIVER THIS REQUIREMENT TO SUPPORT OUR COST OF SERVICE APPLICATION.

INSTRUCTION TO BIDDERS

- A. INTERESTED PARTIES TO **SUBMIT QUOTATION** BASED ON THE SCOPE OF WORK IDENTIFIED HEREIN, **NO LATER THAN 12 NOON, WEDNESDAY OCTOBER 27, 2010.**
- B. QUOTATIONS TO INCLUDE:
 - MAJOR DETAILS OF THE APPROACH OR METHODOLOGY IN CONDUCTING THE ASSESSMENT
 - ANY REQUIREMENTS FROM OSHAWA PUC NETWORKS (I.E. RESOURCE HRS, RECORDS, ETC)
 - 5 YEAR LOAD FORECAST (2010-2014) IS AVAILABLE UPON REQUEST
 - INDIVIDUAL **FIXED** PRICING FOR EACH ITEM, INCLUDING DISBURSEMENTS IF ANY
 - CONFIRMED START DATE AND END DATE
- C. ALL WORK TO COMPLY WITH PRESENT SAFETY STANDARDS, OCCUPATIONAL HEALTH AND SAFETY ACT, ESA REQUIREMENTS AND ANY OTHER RELATED REGULATORY REQUIREMENTS
- D. QUESTIONS ARE TO BE DIRECTED TO DENISE FLORES, VICE PRESIDENT OF ENGINEERING AND OPERATIONS, AT 905-723-4626, ext 5315 or via email dflores@opuc.on.ca

SCOPE OF WORK:

- 1) QUOTATIONS ARE TO BE SUBMITTED FOR THE FOLLOWING ITEMS:
 - AN ASSET CONDITION ASSESSMENT
 - RELATED ASSET CONDITION REPORT
 - AN ASSET MANAGEMENT PLAN

Scope of Work cont'd

- 2) INCLUDED IN THE **ASSESSMENT REPORT** IS THE IDENTIFICATION OF THE CONDITION AND VALUE OF THE EXISTING DISTRIBUTION PLANT, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
 - POLES (WOOD AND CONCRETE – Approx 11824)
 - OVERHEAD LINES (PRIMARY & SECONDARY – Approx 512 KM)
 - OVERHEAD EQUIPMENT (TRANSFORMERS, SWITCHES, ARRESTERS,ETC)
 - UNDERGROUND CABLES (PRIMARY AND SECONDARY – Approx 439 KM)
 - UNDERGROUND INFRASTRUCTURE (UG DUCTS, CABLE CHAMBERS, VAULTS, PADMOUNT TYPE TRANSFORMERS, ETC)
 - SUB-STATIONS (44KV AND 13.8KV – 2TS & 8MS) AND RELATED STATION EQUIPMENT (TRANSFORMERS, SWITCHGEAR, CIRCUIT BREAKERS ETC)
- 3) REPORT TO INCLUDE RECOMMENDATIONS AND TIMELINES FOR CORRECTIVE ACTIONS
- 4) **ASSET MANAGEMENT PLAN** TO IDENTIFY OR RECOMMEND APPROACH AND PLAN TO MAINTAIN OR REPLACE ASSETS TO
 - IMPROVE SYSTEM SERVICE RELIABILITY AND ADDRESS THE ASSET CONDITION AND LOAD GROWTH
 - COVER A 5-10 YR TIMELINE AND COST TO IMPLEMENT RECOMMENDATIONS.
- 5) **WORK TO COMMENCE NO LATER THAN NOVEMBER 1, 2010**
- 6) **FINAL ASSET CONDITION REPORT AND ASSET MANAGEMENT PLAN TO BE SUBMITTED NO LATER THAN DECEMBER 31, 2010. SUBMISSION TO BE SENT TO:**

DENISE A. FLORES, P. ENG
VICE PRESIDENT OF ENGINEERING & OPERATIONS
100 SIMCOE ST SOUTH
OSHAWA, ON, L1H 7M7

Asset Condition Assessment/Report and Asset Management Plan

Evaluation of Quotes

Statement of Work submitted to 3 interested parties on October 15, 2010 with a requested submission extended deadline of October 29, 2010:

- METSCO proposal received October 23, 2010
- [REDACTED] proposal received October 27, 2010
- [REDACTED] regretfully declined to bid - email of October 28, 2010

Comparison summary between METSCO & [REDACTED] as below:

METHODOLOGY OR DELIVERABLES	METSCO	[REDACTED]	COMMENTS
ASSET CONDITION ASSESSMENT			
a) Scope of study	Will assess all distribution plant as identified in SOW and more. Very descriptive in methodology or scope plan	Not complete. Will not assess OH lines as LDC does not normally have data. UG ducts, cable chambers, station relays or site facilities and some OH line equipment (insulators, cutouts) not mentioned.	METSCO in line with meeting OPUCN requirements
	Will perform assessment of 100% Substation assets	Only transformers breakers and switchgear mentioned	METSCO conducting 100% and meets OPUCN requirements
b) approach	Will conduct site visits or inspections to obtain significant samples to validate results for both OH & UG plant	Did not mention conducting any site visits or inspections but will rely on existing data or information available from OPUCN, including OPUCN staff interviews and [REDACTED] expertise in asset management	[REDACTED] approach not acceptable. METSCO is in line in meeting OPUCN requirements

c) Data collection for condition assessment	Will collect available data related to age, asset loading, in-service failures and physical condition from OPUCN and thoroughly scrutinized, analyzed and document to identify highest risk and priorities	Will provide OPUCN with template for OPUCN staff to populate. [REDACTED] require OPUCN assistance in examining the extent of data required and agree on minimum set to conduct asset condition. Will NOT mine data as this is extra.	METSCO provides more expertise and utilize their services to prepare for objective data assessment. [REDACTED] appears to be relying on OPUCN input rather than doing what they believe is required and they will not do data mining.
d) kick off meeting	More to confirm and agree on scope and deliverables to avoid surprises	Suggests meeting is to obtain OPUCN expert opinion?	Thought [REDACTED] had the expertise and should be guiding OPUCN, otherwise Why do we need [REDACTED].
e) Use of OPUCN resources	Will utilize to help acquire data and perhaps to gain access for inspections. Metsco will conduct inspections etc and prepare objective condition assessment	Seems to be using OPUCN staff for data collection, opinions, and guidelines to help formulate condition assessment	[REDACTED] relying heavily on OPUCN staff, which "compromises" objectivity of assessment. Not preferred
f) Asset Condition Assessment Report	Report with objective quantitative measurement units in form of health indices based on data collected and site inspections. Will then review report with OPUCN to ensure any concerns with plant/asset condition are addressed	Draft report for "limited" asset categories with health index based on data provided by OPUCN, interviews with OPUCN and [REDACTED] industry expertise/experience. OPUCN to review report and provide comments which will be incorporated to produce final. (1 revision only)	[REDACTED] approach to preparing report NOT acceptable

ASSET MANAGEMENT PLAN	METSCO		COMMENTS
a) Approach	Use the results of the Asset Condition Report and review plan for investments to mitigate asset risk. Asset mgmt Plan will then be developed and finalized by METSCO to meet OEB compliance/expectations for Cost of Service application	<p>will meet with OPUCN to develop structure and table of contents. OPUCN to provide with corporate info, reliability stats, graphs, maps, diagrams etc for specific sections to complete Asset mgmt Plan report.</p> <p>to provide write up for certain sections and OPUCN will put all sections together for overall review to ensure consistency and compatibility with OEB expectations</p>	<p>approach not preferred. Relying too heavily on OPUCN. METSCO more in line with OPUCN requirements</p>
b) scope	Plan to cover budgetary estimates to implement report recommendations over 5-10 year investment period	Capital & maintenance investment buckets for the next 5 yrs	METSCO is providing more using their resource expertise and experience
TOTAL PRICE	FIXED LUMP SUM \$37,500 plus HST	FIXED COST Asset Condition Asset Mgmt Plan	METSCO lowest bid

RECOMMENDATIONS:

Based on the above “Pros” and Price submission, Award Contract to METSCO

Denise Flores

From: Denise Flores
Sent: October 15, 2010 5:19 PM
To: [REDACTED]
Subject: OPUCN Statement of Work
Attachments: Asset Mgmt Plan - SOW Oct 2010.docx

Importance: High

Hi [REDACTED],

Regarding our previous conversation and confirmation that you are interested in submitting quotations to

- conduct an Asset Condition Assessment
- prepare an associated asset management condition report
- prepare an Asset Management Plan,

I am pleased to submit the related Statement of Work.

