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CITY COUNCIL MEETING
APRIL 18, 1984

SPECIFICATIONS
APPROVED FOR
PURCHASE OF 576
WATTHOUR METERS
AND PADMOUNT
TRANSFORMERS

COUNCIL APPROVED THE SPECIFICATIONS FOR THE PURCHASE OF 576
WATTHOUR METERS AND THE PURCHASE OF ONE 1,000 KVA, ONE 75
KVA, ONE 300 KVA, ONE 225 KVA, AND ONE 112.5 KVA THREE-PHASE
PADMOUNT TRANSFORMERS AND AUTHORIZED THE ADVERTISING FOR
BIDS THEREON

COUNCIL COMMUNICATION

TO THE CITY COUNCIL

FROM: THE CITY MANAGER'S OFFICE

DATE

April 10, 1984

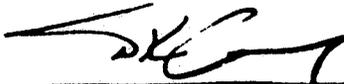
NO.

SUBJECT: PURCHASE OF WATTHOUR METERS (UD-E84-3)

Specifications for the purchase of 576 watthour meters are presented for Council's approval and permission to advertise for bids is requested. The bid opening date has been set for Tuesday, May 22, 1984.

The meters will be used to meter electric energy usage at the following developments: Lakeshore Village, Park West, Beckman Ranch, Summerfield, Noma Ranch, as well as various smaller developments throughout the City and to maintain an inventory of meters for other needs as they develop.

The estimated cost of this purchase is \$20,000 with delivery expected in approximately three months.



David K. Curry
Utility Director

Attach.

COUNCIL COMMUNICATION

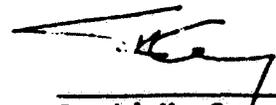
TO: THE CITY COUNCIL FROM: THE CITY MANAGER'S OFFICE	DATE May 24, 1984	NO.
SUBJECT: PURCHASE OF WATTHOUR METERS (UD-E84-3)		

On Tuesday, May 22, 1984, bids were received for 576 watthour meters. These meters will be used to meter electric energy usage at the following developments:

Lakeshore Village
Park West
Beckman Ranch
Summerfield
Noma Ranch

as well as various smaller developments throughout the City and to maintain an inventory of meters for other needs as they develop.

Based on the bids received, it is recommended that the bid be awarded to the lowest bidder, Maydwell & Hartzell, Inc., in the amount of \$18,029.84.



David K. Curry
Utility Director

Attach.

WATTHOUR BID EVALUATION

UD-E84-3

<u>Supplier</u>	<u>Price, Incl. Tax</u>	<u>Delivery (weeks)</u>
Maydwell & Hartzell, Inc. Brisbane	<u>\$18,029.84</u>	4 - 5
General Electric Supply Co. Emeryville	\$19,080.00	8
Ace Supply Co. Emeryville	\$21,394.02	8
Westinghouse Elec. Supply Co. Concord	No Response	



Specifications

WATTHOUR METERS

UD-84-3

April, 1984

CITY OF LODI
UTILITY DEPARTMENT

NOTICE INVITING BIDS

FURNISH AND DELIVER WATTHOUR METERS

TO

CITY OF LODI, CALIFORNIA

The City of Lodi hereby invites sealed proposals for furnishing and delivering watthour meters.

Each bid shall be in accordance with specifications on file in the office of the Utility Director, City Hall, City of Lodi, California 95240, where copies of said specifications may be inspected or obtained. No bid will be considered unless it is submitted on a proposal form furnished by the City of Lodi.

Said sealed proposals shall be delivered to the Purchasing Agent at the City Hall, 221 West Pine Street, Lodi, CA 95240 (P. O. Box 320, Lodi, CA 95241-0320), at or before

11:00 A.M., TUESDAY, MAY 22, 1984

and will be publicly opened on said day and hour in the Council Chambers in the City Hall, Lodi, California.

The City of Lodi reserves the right to reject any or all bids, to waive any informality or irregularity in any bid, to accept other than the lowest bid, or not to award the bid.

Reference is hereby made to said specifications for further details.

CITY OF LODI

James W. Pruss
Purchasing Agent

INFORMATION TO BIDDERS

BID OPENING

- A. The purchasing Agent will receive sealed bids in his office, City Hall, 221 West Pine Street, Lodi, California 95240, until the time for opening bids as noted in the "Notice Inviting Bids." Bidders or their authorized agents are invited to be present.
- B. The proposal shall be submitted as directed in the "Notice Inviting Bids" under sealed cover plainly marked as a proposal, and identifying the equipment to which the proposal relates and the date of the bid opening therefor. Proposals which are not properly marked may be disregarded.

