

Agenda _____
Board of Directors Regular Meeting

**HOLLAND BOARD OF PUBLIC WORKS
625 HASTINGS AVENUE
HOLLAND, MICHIGAN**

**October 12, 2009
4:00 p.m.**

Call to order

- 1. CONSENT AGENDA** All items marked (Consent) are considered routine and/or have previously been reviewed and will be enacted with one motion. There will be no separate discussion of these items unless a Board Member or an audience member so requests. When requested, the item will be removed from the consent agenda and considered in its normal sequence:
- 1. Announcement of above by the facilitator**
 - 2. Summary of the Consent**
 - 3. Request to remove or add items**
 - 4. Motion & Support to approve Consent Agenda items**
 - 5. Voice Vote**
- 1B. MINUTES (Consent)** **Open Minutes:** *August & September 2009 Regular and Study Sessions*
- 1C. BUSINESS SERVICES (Consent)** **Water Transmission Main Maintenance Project for River Ave Bridge**
- Recommendation:* *Approve a construction contract with Muskegon Construction for the River Avenue Bridge Water Transmission Maintenance Project, subject to review as to form by the City Attorney, in the amount of \$42,140 with a 10% contingency (\$4,200) for a total of \$46,340.*
- 1D. UTILITY SERVICES (Consent) CC** **Substation Panel Installation at Washington Ave and Industrial**
- Recommendation:* *Approve a contract with Newkirk Electric in the amount of \$92,708 with a 10% contingency of \$9,271 for the installation of new relay control panels for the Washington Ave and Industrial substations.. Approve a transfer of \$13,000 from contingency to the project budget and forward to City Council for approval.*

- 1E. FINANCE**
(Consent)
CC
- Surplus items**
- Recommendation:* Approve the lists of obsolete items ready to be declared surplus. Forward the recommendation to the Holland City Council for their approval.
- 1F. UTILITY SERVICES**
(Consent)
- Design and Construction Engineering Services for Harrison**
- Recommendation:* Approve a design and construction engineering services contract with OMM Engineering of Grand Rapids, MI in the amount of \$124,393 with a 10% contingency in the amount of \$12,439, subject to City Attorney approval.
- 1G. BUSINESS SERVICES**
(Consent)
CC
- Black & Veatch Review of ADVEC Technology**
- Recommendation* Approve a contract with Black & Veatch in the amount of \$25,000, pending contract language approval by the City Attorney. Approve an associated budget transfer from contingency in the amount of \$25,000. Forward this recommendation to City Council for approval.
- 2. COMMUNICATIONS**
- The Board welcomes input from the audience at this time.**
- Please -
State your name and address before addressing the Board.
Limit your communication to 5 minutes
- 3. FINANCE**
- Financial Statement – First Quarter 2009**
- Not Yet Available
- 4. BUSINESS SERVICES**
CC
- Carbon Dioxide Sequestration Site Characterization**
Presented by Dan Nally, Business Services Director
- Recommendation:* Approve acceptance the DOE FOA-0000033 grant in the amount of \$3,708,722. Approve Holland BPW funding in the amount of \$973,539 and an associated budget transfer from contingency. Forward this recommendation to City Council for their approval.
- 5. BUSINESS SERVICES**
CC
- Enterprise Risk Management Assessment**
Presented by Dan Nally, Business Services Director
- Recommendation:* Approve a contract with McNeary, Inc. on a time and material basis in an amount not to exceed \$50,000 to perform an Enterprise Risk Management Review. Approve a budget transfer from contingency in the amount of \$50,000 which includes a 10% contingency. Forward this recommendation to City Council for their approval.
- 6. FINANCE**
CC
- Rate Revisions for Business Industrial and Business Commercial**
Presented by Freda W. Velzen, Finance Director
- Recommendation:* Approve, and forward to City Council for

Agenda subject to change

approval, the revised Electric Rates BC and BI per the revised rate schedules.

7. EXECUTIVE **Strategic Planning Results Fiscal Year 2009**
Presented by Loren H. Howard, General Manager

Recommendation: Not Available

8. EXECUTIVE **Closed Session – Pending Litigation: Durham v. City of Holland / Holland Board of Public Works**

9. EXECUTIVE **Action on Durham v. City of Holland / Holland Board of Public Works**

Recommendation: Presented after Closed session

“Reports and Attachments” available at www.hollandbpw.com OR by request

*Accommodations are available for persons with disabilities.
If you need any aid, please contact the Holland Board of Public Works
at 616/355-1575 in advance of this Board meeting*

AUDIENCE PARTICIPATION:

Members of the audience may address the Board of Directors during public hearings and under “Communications from the Audience”. Audience participation includes stating name and address and limiting speaking time to five minutes.

