



To: Honorable Public Utilities Board

Submitted by: *ISI*
Andre Basler
AGM – Engineering and Operations

From: Diosdado Hernandez, P.E.
Engineering Manager

Approved by: *ISI*
Nicolas Procos
General Manager

Subject: By Resolution, Authorize the General Manager to Award Purchases to Supply Single-Phase and Three-Phase Pole-Mounted and Pad-Mounted Distribution Transformers for an Immediate Initial Purchase to ABB, Inc. in an Amount Not to Exceed \$269,000; Power Partners, Inc. in an Amount Not to Exceed \$11,300; and Howard Industries, Inc. in an Amount Not to Exceed \$243,700; and Five Year Awards for Future Purchases to Each Vendor per Material Specification No. MS 05-18-01

RECOMMENDATION

By resolution, authorize the general manager to award purchases to supply single-phase and three-phase pole-mounted and pad-mounted distribution transformers for an immediate initial purchase to ABB, Inc. in an amount not to exceed \$269,000; Power Partners, Inc. in an amount not to exceed \$11,300; and Howard Industries, Inc. in an amount not to exceed \$243,700; and five year awards for future purchases to each vendor per material specification no. MS 05-18-01.

BACKGROUND

Alameda Municipal Power (AMP) last purchased transformers in calendar year 2017. All transformers ordered under previous purchases have been delivered. Engineering staff prepared Material Specification No. MS 05-18-01 in order to replenish inventory quantities and to meet transformer needs for expected new development projects. In accordance with the specification, vendors and manufacturers were asked to provide bids for various types of mineral oil-filled and vegetable oil-filled single-phase and three-phase pole-mounted and pad-mounted distribution transformers.

Alameda Municipal Power (AMP) published a Request for Quotation (RFQ) on May 16, 2018 and notified registered vendors and additionally broadcast within Planet Bids to vendors registered with other agencies. An advertisement notice was also published in the Alameda Sun on May 17, 2018. On June 6, 2018, staff received and opened a total of three (3) bids.

DISCUSSION

AMP evaluated three (3) bids from the vendors list below (in no particular order).

- 1) Pacific Utilities Supply Company: Manufacturer's representative for ABB, Inc. (ABB) and Power Partners, Inc. (PPI)
- 2) Chaka Ventures: Manufacturer's representative for Central Maloney, Inc. (Central Maloney)
- 3) Wrathall & Krusi, Inc.: Manufacturer's representative for Howard Industries, Inc. (Howard)

While the vendors submitted bids, the actual contract will be with the manufacturers.

Each bid was evaluated based on the following criteria:

- 1) Conformance to the technical specifications
- 2) Equivalent cost of ownership
- 3) Conformance to the instructions and terms and conditions (e.g., requested warranty period, price index for future purchases, payment terms, etc.)

Chaka Ventures: Central Maloney was disqualified for non-conformance with Section 8.1 of the technical specifications which outlines the requirement that all transformer coils shall be manufactured of copper.

Pacific Utilities Supply Company: Pacific Utilities Supply Company's bid specified that unit prices for all pad-mounted distribution transformers would be supplied by ABB and that unit prices for all pole-mounted distribution transformers would be supplied by PPI. Sales tax was excluded from the unit prices for all line items and was calculated by AMP and added to the unit prices during the bid evaluation.

ABB had one exception which was to only provide secondary spade support on spades with six (6) or more holes. AMP determined secondary support on spades with six (6) or more holes to be sufficient and accepted the exception.

ABB submitted the following transformer price adjustment indexes for pad-mounted units for future purchases:

Description	Published Index	Baseline	Weighted Percent	Update Frequency
Oil	Producer Price Index: Lubricating and Similar Oils (WPU057604)	May 2018	9.6%	Quarterly
Aluminum	Producer Price Index: Aluminum Mill Shapes (WPU102501)	May 2018	7.8%	Quarterly
Mild Steel	Producer Price Index: Hot Rolled Steel Sheet and Strip, Including Tin Mill Products (WPU101703)	May 2018	8.2%	Quarterly
Core Steel	Electrical Equipment Manufacturers Association of Canada and Statistics Canada	May 2018	18.8%	Quarterly
Copper	Producer Price Index: Copper and Brass Mill Shapes (WPU102502)	May 2018	7.1%	Quarterly
Labor	Current Employment Statistics (CES): Electrical Equipment and Appliances (CEU3133500008)	May 2018	41%	Quarterly

PPI had one exception which was to reduce 3.5 mils paint to 3.0 mils paint for all pole-mounted transformers. AMP determined 3.0 mils paint to be sufficient and accepted the exception.