PROPOSAL FORM

- A. Prospective bidders are furnished with one proposal form included with the specifications.
- B. The proposal must be signed with the full name and address of the bidder, if a co-partnership, by a member of the firm; if a corporation, by an officer in the corporate name.
- C. The purchaser reserves the right to accept other than the lowest bid and to reject any or all bids.

REJECTION OF PROPOSALS

Bids may be rejected if they show any alterations of proposal form, additions not called for, or alternative bids not properly documented. Bids proposing equipment with which the City has no prior in-service experience may be rejected. Erasures or irregularities of any kind may also be cause for rejection.

AWARD OF BID

- A. The award of the bid, if it be awarded, will be to the lowest responsible bidder whose bid proposal complies with all the requirements described.

AWARD OF BID (continued)

- B. Where alternate bids are received, the City Council reserves the right to select the bid most advantageous to the City. The award, if made, will be made within thirty (30) days after the opening of the bids.

DELIVERY

Delivery time will be part of the bid evaluation, and delivery shall be clearly indicated on the proposal. Truck delivery shall be made only during normal working hours.

PRICES

All quoted prices shall be current* and firm for at least thirty (30) days after date of bid opening. Escalation clause(s) and base indices shall be clearly specified. Maximum escalation shall also be indicated. Prices to be F.O.B. Lodi, California.

SALES AND USE TAXES

All quotations submitted shall include California State sales or use taxes.

PAYMENTS:

- A. Invoices shall indicate sales or use taxes as separate items apart from the cost F.O.B. point of delivery. Purchaser's specifications and order number shall appear on all invoices. All invoices shall be rendered in triplicate.
- B. Full payment by purchaser shall not release supplier of his responsibility to fully carry out his bid obligations nor be construed by supplier as acceptance of the work hereunder by purchaser.

* May, 1984

GUARANTEES

- A. In addition to any or all guarantees mentioned elsewhere herein, the supplier shall repair and/or replace entirely at his own expense any parts or part that may develop defects due to faulty material, workmanship or design within a period of at least one year after the equipment has been accepted by the purchaser.

- B. This transaction will be covered by City of Lodi purchase order and all terms included in Information to Bidders, Proposal and Detailed Specifications will be binding.

PROPOSAL

UD-E84-3 WATTHOUR METERS

FOR

THE CITY OF LODI, CALIFORNIA

PROPOSAL:

TO FURNISH EQUIPMENT AS SPECIFIED IN THESE SPECIFICATIONS FOR THE CITY OF LODI,
CALIFORNIA.

Name of Bidder _____

Address of Bidder _____

To the Lodi City Council
City Hall
Lodi, California

The undersigned, as bidder, declares that he has carefully examined the Information to Bidders and Specifications filed for furnishing and delivering equipment, and agrees that he is fully informed regarding all of the conditions affecting the materials to be furnished for the completion of the work, and that his information was secured by personal investigation and research and not from any estimate of the engineer; and that he will make no claim against the City by reason of estimates, tests or representations of any officer or agent of the City; and he proposes and agrees that, if the proposal be accepted, he will furnish the City of Lodi the necessary apparatus and materials specified in the bid in the manner and time therein set forth. It has been noted the City of Lodi reserves the right to accept all or part of this bid, and to reject any or all bids or to accept other than the lowest bid.

All items listed below are to be in accordance with the City of Lodi Specifications dated April, 1984. The bidder will submit a detailed list of any and all exceptions taken to these Specifications. In the absence of such a list, it will be understood that the bidder's proposal is based on strict conformance to the Specifications in all respects. If exceptions are taken, they will be cleared before the award is made.

If awarded the bid, the undersigned agrees to furnish and deliver the equipment described in the Specifications and that he will take in full payment therefor the following unit and total prices, to-wit:

<u>QUANTITY</u>	<u>ITEM WITH UNIT PRICE WRITTEN IN WORDS</u>	<u>UNIT PRICE</u>	<u>TOTAL</u>
576	Watthour meters, Form 2S, 4 terminal, 3 wire, 240 volt, Class 200, 5 dial with "Lexan" cover and "City of Lodi" number beginning at 24049.		
	_____	\$ _____	\$ _____
		Taxes	\$ _____
		Total:	\$ _____

Delivery is _____ weeks.