HOLLAND BOARD OF PUBLIC WORKS
Utility Services Department
October 12, 2009

**River Avenue Bridge Water Transmission Main
Maintenance Project
Construction Services Contract**

Introduction

This project is intended to perform recommended improvements identified in the River Avenue Bridge Water Transmission Main Evaluation report prepared by engineering consultants Hubbell, Roth & Clark.

Recommendation

Approve a construction contract with Muskegon Construction for the River Avenue Bridge Water Transmission Maintenance Project, subject to review as to form by the City Attorney, in the amount of \$42,140 with a 10% contingency (\$4,200) for a total of \$46,340.

Discussion

In August of 2003, engineering consulting firm Hubbell Roth & Clark (HRC) completed an evaluation of the aerial transmission main which crosses the Black River west of the bridge on River Avenue. The report identified several needs relative to the aerial transmission main and this project is intended to address those needs.

The project generally can be described as improvements to the concrete abutments and concrete center pier including application of concrete sealant, addition of vent and drain lines, removal and replacement of enclosure and heating system on 30-inch expansion joint, miscellaneous painting/coating, and appurtenant work.

An advertisement for bids was placed in the Holland Sentinel for the project and also sent to several area contractors that staff felt would prepare a qualified bid package. Only one bid was received at the opening on October 2, 2009. Upon review of the proposal, Muskegon Construction appears to have the experience, capability and willingness to carry this project to a timely and successful completion.

Bids were previously solicited from qualified contractors in July 2009, but no bids were received at that time.

Bidder Name	Location of business	Quote Amount	Meets Specifications	Previous contracts
Muskegon Construction	Muskegon	\$42,140	Y	N

It should be noted that one of the pay items in the contract is to inspect an existing 30-inch expansion joint in the north abutment structure of the river crossing. The condition of the joint is unknown because it cannot be inspected until the existing enclosure around the joint is removed and disposed of from the chamber located within the abutment. Due to the unknown condition of the expansion joint, the possibility exists of additional costs being incurred if it is determined that the joint requires major repairs or replacement. The contract is within the approved project budget for the project of \$100,000.

Report prepared by Joel Davenport, PE, Planning Engineer
Submitted by John Van Uffelen, Utility Services Director

HOLLAND BOARD OF PUBLIC WORKS
Utility Services
October 12, 2009

Washington and Industrial Substations
Relay Upgrade

Introduction

This project consists of removing the existing mechanical protection relays from service and installing 24 new panel doors and relay equipment at the Washington and Industrial substations which are used to maintain the integrity of the 138kv loop. This installation of the panels is the final contract for completing the project.

Recommendation

Approve a contract with Newkirk Electric in the amount of \$92,708 with a 10% contingency of \$9,271 for the installation of new relay control panels for the Washington Ave and Industrial substations.. Approve a transfer of \$13,000 from contingency to the project budget and forward to City Council for approval.

Discussion

The Washington and Industrial Relay Upgrade project was approved at \$250,000 for the current 2009-2010 budget year. The control panels have been purchased through a previously approved contract and are currently under construction. With this project, the committed funds to date total \$253,952 and include the following:

Project	Price
System Design	\$31,800
Installation Administration & Startup Testing	\$18,000
Control Panels	\$107,594
Installation	\$92,708
SCADA Enunciator Programming	\$3,850

The budget transfer of \$13,000 will cover the committed funds and the contingency on the Newkirk contract.

Two design changes have contributed to the increase in overall project cost. The first is the relocation of all the relays to the front side of the panels, which moves the equipment away from exposed terminals and chemicals of the station power battery bank at both substation locations. The second change is the replacement and

programming of a new solid state programmable warning indicator panel that will replace the current hard wired annunciator/warning indicator system. Currently there is no communication with the 138kv protection system. Incorporating this upgrade will provide communications from the substation sites to the Supervisory Control and Data Acquisition (SCADA) operations center at the Service Center.