Please note quotes are due no later than **12 noon, Wed Oct 27, 2010**

Please feel free to contact me should you have any concerns or questions.

Regards,

Denise A. Flores, P. Eng.

Vice President, Engineering and Operations

Oshawa PUC Networks Inc.

100 Simcoe Street South

Oshawa, Ontario L1H 7M7

Bus: (905) 723-4623 ext 5315

Cell: (905) 706 2929

Fax: (905) 571-1015

dflores@opuc.on.ca

Denise Flores

From: [REDACTED]
Sent: October 23, 2010 8:08 AM
To: Denise Flores
Cc: [REDACTED]
Subject: METSCO Proposal
Attachments: Oshawa PUC Asset management proposal.pdf; OPUC Asset Management Proposal - Appendix A.docx; [REDACTED]
[REDACTED] IEEE paper.pdf

Dear Ms. Flores:

In response to your recent request for proposals, we are pleased to submit our attached proposal for your consideration. We trust our proposal is fully compliant with your needs and is based on achieving all of your objectives. However we are open to discussing possible alternatives to further reduce the costs, if you wish.

Please note I will be away on an overseas assignment in Brazil and Paraguay next week, arriving back on October 31, 2010.

We look forward to assist you with this assignment.

[REDACTED]
[REDACTED]
METSCO Inc.

Telephone: [REDACTED]
Email: [REDACTED]
www.metsco.ca

Denise Flores

From: Denise Flores
Sent: November 11, 2010 6:22 PM
To: [REDACTED]
Subject: Contract for Asset Condition Assessment Report and Asset Mgmt Plan

Hi [REDACTED];

I am confirming that METSCO Inc has been awarded the contract to perform the following services as outlined in your submitted proposal and which meets Oshawa's PUC Statement of Work:

- conduct an Asset Condition Assessment
- prepare an associated asset management condition report
- prepare an Asset Management Plan,

As a reminder, the work starts immediately and the submission date for the above deliverables is Jan 31, 2011 or earlier.

I will proceed to provide you with a PO# .

Regards

Denise A. Flores, P. Eng.

Vice President, Engineering and Operations

Oshawa PUC Networks Inc.

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dflores@opuc.on.ca

Denise Flores

From: Denise Flores
Sent: October 15, 2010 5:28 PM
To: [REDACTED]
Subject: Oshawa PUCN - Statement of Work
Attachments: Asset Mgmt Plan - SOW Oct 2010.docx

Importance: High

Hi [REDACTED]

Regarding our previous conversation and confirmation that [REDACTED] is interested in submitting quotations to

- conduct an Asset Condition Assessment
- prepare an associated asset management condition report
- prepare an Asset Management Plan,

I am pleased to submit the related Statement of Work. You indicated that as an EDA member we may potentially receive discount pricing. Please confirm accordingly or indicate clearly in your submission if the quotes are discounted.

Hopefully you are the right person to send this to and if not please forward accordingly to that individual. Please note that the submission is time sensitive and is to be **no later than 12 noon, Wed Oct 27, 2010**.

Please feel free to contact me should you have any concerns or questions.

Regards,

Denise A. Flores, P. Eng.

Vice President, Engineering and Operations

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dflores@opuc.on.ca

Denise Flores

From: [REDACTED]
Sent: October 26, 2010 9:41 AM
To: Denise Flores
Cc: [REDACTED]
Subject: [REDACTED]
Attachments: Oshawa Proposal - Oct. 27-10.pdf

Good morning Denise,

Please find attached our proposal in response to your Statement of Work on Asset Condition Assessment and Asset Management Plan, as promised ahead of October 29th deadline. Please let me know whether I should be sending a hard copy as well.