Maximum escalation is _____ percent.

Manufacturer _____

It is understood and agreed that if this Proposal is accepted, the price quoted above is inclusive of sales or use tax, or similar tax now imposed by Federal, State, or other governmental agency upon the material specified.

Shipment will be made by _____
(trucks, or railroad cars and trucks)
and will be consolidated into about _____ shipments.
(number of)

The undersigned submits with this Proposal complete manufacturer's specifications covering all material bid. Failure to provide adequate information may cause rejection of bid.

In any case where discrepancy in extensions may occur, the Bidder agrees that the unit price shall be taken as the correct figure.

The undersigned has checked carefully all the above figures and understands that the City and its officers and employees will not be responsible for any errors or omissions on the part of the undersigned in making up this bid.

The undersigned, as bidder, hereby declares that the only persons or firms interested in the proposal as principal or principals is or are named herein and that no other persons or firms than herein mentioned have any interest in this proposal, that his proposal is made without connection with any other person, company or parties making a bid or proposal; and that it is in all respects fair and in good faith, without collusion or fraud.

The undersigned hereby designates as his office to which such notice of acceptance may be mailed, telegraphed or delivered:

This bid may be withdrawn at any time prior to the scheduled time for the opening of bids or any authorized postponement thereof.

SIGNATURE OF BIDDER

By _____

Title _____

Dated: _____

Address _____

The full names and residences of persons and firms interested in the foregoing bid, as principals, are as follows:

EQUIPMENT SPECIFICATIONS

WATTHOUR METERS

1-3 GENERAL

Meter shall be single-phase watthour with clock dial register, self-contained socket-type having "Lexan" cover. A label marked "City of Lodi" and a sequential number beginning with 24049 shall be factory installed on each meter. Shipping boxes shall show on the outside the sequential number of the meters contained within.

1-4 RATING

Form 2S, 4 terminal, 240 volt, 3 wire, Class 200, 5 dials, Kh 7.2, test amps. 30, multiplying factor 1.

COUNCIL COMMUNICATION

TO THE CITY COUNCIL
FROM THE CITY MANAGER'S OFFICE

DATE April 10, 1984

NO.

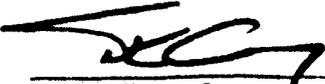
SUBJECT: PURCHASE OF PADMOUNT TRANSFORMERS (UD-E84-4)

Specifications for the purchase of one 1,000 KVA, one 75 KVA, one 300 KVA, one 225 KVA and one 112.5 KVA three-phase padmount transformers are presented for Council's approval and permission to advertise for bids is requested. The bid opening date has been set for Tuesday, May 22, 1984.

The transformers will be utilized at White Slough Water Pollution Control Facility to replace an existing PG&E unit,* to serve the pumping facility at "E" Basin located in Park West Subdivision and to serve the Beckman Ranch Shopping Center on Kettleman Lane, west of Fairmont Avenue.

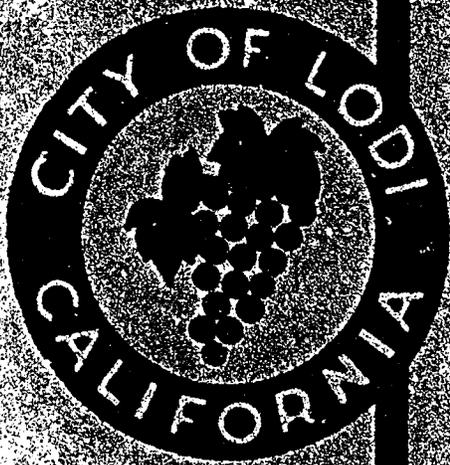
The estimated cost of this purchase is \$34,500 with delivery expected in approximately five months.

* Replacement necessitated by conversion to primary metering, a PG&E and WAPA requirement.



David K. Curry
Utility Director

Attach.



Specifications

THREE-PHASE
PADMOUNT TRANSFORMERS

UD-E84-4

April, 1984

CITY OF LODI
UTILITY DEPARTMENT

Specifications

**THREE-PHASE
PADMOUNT TRANSFORMERS**

UD-E84-4

April, 1984

**NOTICE INVITING BIDS TO
FURNISH AND DELIVER THREE-PHASE
PADMOUNT TRANSFORMERS**

TO

CITY OF LODI, CALIFORNIA

The City of Lodi hereby invites sealed proposals for furnishing and delivering three-phase padmount transformers.