PPI submitted the following transformer price adjustment indexes for pole-mounted units for future purchases:

Description	Published Index	Baseline	Weighted Percent	Update Frequency
Oil	Producer Price Index: Lubricating and Similar Oils (WPU057604)	May 2018	8%	Quarterly
Aluminum	London Metal Exchange (LME): Cash Seller and Settlement	May 2018	8%	Quarterly
Mild Steel	American Metal Market: Carbon Steel Hot Rolled Sheet	May 2018	3%	Quarterly
Core Steel	Electrical Equipment Manufacturers Association of Canada and Statistics Canada	May 2018	35%	Quarterly
Copper	LME: Cash Seller and Settlement	May 2018	3%	Quarterly
Labor	CES: Employment, Hours, and Earnings from the Current Employment Statistics Survey (National) (CEU0500000008)	May 2018	8%	Quarterly

Wrathall & Krusi, Inc.: Howard included sales tax in the unit prices for all line items. Howard had multiple exceptions for maximum height and maximum diameter for several transformer sizes and types. AMP determined that new Department of Energy (DOE) requirements for high standards of efficiency were the cause of larger size transformers as compared to transformers purchased in the past and accepted the exceptions. Howard had a few other negligible exceptions which AMP accepted.

Howard submitted the following transformer price adjustment indexes for mineral oil-filled units for future purchases:

Description	Published Index	Baseline	Weighted Percent	Update Frequency
Oil	Producer Price Index: Petroleum Products, Refined (WPU057)	May 2018	8%	Quarterly
Mild Steel	Producer Price Index: Steel Mill Products (WPU1017)	May 2018	8%	Quarterly
Core Steel	Producer Price Index: Steel Mill Products (WPU1017)	May 2018	24%	Quarterly
Copper	Producer Price Index: Primary Nonferrous Metals (WPU102201)	May 2018	12%	Quarterly
Labor	CES: Electrical Equipment (CEU3133530006)	May 2018	15%	Quarterly

Howard submitted the following transformer price adjustment indexes for vegetable oil-filled units for future purchases:

Description	Published Index	Baseline	Weighted Percent	Update Frequency
Oil	Producer Price Index: Petroleum Products, Refined (WPU057)	May 2018	12%	Quarterly
Mild Steel	Producer Price Index: Steel Mill Products (WPU1017)	May 2018	8%	Quarterly
Core Steel	Producer Price Index: Steel Mill Products (WPU1017)	May 2018	24%	Quarterly
Copper	Producer Price Index: Primary Nonferrous Metals (WPU102201)	May 2018	12%	Quarterly
Labor	CES: Electrical Equipment (CEU3133530006)	May 2018	15%	Quarterly

Pacific Utilities Supply Company and Wrathall & Krusi, Inc. submitted bids on behalf of ABB, PPI, and Howard, respectively, that met the requirements of technical specifications, provided the required technical data, provided acceptable price adjustment indexes, and submitted required documents by the bid opening date. While all vendors submitted exceptions with their bids, all were accepted by AMP. AMP solicited bids for a total of sixty (60) line items for various transformer types and sizes. ABB submitted the lowest cost of ownership for eighteen (18) of the line items, PPI for eleven (11) of the line items, and Howard for thirty-one (31) of the line items.

Staff recommends awarding purchases to ABB, Inc.; Power Partners, Inc.; and Howard Industries, Inc. to supply single-phase and three-phase pole-mounted and pad-mounted distribution transformers for an immediate initial purchase and a five year award for future

purchases to each vendor. The immediate initial purchase will be supplied by ABB, Inc. in an amount not to exceed \$269,000; Power Partners, Inc. in an amount not to exceed \$11,300; and Howard Industries, Inc. in an amount not to exceed \$243,700, for a combined total of \$524,000 including sales tax and shipping.

FINANCIAL IMPACT

There are sufficient funds in its Fiscal Year 2019 budget for the purchase of distribution transformers.