The construction contract is for the removal of the existing equipment, installation of the new relay control panels, and all associated material and labor required for a complete installation.

Project specifications and installation plans were developed for the installation of the equipment and forwarded to qualified electrical contractors for bidding. Three (3) sealed bids were received and opened on September 24 with Newkirk Electric submitting the lowest bid. HBPW Engineering staff has reviewed and evaluated all three submitted bids and recommends accepting the low bid from Newkirk Electric of \$92,708. Bid results are shown below.

Construction Contract Bid Tabulation

Bidder	Bid Bond	Base Bid
Newkirk Electric	Y	\$ 92,708
Kent Power	Y	\$108,075
Hydaker-Wheatlake	Y	\$104,211

Report prepared by Mike Buikema, Electric Engineering Supervisor
Submitted by John Van Uffelen, Utility Services Director

HOLLAND BOARD OF PUBLIC WORKS
Finance Department
October 12, 2009

Disposal of Obsolete Materials and Equipment

Introduction

Items declared surplus can be donated, auctioned off, or sold since they no longer meet Holland Board of Public Works (HBPW) department needs.

Recommendation

Approve the lists of obsolete items ready to be declared surplus. Forward the recommendation to the Holland City Council for their approval.

Discussion

The HBPW has identified materials and equipment, which are no longer pertinent for our use. The items on the attached lists have been determined excess, obsolete, or uneconomical to repair.

First, we determine if the items are usable within the HBPW and other City departments. Secondly, in an attempt to recover as much as we can, we will try to sell items to companies that specialize in inventory disposal. Our third course of action is to auction items that are remaining. The HBPW has the ability to conduct its own limited auction, open to the public. Items not sold or donated are recycled to the maximum extent.

Attachments:

Excess Materials – Warehouse/Materials Department

Excess Materials – Utility Services Department

Excess Materials - Water Plant, Waste Water Plant, and Power Plant

Excess Materials – Technology Broadband Department

Surplus Information Technology (IT) Materials – Technology Department

Report prepared by James Theis, Materials and Facility Manager
Submitted by Freda Velzen, Director of Finance

ATTACHMENT 1

Excess Materials - Warehouse/Materials Department

Non-Inventory Transformers

QTY	KVA	TYPE	Inventory ID
2	10	POLE	180-12-0010
3	15	POLE	180-24-0015
3	25	POLE	180-12-0050
3	37.5	POLE	180-12-0037
12	50	POLE	180-12-0050
1	75	POLE	180-12-0075
1	100	POLE	180-12-0100
3	100	POLE	180-24-0100
1	250	POLE	180-27-0250
2	25	PAD	181-12-0025
1	37.5	PAD	181-12-0037
5	50	PAD	181-12-0050
1	225	PAD	183-20-0225
1	300	PAD	183-27-0300

Inventory Transformers

QTY	KVA	TYPE	Inventory ID
4	10	POLE	180-24-0010
1	15	POLE	180-12-0015
7	250	POLE	180-12-0250
3	500	POLE	180-24-0500
3	500	POLE	180-27-0500

The 57 transformers (listed above) will be sold for \$4.35 per KVA to Solomon Corporation.

Quotes were received from four companies for the current rate per KVA. Those companies were:

<u>Company</u>	<u>Price</u>
Solomon	\$4.35
Transformer Decommissioning	\$2.65 up to 50 KVA, and \$4.72 for 75 KVA and up.
T&R Electric	\$4.00
Jerry's Electric	\$3.26

Estimated proceeds from sale: \$31,515.75

Excess Inventory Equipment for Other Departments.