Each bid shall be in accordance with specifications on file in the office of the Utility Director, City Hall, City of Lodi, California 95240, where copies of said specifications may be inspected or obtained. No bid will be considered unless it is submitted on a proposal form furnished by the City of Lodi.

Said sealed proposals shall be delivered to the Purchasing Agent at the City Hall, 221 West Pine Street, Lodi, CA (P. O. Box 320, Lodi, CA 95241-0320), at or before

11:00 A.M., TUESDAY, MAY 22, 1984

and will be publicly opened on said day and hour in the Council Chambers in the City Hall, Lodi, California.

The City of Lodi reserves the right to reject any or all bids, to waive any informality or irregularity in any bid, to accept other than the lowest bid, or not to award the bid.

Reference is hereby made to said specifications for further details.

CITY OF LODI

**James W. Pruss
Purchasing Agent**

INFORMATION TO BIDDERS

BID OPENING

- A. The purchasing Agent will receive sealed bids in his office, City Hall, 221 West Pine Street, Lodi, California 95240, until the time for opening bids as noted in the "Notice Inviting Bids." Bidders or their authorized agents are invited to be present.
- B. The proposal shall be submitted as directed in the "Notice Inviting Bids" under sealed cover plainly marked as a proposal, and identifying the equipment to which the proposal relates and the date of the bid opening therefor. Proposals which are not properly marked may be disregarded.

PROPOSAL FORM

- A. Prospective bidders are furnished with one proposal form included with the specifications.
- B. The proposal must be signed with the full name and address of the bidder, if a co-partnership, by a member of the firm; if a corporation, by an officer in the corporate name.
- C. The purchaser reserves the right to accept other than the lowest bid and to reject any or all bids.

REJECTION OF PROPOSALS

Bids may be rejected if they show any alterations of proposal form, additions not called for, or alternative bids not properly documented. Bids proposing equipment with which the City has no prior in-service experience may be rejected. Erasures or irregularities of any kind may also be cause for rejection.

AWARD OF BID

- A. The award of the bid, if it be awarded, will be to the lowest responsible bidder whose bid proposal complies with all the requirements described.

AWARD OF BID (continued)

- B. Transformer losses will be considered in the evaluation of the proposal.
- C. Where alternate bids are received, the City Council reserves the right to select the bid most advantageous to the City. The award, if made, will be made within thirty (30) days after the opening of the bids.

DELIVERY

Delivery time will be part of the bid evaluation, and delivery shall be clearly indicated on the proposal. Truck delivery shall be made only during normal working hours.

PRICES

All quoted prices shall be current* and firm for at least thirty (30) days after date of bid opening. Escalation clause(s) and base indices shall be clearly specified. Maximum escalation shall also be indicated. Prices to be F.O.B. Lodi, California.

SALES AND USE TAXES

All quotations submitted shall include California state sales or use taxes.

PAYMENTS

- A. Invoices shall indicate sales or use taxes as separate items apart from the cost F.O.B. point of delivery. Purchaser's specifications and order number shall appear on all invoices. All invoices shall be rendered in triplicate.
- B. Full payment by purchaser shall not release supplier of his responsibility to fully carry out his bid obligations nor be construed by supplier as acceptance of the work hereunder by purchaser.

* May, 1984

GUARANTEES

- A. In addition to any or all guarantees mentioned elsewhere herein, the supplier shall repair and/or replace entirely at his own expense any parts or part that may develop defects due to faulty material, workmanship or design within a period of at least one year after the equipment has been accepted by the purchaser.
- B. This transaction will be covered by City of Lodi purchase order and all terms included in Information to Bidders, Proposal and Detailed Specifications will be binding.

PROPOSAL

UD-E84-4 - THREE-PHASE PADMOUNT TRANSFORMERS

FOR

THE CITY OF LODI, CALIFORNIA

PROPOSAL:

TO FURNISH EQUIPMENT AS SPECIFIED IN THESE SPECIFICATIONS FOR THE CITY OF LODI,
CALIFORNIA.