LINKS TO KEY RESULT AREAS AND GOALS

KRA 3: System Resiliency
Goal 3.2: Replace AMP Infrastructure

EXHIBITS

- A. Resolution
- B. Summary of Purchase Awards

CITY OF ALAMEDA
ALAMEDA MUNICIPAL POWER

RESOLUTION NO. _____

AUTHORIZE THE GENERAL MANAGER TO AWARD PURCHASES TO SUPPLY SINGLE-PHASE AND THREE-PHASE POLE-MOUNTED AND PAD-MOUNTED DISTRIBUTION TRANSFORMERS FOR AN IMMEDIATE INITIAL PURCHASE TO ABB, INC. IN AN AMOUNT NOT TO EXCEED \$269,000; POWER PARTNERS, INC. IN AN AMOUNT NOT TO EXCEED \$11,300; AND HOWARD INDUSTRIES, INC. IN AN AMOUNT NOT TO EXCEED \$243,700; AND FIVE YEAR AWARD FOR FUTURE PURCHASES TO EACH VENDOR PER MATERIAL SPECIFICATION NO. MS 05-18-01

WHEREAS, Material Specification No. MS 05-18-01 was published on May 16, 2018 to solicit bids for various types of mineral oil-filled and vegetable oil-filled single-phase and three-phase pole-mounted and pad-mounted distribution transformers; and

WHEREAS, on June 6, 2018 Alameda Municipal Power (AMP) received and opened a total of three (3) bids for the transformers from vendors Pacific Utilities Supply Company on behalf of ABB, Inc. (ABB) and Power Partners, Inc. (PPI), Chaka Ventures, Inc. on behalf of Central Maloney, Inc. (Central Maloney), and Wrathall & Krusi, Inc. on behalf of Howard Industries, Inc. (Howard); and

WHEREAS, while the vendors submitted bids for the transformers, the actual contract will be with the manufacturers; and

WHEREAS, Central Maloney, Inc. was disqualified for non-conformance with Section 8.1 of the technical specifications which outlines the requirement that all transformer coils shall be manufactured of copper; and

WHEREAS, ABB, PPI, and Howard submitted exceptions with their bids, which were all accepted by AMP; and

WHEREAS, ABB, PPI, and Howard submitted bids that met the requirement of the technical specifications, provided the required technical data, and provided acceptable price adjustment indexes; and

WHEREAS, ABB submitted the lowest cost of ownership for eighteen (18) of the line items, PPI submitted the lowest cost of ownership for eleven (11) of the line items, and Howard submitted the lowest cost of ownership for thirty-one (31) of the line items; and

WHEREAS, AMP has proposed sufficient funds in its Fiscal Year 2019 budget for the purchase of distribution transformers; and

WHEREAS, staff recommends awarding purchases to ABB, PPI, and Howard to supply single-phase and three-phase pole-mounted and pad-mounted distribution transformers for an immediate initial purchase and a five year award for future purchases to each vendor based on adjustments for change in sales tax percentage, adjustments in price for changes to indexes, and five years from the date of initial award on July 16, 2018.

NOW, THEREFORE, BE IT RESOLVED that the Public Utilities Board of the City of Alameda hereby authorizes the General Manager to award purchases to supply single-phase and three-phase pole-mounted and pad-mounted distribution transformers for an immediate initial purchase to ABB, Inc. in an amount not to exceed \$269,000; Power Partners, Inc. in an amount not to exceed \$11,300; and Howard Industries, Inc. in an amount not to exceed \$243,700 for a combined total of \$524,000 including sales tax and shipping.