The price quoted is essentially the same as what was offered to USF members last year in spite of the fact that you have more assets than the standard list, so we have really sharpened our pencils to bring it down.

We find that the Risk Assessment part is really what sets us apart from others.

Please do not hesitate to call me if you have any questions at all and I look forward to meeting you in person in the near future.

Best Regards

[REDACTED]

Denise Flores

From: Denise Flores
Sent: November 11, 2010 6:29 PM
To: [REDACTED]
Subject: Oshawa request for Asset condition assessment report & Asset Mgmt Plan

Hi [REDACTED]

Thank you again for submitting [REDACTED] proposal/quote for the above as defined in our Statement of Work.

We reviewed all submissions from all interested parties and unfortunately I am confirming that [REDACTED] was not selected.

We hope that will be future opportunities to do business together.

Regards,

Denise

Denise A. Flores, P. Eng.

Vice President, Engineering and Operations

Oshawa PUC Networks Inc.

100 Simcoe Street South

Oshawa, Ontario L1H 7M7

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Fax: (905) 571-1015

dflores@opuc.on.ca

Denise Flores

From: Denise Flores
Sent: October 15, 2010 5:14 PM
To: [REDACTED]
Subject: Oshawa PUCN - Statement of Work
Attachments: Asset Mgmt Plan - SOW Oct 2010.docx

Importance: High

Hi [REDACTED],

Regarding our previous conversation and confirmation that [REDACTED] is interested in submitting quotations to

- conduct an Asset Condition Assessment
- prepare an associated asset management condition report
- prepare an Asset Management Plan,

I am pleased to submit the related Statement of Work.

Please feel free to contact me should you have any concerns or questions.

Regards,

Denise A. Flores, P. Eng.

Vice President, Engineering and Operations

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Cell: (905) 706 2929

Fax: (905) 571-1015

dflores@opuc.on.ca

Denise Flores

From: [REDACTED]
Sent: October 28, 2010 11:46 AM
To: Denise Flores
Subject: Oshawa PUCN - Statement of Work - Asset Management Plan

Hi Denise,

Reference is made to the request for quotation to provide Asset Condition Assessment Services, an Asset Condition Assessment Report and Asset Management Plan for your network.

Upon further review of the tasks to be undertaken in the timeframe provided, we regret to inform you that [REDACTED] will have to decline to bid on these works at this stage.

We would like to thank you for considering us for this venture and wish you all the best with the delivery of these works. We look forward to the opportunity to work with you in the future.

Should you wish to discuss the above, please feel free to contact me.

Yours Sincerely,

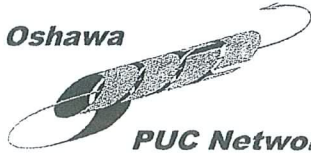
[REDACTED]

Appendix H

Project Costing & Award Samples

in response to

Board Staff Interrogatory # 19



CONFIDENTIAL

Background

As per the staff's request Purchasing issued a tender document for Vacuum Excavation as per the specifications supplied by the Overhead and Fleet Manager.

Tender # T09-04-VE closed on May 7, 2009. Five tenders were issued and three were received. Purchasing and Distribution opened the three (3) tenders for evaluation. The tenders were evaluated for compliance with the specifications and quotation submitted. [REDACTED] did not reply to the tender.

Discussion***Tender pricing:***

Normal Hours	\$300.00/hr	\$230.00/hr	\$195.00/hr	No quote	No quote
After Hours	\$300.00/hr	\$250.00/hr	\$250.00/hr	No quote	No quote
Emergency	\$300.00/hr	\$250.00/hr	\$250.00/hr	No quote	No quote

Recommendation

Proceed with awarding the Vacuum Excavation contract to [REDACTED] Inc.