Name of Bidder _____

Address of Bidder _____

To the Lodi City Council
City Hall
Lodi, California

The undersigned, as bidder, declares that he has carefully examined the information to Bidders and Specifications filed for furnishing and delivering equipment, and agrees that he is fully informed regarding all of the conditions affecting the materials to be furnished for the completion of the work, and that his information was secured by personal investigation and research and not from any estimate of the engineer; and that he will make no claim against the City by reason of estimates, tests or representations of any officer or agent of the City; and he proposes and agrees that, if the proposal be accepted, he will furnish the City of Lodi the necessary apparatus and materials specified in the bid in the manner and time therein set forth. It has been noted the City of Lodi reserves the right to accept all or part of this bid, and to reject any or all bids or to accept other than the lowest bid.

All items listed below are to be in accordance with the City of Lodi Specifications dated April, 1984. The bidder will submit a detailed list of any and all exceptions taken to these Specifications. In the absence of such a list, it will be understood that the bidder's proposal is based on strict conformance to the Specifications in all respects. If exceptions are taken, they will be cleared before the award is made.

If awarded the bid, the undersigned agrees to furnish and deliver the equipment described in the Specifications and that he will take in full payment therefor the following unit and total prices, to-wit:

<u>QUANTITY</u>	<u>ITEM WITH UNIT PRICE WRITTEN IN WORDS</u>	<u>UNIT PRICE</u>	<u>TOTAL</u>
-----------------	--	-------------------	--------------

- ITEM 1

One	1000 KVA, three-phase, 12,000-volt Delta to 480Y/277-volt radial feed transformer with RTE Bay-O-Net fuses, 2-2½% taps, above and below, and primary ON-OFF switch.		
-----	---	--	--

		\$ _____	\$ _____
--	--	----------	----------

Taxes:	\$ _____
--------	----------

Sub-total:	\$ _____
------------	----------

Delivery of transformers is _____ weeks.

Maximum escalation is _____ percent.

No load loss _____ kw.

Load loss (winding) _____ kw.

Dimensions (overall):

Height _____ inches; Width _____ inches; Depth _____ inches.

Manufacturer: _____

QUANTITY ITEM WITH UNIT PRICE WRITTEN IN WORDS UNIT PRICE TOTAL

ITEM 2

One 75 KVA, three-phase, 12,000-volt Delta
to 480Y/277-volt radial feed transformer
with RTE Bay-O-Net fuses.

_____ \$ _____ \$ _____

Taxes: \$ _____

Sub-total: \$ _____

Delivery of transformers is _____ weeks.

Maximum escalation is _____ percent.

No load loss _____ kw.

Load loss (winding) _____ kw.

Dimensions (overall):

Height _____ inches; Width _____ inches; Depth _____ inches.

Manufacturer: _____

QUANTITY ITEM WITH UNIT PRICE WRITTEN IN WORDS UNIT PRICE TOTAL

ITEM 3

One 300 KVA, three-phase, 12,000-volt Delta
to 208Y/120-volt radial feed transformer
with RTE Bay-O-Net fuses.

_____ \$ _____ \$ _____

Taxes: \$ _____

Sub-total: \$ _____

Delivery of transformers is _____ weeks.

Maximum escalation is _____ percent.

No load loss _____ kw.

Load loss (winding) _____ kw.

Dimensions (overall):

Height _____ inches; Width _____ inches; Depth _____ inches.

Manufacturer: _____

QUANTITY

ITEM WITH UNIT PRICE WRITTEN IN WORDS

UNIT PRICE

TOTAL

ITEM 4

One

225 KVA, three-phase, 12,000-volt Delta to 208Y/120-volt radial feed transformer with RTE Bay-O-Net fuses.

_____ \$ _____ \$ _____

Taxes: \$ _____

Sub-total: \$ _____

Delivery of transformers is _____ weeks.

Maximum escalation is _____ percent.

No load loss _____ kw.

Load loss (winding) _____ kw.

Dimensions (overall):

Height _____ inches; Width _____ inches; Depth _____ inches.

Manufacturer: _____

<u>QUANTITY</u>	<u>ITEM WITH UNIT PRICE WRITTEN IN WORDS</u>	<u>UNIT PRICE</u>	<u>TOTAL</u>
	<u>ITEM 5</u>		
One	112.5 KVA, three-phase, 12,000-volt Delta to 208Y/120-volt radial feed transformer with RTE Bay-O-Net fuses.		
	_____	\$ _____	\$ _____
		Taxes: \$ _____	
		Sub-total: \$ _____	
		GRAND TOTAL (Items 1-5) \$ _____	

Delivery of transformers is _____ weeks.