Approved as to Form

By: _____

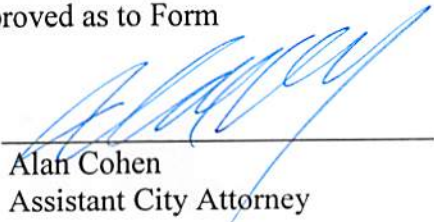

Alan Cohen
Assistant City Attorney

EXHIBIT B

TRANSFORMER BID EVALUATION & PURCHASE AWARD SUMMARY													
MS 05-18-01													
Bid Item Number	AMP Item Code	Main or Alternate Bid Item	KVA, PHASE, TYPE, VOLTAGE	Dielectric Fluid	Pacific Utilities/ABB Unit Bid Price	Pacific Utilities/ABB Unit Bid Price Including 9.25% Sales Tax	Pacific Utilities/ABB *Equivalent Cost of Ownership	Wrathall & Krusi/Howard Industries Unit Bid Price Including 9.25% Sales Tax	Wrathall & Krusi/Howard Industries *Equivalent Cost of Ownership	Recommended for Purchase Award	**Proposed Initial Purchase Quantity	Unit Bid Price for Recommended Purchase Award	Proposed Initial Purchase Amount
1	9001	Main	25 KVA,1PH,POLE, 240(120/240)	Mineral	\$1,101.00	\$1,202.85	\$2,024.85	\$1,482.52	\$2,285.02	PPI	2	\$1,202.85	\$2,405.70
2	9005	Main	100 KVA,1PH,POLE, 240(120/240)	Mineral	\$3,147.00	\$3,438.10	\$5,767.60	\$3,852.16	\$6,204.16	PPI	1	\$3,438.10	\$3,438.10
3	9016	Main	167KVA,1PH,POLE, 480(240/480)	Mineral	\$4,922.00	\$5,377.29	\$8,366.79	\$6,552.82	\$9,914.32	PPI	1	\$5,377.29	\$5,377.29
4	9021	Main	25KVA,1PH, PAD, 240/120V (LT)	Mineral	\$4,760.00	\$5,200.30	\$6,050.80	\$3,174.81	\$3,990.81	HOWARD	1	\$3,174.81	\$3,174.81
5	9022	Main	37.5KVA,1PH,PAD, 240/120V(LT)	Mineral	\$4,890.00	\$5,342.33	\$6,513.83	\$3,407.51	\$4,514.51	HOWARD	4	\$3,407.51	\$13,630.04
6	9025	Main	100KVA,1PH,PAD, 240/120V(LT)	Mineral	\$6,210.00	\$6,784.43	\$9,194.93	\$4,964.32	\$7,298.32	HOWARD	1	\$4,964.32	\$4,964.32
7	9031	Main	75KVA,3PH,PAD, 208Y/120V	Mineral	\$8,150.00	\$8,903.88	\$11,257.38	\$7,719.61	\$9,986.11	HOWARD	6	\$7,719.61	\$46,317.66
8	9032	Main	150KVA,3PH,PAD, 208Y/120V	Mineral	\$9,090.00	\$9,930.83	\$14,061.83	\$9,293.90	\$13,250.90	HOWARD	2	\$9,293.90	\$18,587.80
9	9033	Main	300KVA,3PH,PAD, 208Y/120V	Mineral	\$11,470.00	\$12,530.98	\$19,697.98	\$13,356.91	\$20,130.91	ABB	7	\$12,530.98	\$87,716.86
10	9043	Main	150KVA,3PH,PAD, 480Y/277V	Mineral	\$8,955.00	\$9,783.34	\$13,923.34	\$9,493.21	\$13,396.21	HOWARD	2	\$9,493.21	\$18,986.42
11	9044	Main	300KVA,3PH,PAD, 480Y/277V	Mineral	\$11,260.00	\$12,301.55	\$20,250.05	\$13,333.96	\$20,109.46	HOWARD	1	\$13,333.96	\$13,333.96
12	9046	Main	750KVA,3PH,PAD, 480Y/277V	Mineral	\$20,015.00	\$21,866.39	\$36,614.39	\$20,773.31	\$34,555.31	HOWARD	6	\$20,773.31	\$124,639.86
13	9048V	Main	1500KVA,3PH,PAD, 480Y/277V	Vegetable	\$28,445.00	\$31,076.17	\$56,378.17	\$42,741.88	\$66,620.38	ABB	1	\$31,076.17	\$31,076.17
14	9067	Main	2500KVA,3PH,PAD, 480Y/277V	Mineral	\$39,525.00	\$43,181.07	\$81,363.57	\$51,978.97	\$87,468.97	ABB	2	\$43,181.07	\$86,362.14
15	9067V	Main	2500KVA,3PH,PAD, 480Y/277V	Vegetable	\$42,215.00	\$46,119.89	\$84,302.39	\$65,982.63	\$101,082.63	ABB	1	\$46,119.89	\$46,119.89
16	9002	Alternate	37.5 KVA,1PH,POLE, 240V(120/240)	Mineral	\$1,310.00	\$1,431.18	\$2,548.68	\$1,909.69	\$3,018.19	PPI	0	\$1,431.18	\$0.00
17	9003	Alternate	50 KVA,1PH,POLE, 240V(120/240)	Mineral	\$1,416.00	\$1,546.98	\$2,949.48	\$2,333.58	\$3,656.58	PPI	0	\$1,546.98	\$0.00
18	9004	Alternate	75 KVA,1PH,POLE, 240V(120/240)	Mineral	\$2,122.00	\$2,318.29	\$4,166.29	\$3,352.88	\$5,187.38	PPI	0	\$2,318.29	\$0.00
19	9006	Alternate	167 KVA,1PH,POLE, 240V(120/240)	Mineral	\$4,618.00	\$5,045.17	\$8,529.67	\$4,291.34	\$6,010.34	HOWARD	0	\$4,291.34	\$0.00
20	9011	Alternate	25 KVA,1PH,POLE, 480V(240/480)	Mineral	\$1,028.00	\$1,123.09	\$1,945.09	\$1,643.12	\$2,427.62	PPI	0	\$1,123.09	\$0.00
21	9012	Alternate	37.5 KVA,1PH,POLE, 480V(240/480)	Mineral	\$1,343.00	\$1,467.23	\$2,559.23	\$1,927.17	\$3,016.17	PPI	0	\$1,467.23	\$0.00
22	9013	Alternate	50 KVA,1PH,POLE, 480V(240/480)	Mineral	\$1,439.00	\$1,572.11	\$2,955.11	\$2,193.74	\$3,503.24	PPI	0	\$1,572.11	\$0.00
23	9014	Alternate	75 KVA,1PH,POLE, 480V(240/480)	Mineral	\$1,853.00	\$2,024.41	\$3,888.91	\$3,438.10	\$5,133.10	PPI	0	\$2,024.41	\$0.00