Report prepared by: _____


 J.R. Wagg, Materials Manager

Report approved by: _____


 D. Osborne, Overhead & Fleet Manager

Recommendation approved by: _____

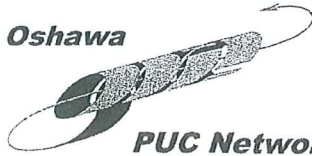
 A. Mahajan, CEO

 , CFO

 M. Turney, VP Operations & Engineering

CONFIDENTIAL

Oshawa



PUC Networks Inc.

Tender Award – Vacuum Excavation -
Addendum

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████████████████████ will be set up on a registry to provide the vacuum excavation service as outlined in the tender document for the next three years. The low bidder will be called in when service is required. If unavailable to fulfill the service requirement the next vendor ██████████ will be called to provide the required service. ██████████ will be put on a one hundred eighty (180) day evaluation. Distribution will keep detail records of the services provided, any issues reported by staff and forward copies to Purchasing. The Materials Manager will retain these records for final review with the Executive.

Report prepared by: _____

J.R. Wagg, Materials Manager

Report approved by: _____

D. Osborne, Overhead & Fleet Manager

Recommendation approved by: _____

A. Mahajan, CEO

_____, CFO

M. Turney, VP Operations & Engineering

2009.06.02

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W.O. #C11-500					
Project Name New UG Primary Serv.					
[REDACTED]					
COMMERCIAL 3PH PAD 03/25/11					
[REDACTED]					
[REDACTED]					
15KV THREE PHASE DIP VERTICAL					
0					
15KV THREE PHASE DIP TANGENT					
0					
3PH PAD-MOUNT TRANS (150 to 500)					
1					
3PH PAD-MOUNT TRANS (750 to 1000)					
0					
DESCRIPTION	STOCK #	QUANTITY	VALUE	STORES	TOTAL
ARRESTER 10kv RISER POLE	[REDACTED]	0	\$51.87	\$0.00	\$0.00
TRANSFORMER BASE-6'X6' W/6" LID	[REDACTED]	1	\$1,568.56	\$313.71	\$1,882.27
Tx, BASE, FLOOR&LID (48"x78"x85") 750 -1	[REDACTED]	0	\$1,735.00	\$0.00	\$0.00
CONN SPLIT BOLT 2/0	[REDACTED]	2	\$22.29	\$8.92	\$53.49
BOLT MACH 5/8"x12"	[REDACTED]	0	\$1.21	\$0.00	\$0.00
BOLT SPACER 5/8"x24"	[REDACTED]	0	\$2.71	\$0.00	\$0.00
BOLT MACH 5/8"x14"	[REDACTED]	0	\$1.38	\$0.00	\$0.00
FIBREGLOSS 3-PHASE BRACKET C/W HARDWARE	[REDACTED]	0	\$198.00	\$0.00	\$0.00
CABLE #2 CU BARE	[REDACTED]	0	\$3.81	\$0.00	\$0.00
CABLE #2 CU XLPEJ-CN	[REDACTED]	250	\$12.02	\$350.00	\$3,356.04
CABLE 15KV #2 CU IN DUCT	[REDACTED]	0	\$16.08	\$0.00	\$0.00
CABLE 2/0CU SOLID BARE (FT)	[REDACTED]	0	\$2.56	\$0.00	\$0.00
CABLE 2/0 CU BARE	[REDACTED]	10	\$6.32	\$12.64	\$75.81
CLAMP STIRRUP LARGE	[REDACTED]	0	\$26.24	\$0.00	\$0.00
CLAMP HOT LINE	[REDACTED]	0	\$9.10	\$0.00	\$0.00
CLIPS THROAT LARGE 3 1/4"	[REDACTED]	0	\$7.29	\$0.00	\$0.00