Maximum escalation is _____ percent.

No load loss _____ kw.

Load loss (winding) _____ kw.

Dimensions (overall):

Height _____ inches; Width _____ inches; Depth _____ inches.

Manufacturer: _____

It is understood and agreed that if this Proposal is accepted, the price quoted above is inclusive of sales or use tax, or similar tax now imposed by Federal, State, or other governmental agency upon the material specified.

Shipment will be made by _____
(trucks, or railroad cars and trucks)
and will be consolidated into about _____ shipments.
(number of)

The undersigned submits with this Proposal complete manufacturer's specifications covering all material bid. Failure to provide adequate information may cause rejection of bid.

In any case where discrepancy in extensions may occur, the Bidder agrees that the unit price shall be taken as the correct figure.

The undersigned has checked carefully all the above figures and understands that the City and its officers and employees will not be responsible for any errors or omissions on the part of the undersigned in making up this bid.

The undersigned, as bidder, hereby declares that the only persons or firms interested in the proposal as principal or principals is or are named herein and that no other persons or firms than herein mentioned have any interest in this proposal, that his proposal is made without connection with any other person, company or parties making a bid or proposal; and that it is in all respects fair and in good faith, without collusion or fraud.

The undersigned hereby designates as his office to which such notice of acceptance may be mailed, telegraphed or delivered:

This bid may be withdrawn at any time prior to the scheduled time for the opening of bids or any authorized postponement thereof.

SIGNATURE OF BIDDER

By _____

Title _____

Dated: _____

Address _____

The full names and residences of persons and firms interested in the foregoing bid, as principals, are as follows:

DIVISION 1 - GENERAL REQUIREMENTS

TRANSFORMERS - OIL FILLED

1-1 GENERAL:

Electrical design and materials shall conform to the latest EEI-NEMA and ANSI Standards. It is the intent of these specifications to describe equipment of the best design and construction, for the service for which it is intended. Consequently, it shall be the City's desire to award contracts to the bidder who has demonstrated high quality, by a considerable number of transformers of his manufacture in service on the lines of electrical utilities over a period of years.

1-2 PERFORMANCE SPECIFICATIONS:

Bidders shall submit with their bid complete performance specifications and dimensions of the transformers they propose to furnish. Failure to supply transformer data may be cause for rejection of the bid.

1-3 TESTS:

Transformers shall receive at least the following tests in accordance with the applicable ANSI and NEMA Standards:

- | | |
|--------------------------|---|
| (1) Load & no load loss. | (5) Applied and induced potential test. |
| (2) Exciting current. | (6) Impulse voltage test. |
| (3) Polarity check. | (7) Tank pressure. |
| (4) Ratio check. | (8) Radio influence voltage
(NEMA TR1-1980). |

1-4 SERVICE:

The manufacturer shall own and operate a service shop in this vicinity, or the bidder may submit evidence that he has a repair shop contract with an approved service shop in this vicinity, which has been in effect for a period of at least one year.

1-5 GUARANTEE:

The contractor shall guarantee all equipment delivered under these specifications against any and all defects in material and/or workmanship for a period of at least one year from date of acceptance. He shall rectify all such defects by repair or replacement at his own expense and assume responsibility for associated shipping costs.

1-6 SHIPMENT:

Unloading of truck deliveries will be performed only during the normal 40-hour work week. All shipments will be prepaid, F.O.B. Lodi, California.

1-7 TECHNICAL INFORMATION:

The following specifications shall be met:

- (1) Insulation level: 95 kv BIL (min.)
- (2) Insulation rating: 65°C rise
- (3) Ground lugs which accept 4-1/0 AWG copper shall be provided.
- (4) All exterior surfaces shall be coated, using a system of coordinated and thoroughly tested materials and application techniques that will assure long life. Special attention shall be given to welds, seams, edges and rough spots.
- (5) Lifting lugs shall be provided on the tank and shall be located in such a way to avoid interference between lifting slings and any attachments on the transformer and to avoid scratching the transformer coating.
- (6) Tanks shall be tested at a pressure equal to or greater than the maximum operating pressure and for a sufficient period of time to insure that all welds are free from leaks. Tank and radiator construction shall be consistent with good manufacturing and design practices prevalent in the transformer industry, and together they should contribute to a high quality product.