EXHIBIT B

Bid Item Number	AMP Item Code	Main or Alternate Bid Item	KVA, PHASE, TYPE, VOLTAGE	Dielectric Fluid	Pacific Utilities/ABB Unit Bid Price	Pacific Utilities/ABB Unit Bid Price Including 9.25% Sales Tax	Pacific Utilities/ABB *Equivalent Cost of Ownership	Wrathall & Krusi/Howard Industries Unit Bid Price Including 9.25% Sales Tax	Wrathall & Krusi/Howard Industries *Equivalent Cost of Ownership	Recommended for Purchase Award	**Proposed Initial Purchase Quantity	Unit Bid Price for Recommended Purchase Award	Proposed Initial Purchase Amount
24	9015	Alternate	100 KVA, 1PH, POLE, 480V(240/480)	Mineral	\$2,938.00	\$3,209.77	\$5,416.27	\$3,574.66	\$5,842.66	PPI	0	\$3,209.77	\$0.00
25	9021	Alternate	25 KVA, 1PH, PAD, 240/120V (LT)	Vegetable	\$5,175.00	\$5,653.69	\$6,504.19	\$4,070.66	\$4,886.66	HOWARD	0	\$4,070.66	\$0.00
26	9022	Alternate	37.5 KVA, 1PH, PAD, 240/120V (LT)	Vegetable	\$5,270.00	\$5,757.48	\$6,928.98	\$4,422.44	\$5,544.44	HOWARD	0	\$4,422.44	\$0.00
27	9023	Alternate	50 KVA, 1PH, PAD, 240/120V (LT)	Mineral	\$5,110.00	\$5,582.68	\$7,042.18	\$3,984.35	\$5,328.35	HOWARD	0	\$3,984.35	\$0.00
28	9023	Alternate	50 KVA, 1PH, PAD, 240/120V (LT)	Vegetable	\$5,460.00	\$5,965.05	\$7,424.55	\$4,861.63	\$6,205.63	HOWARD	0	\$4,861.63	\$0.00
29	9024	Alternate	75 KVA, 1PH, PAD, 240/120V (LT)	Mineral	\$5,225.00	\$5,708.32	\$7,710.82	\$4,624.55	\$6,520.55	HOWARD	0	\$4,624.55	\$0.00
30	9024	Alternate	75 KVA, 1PH, PAD, 240/120V (LT)	Vegetable	\$5,620.00	\$6,139.85	\$8,142.35	\$5,624.19	\$7,508.19	HOWARD	0	\$5,624.19	\$0.00
31	9025	Alternate	100 KVA, 1PH, PAD, 240/120V (LT)	Vegetable	\$6,590.00	\$7,199.58	\$9,610.08	\$5,933.37	\$8,276.37	HOWARD	0	\$5,933.37	\$0.00
32	9026	Alternate	167 KVA, 1PH, PAD, 240/120V (LT)	Mineral	\$7,920.00	\$8,652.60	\$12,261.60	\$7,981.84	\$11,364.34	HOWARD	0	\$7,981.84	\$0.00
33	9026	Alternate	167 KVA, 1PH, PAD, 240/120V (LT)	Vegetable	\$8,600.00	\$9,395.50	\$13,004.50	\$9,724.34	\$13,099.34	ABB	0	\$9,395.50	\$0.00
34	9031	Alternate	75KVA, 3PH, PAD, 208Y/120V	Vegetable	\$8,655.00	\$9,455.59	\$11,809.09	\$8,888.58	\$11,123.58	HOWARD	0	\$8,888.58	\$0.00