CRIMPIT 2/0-2/0	[REDACTED]	2	\$6.46	\$2.58	\$15.50
3/4" GROUND ROD CONNECTOR TO 2/0 WIRE	[REDACTED]	4	\$26.85	\$21.48	\$128.86
CONNECTOR TAP 556-1/0 STRAND(Y67)	[REDACTED]	0	\$22.04	\$0.00	\$0.00
CONN SQUEEZE #2-#2 (508,YHO-2)	[REDACTED]	0	\$0.61	\$0.00	\$0.00
CONNECTOR SQUEEZE 3/0AACSR-3/0 (505,YHD-6)	[REDACTED]	0	\$1.02	\$0.00	\$0.00
CONNECTOR SQUEEZE 3/0AACSR-#2 (503,YHD-5)	[REDACTED]	0	\$0.90	\$0.00	\$0.00
DUCT 100mm OD (ft)	[REDACTED]	0	\$0.89	\$0.00	\$0.00
ELBOW L/B 15kv 200A #2	[REDACTED]	3	\$36.70	\$22.02	\$132.13
15kv Fused loadbreak elbow	[REDACTED]	0	\$475.00	\$0.00	\$0.00
METER BOX c/w LOCK HANDLE	[REDACTED]	1	\$438.37	\$87.67	\$526.04
FUSELINK (20K)	[REDACTED]	0	\$2.94	\$0.00	\$0.00
65 amp fuselink	[REDACTED]	0	\$7.17	\$0.00	\$0.00
U-GUARD CABLE LARGE 3 1/4"x8'	[REDACTED]	0	\$43.51	\$0.00	\$0.00
HOLDER NUMBER VERTICAL	[REDACTED]	0	\$3.55	\$0.00	\$0.00
L/B BUSHING INSERT 15kv	[REDACTED]	3	\$36.13	\$21.68	\$130.07
INSUL 15kv RISER POLE	[REDACTED]	0	\$39.83	\$0.00	\$0.00
PADLOCK	[REDACTED]	1	\$12.74	\$2.55	\$15.29
PADLOCK	[REDACTED]	0	\$12.74	\$0.00	\$0.00
LUGS COMPRESSION 500KCMIL	[REDACTED]	0	\$6.76	\$0.00	\$0.00
LUG COMPRESSION #2 3/8" HOLE	[REDACTED]	0	\$4.45	\$0.00	\$0.00
LUG COMPRESSION #4 3/8" HOLE	[REDACTED]	0	\$2.26	\$0.00	\$0.00
MOULDING 1/2" PLASTIC 8'	[REDACTED]	0	\$0.24	\$0.00	\$0.00
GROUND ROD 3/4X10	[REDACTED]	4	\$14.55	\$11.64	\$69.85
SCREW LAG 1/4"x3"	[REDACTED]	0	\$0.11	\$0.00	\$0.00
STRAP UGUARD LARGE 3 1/4"	[REDACTED]	0	\$1.21	\$0.00	\$0.00
SWITCH CUTOFF 100A 15KV	[REDACTED]	0	\$79.04	\$0.00	\$0.00
BAANDIT TAPE	[REDACTED]	0	\$83.67	\$0.00	\$0.00
PHASING TAPE RED	[REDACTED]	1	\$4.40	\$2.50	\$6.90
PHASING TAPE WHITE	[REDACTED]	1	\$4.36	\$2.50	\$6.86
PHASING TAPE BLUE	[REDACTED]	1	\$4.40	\$2.50	\$6.90
TAPE #37	[REDACTED]	1	\$1.46	\$2.50	\$3.96
TERMINATOR 15KV #2CU	[REDACTED]	0	\$62.42	\$0.00	\$0.00
1000 KVA RAD PAD transformer 13800-600/	[REDACTED]	0	\$33,395.66	\$0.00	\$0.00
500 kVA RAD TRANS 600 347V	[REDACTED]	0	\$13,500.83	\$0.00	\$0.00
500 KVA transformer 13800-600/347 PAD to	[REDACTED]	0	\$13,079.64	\$0.00	\$0.00
750 kVA RAD PAD 13800/600/347V	[REDACTED]	0	\$26,356.01	\$0.00	\$0.00
750 KVA LOOP PAD transformer 13800-600/347	[REDACTED]	0	\$30,192.21	\$0.00	\$0.00
300 KVA RAD PAD TRANS 13800-208 120V	[REDACTED]	1	\$13,336.03	\$350.00	\$13,686.03
300 KVA loop PAD transformer 13800-600/347	[REDACTED]	0	\$13,305.62	\$0.00	\$0.00
WASHER CURVED 3/8"x1 1/2" HOLE	[REDACTED]	0	\$1.23	\$0.00	\$0.00
WIRE #4CU 6KV TRANS DROP WSTR	[REDACTED]	0	\$4.01	\$0.00	\$0.00
#2 copper split bolt connector	[REDACTED]	3	\$2.04	\$1.50	\$3.52