1-7 TECHNICAL INFORMATION: (continued)

- (7) Stainless steel nameplate shall be securely attached to the transformer by means of stainless steel screws, rivets or other fasteners. The letters and numbers shall be stamped on the nameplate. The instruction nameplate shall contain the information specified in Section 5.12 of ANSI Standard C57.12.00 - 1980.
- (8) Sound level: The sound level shall be equal to or better than EEI-NEMA Standards.

1-8 LOSSES:

Transformer losses will be considered in the evaluation of this bid, in accordance with the following:

No load losses @ \$3,950/kw.

Load loss (winding) @ \$650/kw.

Quoted losses to be average guaranteed. Certified test report of losses must be submitted by manufacturer.

1-9 PCB CONTENT:

Transformer fluid must be guaranteed to contain less than 1 p.p.m. Polychlorinated Biphenyls (PCB). Certified test report of PCB content must be produced upon request.

1-10 DIMENSIONS:

The overall dimensions (height, width, depth) of the units will be considered in the evaluation of this bid. Please submit alternate bids for low profile units meeting these specifications.

1-11 LABELING:

The units are to be shipped without the Safety Labels per NEMA No. 260-1982. The City will affix its personalized "Mr. Ouch" labels.

DIVISION 2 - EQUIPMENT SPECIFICATIONS

PADMOUNT TRANSFORMER - 3-PHASE, 60 HERTZ, OISC

2-1 GENERAL:

Enclosure to be in conformance with Western Underground Committee, Guide #2.13, Rev. 4. High and low voltage sections shall be separated and the low voltage door shall be equipped with a locking handle, and in addition, the doors so arranged that access to the high voltage compartment can be gained only after opening the low voltage door; doors shall be removable. Cables shall enter and leave the compartment sections from below, through openings in a concrete pad.

2-2 STANDARD ACCESSORIES:

In addition to that specified in General Requirements, transformers shall be provided with the following:

- (1) Pressure relief valve: Qualitrol 202-6 or Circle Seal P60-383.
- (2) Low voltage bushing spades - 4 insulated NEMA pattern.
- (3) Liquid level gauge, drain valve with sample valve and oil filler plug.
- (4) Parking stands for each high voltage elbow terminator.
- (5) Universal bushing wells, for high-voltage terminations.
- (6) R.T.E. Bay-O-Net fuses with moulded outer tube assembly, Catalog #4000361C50M, A7 isolation link and oil drip-plate below fuse holder entrance. Fuse elements not to be installed, but to be supplied in a bag attached to fuse holder handle.

2-3 RATINGS AND DESIGN:

ITEM 1

- A. 1000 KVA, dead front, radial feed design with three (3) universal bushing wells.
- B. ON-OFF loadbreak, gang operated, oil immersed switch. Switch handle with eye for operation with hot stick shall be located in high-voltage compartment.
- C. 12,000-volt (Delta-connected primary) to 480Y/277 volt.
- D. RTE Bay-O-Net fuses, size C16, 100 amp. fault sensing with A7 isolation link.
- E. Tap changer with 2-2½% taps above and below.

ITEM 2

- A. 75 KVA, dead front, radial feed design with three (3) universal bushing wells.
- B. 12,000 volt (Delta-connected primary) to 480Y/277 volt.
- C. RTE Bay-O-Net fuses, size C5, 8 amp. load sensing with A7 isolation link.

ITEM 3

- A. 300 KVA, dead front, radial feed design with three (3) universal bushing wells.
- B. 12,000 volt (Delta-connected primary) to 208Y/120 volt.
- C. RTE Bay-O-Net fuses, size C10, 25 amp. load sensing with A7 isolation link.

2-3 RATINGS AND DESIGN: (continued)

ITEM 4

- A. 225 KVA, dead front, radial feed design with three (3) universal bushing wells.
- B. 12,000 volt (Delta-connected primary) to 208Y/120 volt.
- C. RTE Bay-O-Net fuses, size C10, 25 amp. load sensing with A7 isolation link.

ITEM 5

- A. 112.5 KVA, dead front, radial feed design with three (3) universal bushing wells.
- B. 12,000 volt (Delta-connected primary) to 208Y/120 volt.
- C. RTE Bay-O-Net fuses, size C8, 15 amp. load sensing with A7 isolation link.