35	9032	Alternate	150KVA, 3PH, PAD, 208Y/120V	Vegetable	\$9,520.00	\$10,400.60	\$14,531.60	\$11,382.76	\$15,213.76	ABB	0	\$10,400.60	\$0.00
36	9033	Alternate	300KVA, 3PH, PAD, 208Y/120V	Vegetable	\$12,280.00	\$13,415.90	\$20,582.90	\$16,710.88	\$23,435.38	ABB	0	\$13,415.90	\$0.00
37	9041	Alternate	75 KVA, 3PH, PAD, 480Y/277V	Mineral	\$8,000.00	\$8,740.00	\$11,069.50	\$8,172.99	\$10,442.49	HOWARD	0	\$8,172.99	\$0.00
38	9041	Alternate	75 KVA, 3PH, PAD, 480Y/277V	Vegetable	\$8,520.00	\$9,308.10	\$11,637.60	\$9,068.84	\$11,327.84	HOWARD	0	\$9,068.84	\$0.00
39	9042	Alternate	100 KVA, 3PH, PAD, 480Y/277V	Mineral	\$8,485.00	\$9,269.87	\$12,236.87	\$7,973.07	\$10,752.57	HOWARD	0	\$7,973.07	\$0.00
40	9042	Alternate	100 KVA, 3PH, PAD, 480Y/277V	Vegetable	\$8,975.00	\$9,805.19	\$12,772.19	\$9,140.95	\$11,921.95	HOWARD	0	\$9,140.95	\$0.00
41	9043	Alternate	150 KVA, 3PH, PAD, 480Y/277V	Vegetable	\$9,400.00	\$10,269.50	\$14,409.50	\$11,118.37	\$14,950.87	ABB	0	\$10,269.50	\$0.00
42	9044	Alternate	300 KVA, 3PH, PAD, 480Y/277V	Vegetable	\$12,200.00	\$13,328.50	\$21,277.00	\$15,533.17	\$22,203.67	ABB	0	\$13,328.50	\$0.00
43	9045	Alternate	500 KVA, 3PH, PAD, 480Y/277V	Mineral	\$14,855.00	\$16,229.09	\$26,877.59	\$16,704.33	\$26,590.83	HOWARD	0	\$16,704.33	\$0.00
44	9045	Alternate	500 KVA, 3PH, PAD, 480Y/277V	Vegetable	\$16,110.00	\$17,600.18	\$28,248.68	\$19,720.72	\$29,704.72	ABB	0	\$17,600.18	\$0.00
45	9046	Alternate	750KVA, 3PH, PAD, 480Y/277V	Vegetable	\$21,335.00	\$23,308.49	\$38,056.49	\$26,436.32	\$40,408.82	ABB	0	\$23,308.49	\$0.00
46	9047	Alternate	1000 KVA, 3PH, PAD, 480Y/277V	Mineral	\$24,095.00	\$26,323.79	\$44,824.79	\$27,432.68	\$44,813.18	HOWARD	0	\$27,432.68	\$0.00
47	9047	Alternate	1000 KVA, 3PH, PAD, 480Y/277V	Vegetable	\$24,570.00	\$26,842.73	\$45,343.73	\$32,895.18	\$49,615.68	ABB	0	\$26,842.73	\$0.00
48	9048	Alternate	1500 KVA, 3PH, PAD, 480Y/277V	Mineral	\$27,905.00	\$30,486.22	\$55,788.22	\$37,129.71	\$61,008.21	ABB	0	\$30,486.22	\$0.00