TOTAL MATERIAL		\$1,217.39	\$25,104.62

LABOUR REGULAR	#OF MEN	HOURS	TOTAL HOURS	\$/HRS	TOTAL
SUBF'MAN LINEMEN LAB HRLY REG	1	40.00	40.00	\$41.03	\$3,036.22
LINEMEN HOURLY REGULAR	1	40.00	40.00	\$36.63	\$2,710.62
O/H EQUIP OPER LAB HOURLY REG	1	8.00	8.00	\$31.06	\$459.69
SUBFOREMAN FORESTER	1	0.00	0.00	\$34.38	\$0.00
FORESTER	1	0.00	0.00	\$31.24	\$0.00
SUBF'MAN PME UNDRGND HRLY REG	1	0.00	0.00	\$41.03	\$0.00
PME HOURLY REG	1	0.00	0.00	\$36.63	\$0.00
SUBFOREMAN SERVICEMAN	1	0.00	0.00	\$35.41	\$0.00
CABLE HOURLY REG	2	8.00	16.00	\$35.41	\$1,048.14
TOTAL REGULAR LABOUR			104.00		\$7,254.66
LABOUR OVERTIME					
SUBF'MAN LINEMEN LAB HRLY OT	1	0.00	0.00	\$41.03	\$0.00
LINEMEN HOURLY OT	4	0.00	0.00	\$36.63	\$0.00
O/H EQUIP OPER LAB HOURLY OT	1	0.00	0.00	\$31.06	\$0.00
SUBFOREMAN FORESTER	1	0.00	0.00	\$34.38	\$0.00
FORESTER	1	0.00	0.00	\$31.24	\$0.00
SUBF'MAN PME UNDRGND HRLY OT	1	0.00	0.00	\$41.03	\$0.00
PME HOURLY OT	1	0.00	0.00	\$36.63	\$0.00
SUBFOREMAN SERVICEMAN	1	0.00	0.00	\$35.41	\$0.00
CABLE HOURLY OT	2	0.00	0.00	\$35.41	\$0.00
TOTAL OVERTIME LABOUR			0.00		\$0.00
TOTAL LABOUR			104.00		\$7,254.66
EQUIPMENT			HOURS	\$/HR	TOTAL
SINGLE BUCKET SERVICE VEHICLE			40.00	\$35.00	\$1,400.00
O/H DOUBLE BUCKET			0.00	\$35.00	\$0.00
DERRICK SERVICE VEHICLES			8.00	\$35.00	\$280.00
FORESTRY			0.00	\$0.00	\$0.00
U/G SINGLE BUCKET			8.00	\$35.00	\$280.00
U/G DIGGER DERRICK			0.00	\$35.00	\$0.00
PICKUP TRUCK SERVICE VEHICLES			0.00	\$10.00	\$0.00
DUMP TRUCK			4.00	\$35.00	\$140.00
TOTAL VEHICLES					\$2,100.00
CONSTRUCTION STORES					
FACTORYING CREW	BCONTRACTED SERVICES		0.00	\$230.00	\$0.00
BACKHOE AND OPERATOR	BCONTRACTED SERVICES		4.00	\$65.00	\$260.00
TREE TRIMMING SERVICE	BCONTRACTED SERVICES		0.00	\$85.00	\$0.00
DIRECTIONAL BORE			1.00	\$3,000.00	\$3,000.00
TOTAL CONST. STORES					\$3,260.00
TOTAL SUB					\$37,719.29
CREDITS					\$0.00
NET U/G COST					\$37,719.29
ENG TECH HOURLY REGULAR					\$5,657.89
TOTAL SUB					\$43,377.18
HST					\$5,639.03
TOTAL GRAND					\$49,016.21