W/WW

QTY	DESCRIPTION	INVENTORY ID
2	Sleeve- Tapping16" (17.40-17.80)	278-01-1912

Total Inventory Value: \$ 1840.00

ELECTRIC

QTY	DESCRIPTION	INVENTORY ID
10	Sealing compound	160-00-0102
10	Ballast 110W HPS	110-00-0120
2	Ballasts 150W HPS	110-00-0125
125	Connectors – Heavy duty 4/0 ST	110-00-0800
53	Connectors	110-00-0880
7	Pole Mounts for 400W HPS	110-00-2650
45	Connectors for Side Break SC1	110-00-4466
500	#6 TRI ACSR Poly Alum	130-00-2800
10	PLUGS 3-1.62 1-.69 INSERT	160-00-0101
6	NX Fuse 40 AMP 6.5	110-00-1552-040
2	NX Fuse 2.0-2.8 25 AMP	110-00-1553-025
2	NX Fuse 35 AMP	110-00-1550-040
4	NX Fuse 18 AMP	110-00-1555-018
6	NX Fuse 50 AMP	110-00-1555-050
1	NX Fuse 75 AMP	110-00-1556-075
1	NX Fuse 100 AMP	110-00-1556-100
1	NX Fuse 2.8, 35 AMP	110-00-1557-035
2	NX Fuse 2.8 75 AMP	110-00-1557-075
6	NX 25 AMP WH	110-00-1690-025
8	NX Fuse 30 AMP	110-00-1690-030
5	NX Fuse 75 AMP	110-00-1690-075
14	Mast Arms Support 6" Steel	110-00-2660-006

Total Inventory Value: \$6604.00

FIBER

QTY	DESCRIPTION	INVENTORY ID
9	SM to UTP Standalone ATM Media converter	570-00-1000
7	MM to UTP Standalone ATM Media converter	570-00-1050
3	16-poRT Conversion Center Chassis	570-00-1100
2	AC Power supply Module for E-MCC-1600	570-00-1110
3	SM to UTP ATM Media Converter Card	570-00-1200
9	MM to UTP ATM Media Converter Card	570-00-1250
6	SM to MM ATM Media Converter Card	570-00-1275
3	Four Port OC-3C SMIR SC	570-00-1300
4	Four Port OC-3C SMM SC	570-00-1350
6	Four Port OC-3C UTP RJ-45	570-00-1375
3	ATM Chasis	570-00-1400
1	ASX-200BX Power Supply	570-00-1410
1	Switch control Processor	570-00-1415
2	Single Port OC-12C SMIR SC	570-00-1600

Total Inventory Value: \$102,762.65

ATTACHMENT 2

Excess Materials – Utility Services Department

1 21" repair clamp, scrap

1 Panasonic VCR, sell or reuse

Polaroid Camera	ProCam	#L3E48874NDBC	Outdated
PA7	Metering Test Equipment	Serial #2074	Inoperable
PA7	Metering Test Equipment	Serial #1399	Inoperable
VO3P Test Board	Metering Test Equipment	Serial# 114542-001/1	Outdated
States Test Board	Metering Test Equipment	Serial 41638-001/1	Outdated
Grinder,B&D,6"		Serial #7917	Safety Hazard
Rochester	TR-132Transient Recorder	Serial #41006	Excess
Gould Moab	MO-10X	Serial #A30828	Excess
Gould Moab	MO-10X	Serial #A30828	Excess
GE Relays (24)	Substation Class Relays	Various	Excess

ATTACHMENT 3

Excess Materials - Water Plant, Waste Water Plant, and Power Plant

Ingersoll Tractor 3016 with Mower Deck 48"	Serial # 14169560	Inoperable
De Vilbiss Compressor	Serial # 44735	Inoperable
Air Tank	Serial #B4410	Scrap
Truck – 2001 Freightliner, 18 speed, 490 HP	VIN # 1FUJALAV82LJ89259	\$45 to 50,000