EXHIBIT B

Bid Item Number	AMP Item Code	Main or Alternate Bid Item	KVA, PHASE, TYPE, VOLTAGE	Dielectric Fluid	Pacific Utilities/ABB Unit Bid Price	Pacific Utilities/ABB Unit Bid Price Including 9.25% Sales Tax	Pacific Utilities/ABB *Equivalent Cost of Ownership	Wrathall & Krusi/Howard Industries Unit Bid Price Including 9.25% Sales Tax	Wrathall & Krusi/Howard Industries *Equivalent Cost of Ownership	Recommended for Purchase Award	**Proposed Initial Purchase Quantity	Unit Bid Price for Recommended Purchase Award	Proposed Initial Purchase Amount
49	9049	Alternate	500 KVA,3PH,PAD, 208Y/120V	Mineral	\$15,315.00	\$16,731.64	\$27,401.14	\$18,912.27	\$28,959.27	ABB	1	\$16,731.64	\$16,731.64
50	9049	Alternate	500 KVA,3PH,PAD, 208Y/120V	Vegetable	\$16,825.00	\$18,381.32	\$29,026.82	\$23,970.54	\$33,633.54	ABB	0	\$18,381.32	\$0.00
51	9051	Alternate	50 KVA,1PH, PAD, 240/120V (LX)	Mineral	\$5,260.00	\$5,746.55	\$7,206.05	\$4,243.27	\$5,587.27	HOWARD	0	\$4,243.27	\$0.00
52	9051	Alternate	50 KVA,1PH, PAD, 240/120V (LX)	Vegetable	\$5,620.00	\$6,139.85	\$7,599.35	\$5,474.52	\$6,818.52	HOWARD	0	\$5,474.52	\$0.00
53	9052	Alternate	75 KVA,1PH, PAD, 240/120V (LX)	Mineral	\$5,360.00	\$5,855.80	\$7,858.30	\$4,895.49	\$6,791.49	HOWARD	0	\$4,895.49	\$0.00
54	9052	Alternate	75 KVA,1PH, PAD, 240/120V (LX)	Vegetable	\$5,760.00	\$6,292.80	\$8,295.30	\$6,112.54	\$7,999.54	HOWARD	0	\$6,112.54	\$0.00
55	9053	Alternate	100 KVA,1PH, PAD, 240/120V (LX)	Mineral	\$6,305.00	\$6,888.22	\$9,298.72	\$5,270.22	\$7,544.22	HOWARD	0	\$5,270.22	\$0.00
56	9053	Alternate	100 KVA,1PH, PAD, 240/120V (LX)	Vegetable	\$6,680.00	\$7,297.90	\$9,708.40	\$6,517.86	\$8,830.86	HOWARD	0	\$6,517.86	\$0.00
57	9061	Alternate	167/25 KVA,3PH, PAD, 240Y/120V	Mineral	\$10,040.00	\$10,968.70	\$15,416.20	No Bid	No Bid	ABB	0	\$10,968.70	\$0.00
58	9061	Alternate	167/25 KVA,3PH, PAD, 240Y/120V	Vegetable	\$10,770.00	\$11,766.23	\$16,213.73	No Bid	No Bid	ABB	0	\$11,766.23	\$0.00
59	9068	Alternate	167 KVA,1PH, PAD, 240/120V (LX)	Mineral	\$7,820.00	\$8,543.35	\$12,152.35	\$8,374.01	\$11,794.01	HOWARD	0	\$8,374.01	\$0.00
60	9068	Alternate	167 KVA,1PH, PAD, 240/120V (LX)	Vegetable	\$8,500.00	\$9,286.25	\$12,895.25	\$9,849.98	\$13,224.98	ABB	0	\$9,286.25	\$0.00
												TOTAL INITIAL PURCHASE AMOUNT	\$522,862.66
								Main Bid Items Award (1-15): Initial Purchase Amount					
								PACIFIC UTILITIES/PPI	\$11,221.09				
								PACIFIC UTILITIES/ABB	\$268,006.70				
								WRATHALL & KRUSI/HOWARD	\$243,634.87				
								TOTAL INITIAL AWARD AMOUNT	\$522,862.66				
*Note: Equivalent Cost of Ownership = Unit Bid Price + (No Load Losses x \$6.00) + (Load Losses x \$1.50)													
**Note: Zero (0) purchase quantities are not included in the proposed initial purchase and are for evaluation purposes only for future purchases exceeding \$25,000.													