ATTACHMENT 4

Excess Materials – Technology Broadband Department

Broadband Equipment Manufacturer	Model	Description	Serial No
Cisco Systems	1401	ATM-25 Router, w/ 10HD Ethernet port	701NG
Cisco Systems	1401	ATM-25 Router, w/ 10HD Ethernet port	10056
Cisco Systems	1401	ATM-25 Router, w/ 10HD Ethernet port	10079
Cisco Systems	1401	ATM-25 Router, w/ 10HD Ethernet port	201BF
Cisco Systems	1401	ATM-25 Router, w/ 10HD Ethernet port	201CR
Cisco Systems	1401	ATM-25 Router, w/ 10HD Ethernet port	3003N
Cisco Systems	1401	ATM-25 Router, w/ 10HD Ethernet port	300CD
Cisco Systems	1401	ATM-25 Router, w/ 10HD Ethernet port	30014
Cisco Systems	1401	ATM-25 Router, w/ 10HD Ethernet port	30026
Cisco Systems	1401	ATM-25 Router, w/ 10HD Ethernet port	30029
Cisco Systems	1401	ATM-25 Router, w/ 10HD Ethernet port	30038
Cisco Systems	1401	ATM-25 Router, w/ 10HD Ethernet port	30041
Cisco Systems	1401	ATM-25 Router, w/ 10HD Ethernet port	300DB
Cisco Systems	1401	ATM-25 Router, w/ 10HD Ethernet port	300EF
Cisco Systems	1401	ATM-25 Router, w/ 10HD Ethernet port	40002
Cisco Systems	1401	ATM-25 Router, w/ 10HD Ethernet port	4000E
Cisco Systems	1401	ATM-25 Router, w/ 10HD Ethernet port	000EG
Transition Networks	F-SM-MM-05	Ethernet SM to MM media converter ST	2757
Transition Networks	F-SM-MM-05	Ethernet SM to MM media converter ST	2770
Transition Networks	F-SM-MM-05	Ethernet SM to MM media converter ST	4629
Transition Networks	E-TBT-FRL-03	10base fiber/copper media converter	2992
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	1935
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	1937
Transition Networks	C/A-CF-02	ATM MM fiber/copper media conv. card	8398
Transition Networks	F-SM-MM-02	MM-SM fiber media conv. standalone	8105
Transition Networks	E-MCC-1600	Media Converter Chassis w/1 ps	9360
Transition Networks	C/A-CF-02	ATM fiber/copper media conv. card MM	2033
Transition Networks	C/A-CF-02	ATM fiber/copper media conv. card MM	8290
Transition Networks	A-CF-02	ATM fiber/copper media converter MM	7767
Transition Networks	A-CF-02	ATM fiber/copper media converter MM	7768
Transition Networks	A-CF-02	ATM fiber/copper media converter MM	7777
Transition Networks	E-MCC-1600	Media Converter Chasis w/2 ps w/3 cards	9748
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	2830
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	2831
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	2832
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	2833
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	2834
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	2836
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	2840
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	2841

Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	4078
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	4080
Transition Networks	C/A-CF-02	ATM fiber/copper media conv. card MM	6323
Transition Networks	E-MCC-1600	Media Conv. Chassis w/2 ps w/7 cards	1359
Transition Networks	E-MCC-PS	Redundant ps for E-MCC-1600	2644
Transition Networks	C/A-CF-02	ATM fiber/copper media conv. card MM	0603
Transition Networks	C/A-CF-02	ATM fiber/copper media conv. card MM	0604
Transition Networks	C/A-CF-02	ATM MM fiber/copper media conv. card	0605
Transition Networks	C/A-CF-02	ATM fiber/copper media conv. card MM	0609
Transition Networks	C/A-CF-02	ATM fiber/copper media conv. card MM	0611
Transition Networks	E-MCC-PS	Redundant ps for E-MCC-1600	4175
Transition Networks	E-MCC-PS	Redundant ps for E-MCC-1600	4218
Transition Networks	E-MCC-1600	Media Conv. Chassis w/1 power supply	3947
Transition Networks	E-MCC-1600	Media Conv. Chassis w/1 ps w/11 cards	4154
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	6200
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	6209
Transition Networks	A-CF-02	ATM fiber/copper media converter MM	6400
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	3021
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	3037
Transition Networks	C/A-CF-02	ATM fiber/copper media conv. card MM	3745
Transition Networks	C/A-CF-02	ATM fiber/copper media conv. card MM	4612
Transition Networks	C/A-CF-02	ATM fiber/copper media conv. card MM	4613
Transition Networks	A-CF-02	ATM fiber/copper media conv. MM	5890
Transition Networks	A-CF-02	ATM fiber/copper media conv. MM	5891
Transition Networks	C/A-CF-02	ATM fiber/copper media conv. card MM	2087
Transition Networks	C/A-CF-02	ATM fiber/copper media conv. card MM	2088
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	3117
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	3118
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	3119
Transition Networks	F-SM-MM-02	MM to SM fiber media conv. standalone	3263
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	9690
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	9696
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	9702
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	9703
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	2457
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	2458
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	2462
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	2464
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	2475
Transition Networks	C/F-SM-MM-02	fiber/fiber media converter card SM/MM	3724
Transition Networks	A-CF-02	ATM fiber/copper media converter MM	4065
Transition Networks	C/A-CF-02	ATM MM fiber/copper media conv. card	9499
Transition Networks	C/A-CF-02	ATM fiber/copper media conv. card MM	9502
Transition Networks	C/A-CF-02	ATM fiber/copper media conv. card MM	9503
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	7750
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	7754
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	7758
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	7760

Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	7761
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	7762
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	7763
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	7764
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	7766
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	7767
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	7768
Transition Networks	J/FE-CF-02(SC)	100mb SM-UTP media conv. standalone	8845
Transition Networks	J/FE-CF-02(SC)	100mb SM-UTP media conv. standalone	8846
Transition Networks	J/FE-CF-02	100mb SM-UTP media conv. standalone	9382
Transition Networks	F-SM-MM-02	1300nm MM-SM media conv. standalone	8967
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	5182
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	5183
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	5184
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	5187
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	5189
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	5192
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	5193
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	7849
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	7850
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	7851
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	7852
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	7853
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	7858
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	7859
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	7861
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	7862
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	7863
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	7865
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	7866
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	7869
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	7872
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	7873
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	7874
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	7876
Transition Networks	E-MCC-1600	Media Converter Chasis w/1 ps w/8 cards	1130
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	2872
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	2873
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	2874
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	5382
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	5383
Transition Networks	C/A-CF-02	ATM fiber/copper media converter card	1106
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	3125
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	3127
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	5674
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	5969
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	5970
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	5971

Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	5972
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	9973
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	9974
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	9976
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	9977
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	9978
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	2619
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	2620
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	2715
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	3312
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	4656
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	4657
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	4659
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	4661
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	4662
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	4663
Transition Networks	C/A-CF-02(SM)	ATM fiber/copper media converter card	4664
Transition Networks	J/FE-CF-03(SC)	100mb SM-UTP media conv. standalone	5118
Transition Networks	J/FE-CF-03(SC)	100mb SM-UTP media conv. standalone	5354
Transition Networks	J/FE-CF-03(SC)	100mb SM-UTP media conv. standalone	5575
Transition Networks	J/FE-CF-02(SC)	100mb SM-UTP media conv. standalone	2741
Transition Networks	A-CF-02(SM)	ATM fiber/copper media converter	9191
Transition Networks	A-CF-02	ATM fiber/copper media converter MM	1342
Versitron	MCR-1	Media conv. w/ PS and 2 cards MM-UTP	6965
Efficient Networks	5711	Speedstream ATM router	6806
Efficient Networks	5711	Speedstream ATM router	0708
Efficient Networks	5711	Speedstream ATM router	8034
Efficient Networks	5711	Speedstream ATM router	5387
Efficient Networks	5711	Speedstream ATM router	6585
Efficient Networks	5711	Speedstream ATM router	6814
Efficient Networks	5711	Speedstream ATM router	5439
Efficient Networks	5711	Speedstream ATM router	2334
Efficient Networks	5711	Speedstream ATM router	5582
Efficient Networks	5711	Speedstream ATM router	0656
Efficient Networks	5711	Speedstream ATM router	7598
Efficient Networks	5711	Speedstream ATM router	1663
Efficient Networks	5711	Speedstream ATM router	8327
Efficient Networks	5711	Speedstream ATM router	2452
Efficient Networks	5711	Speedstream ATM router	4662
Efficient Networks	5711	Speedstream ATM router	6527
Fore Systems	LE-25	ATM Switch w/ 4 copper OC-3 ports	01649
Fore Systems	LE-25	ATM Switch w/ 4 copper OC-3 ports	01816
Fore Systems	LE-25	ATM Switch w/ 4 copper OC-3 ports	01834
Fore Systems	ATV300	Remote control	
Fore Systems	ES-3810CH	ATM Chasis	5265
Fore Systems	PWSP0023	Power supply module	0004
Fore Systems	NM-1/155MMSC	ATM module OC-3 Multimode SC	1961
Fore Systems	SSM-16	16 port UTP module ATM	0102

Fore Systems	ASX-200BX	ATM Chassis w/modules	2126
Fore Systems	ACCA0081	Power supply module	0102
Fore Systems	ACCA0081	Power supply module	0590
Fore Systems	NM-4/155MMSCD	Four Port OC-3C MM SC	0895
Fore Systems	NM-4/155SMIRD	Four Port OC-3C SMIR SC	0657
Fore Systems	NM-1/622SMIRE	Single Port OC-12C SMIR SC	0518
Fore Systems	NM-1/622SMIRE	Single Port OC-12C SMIR SC	0538
Fore Systems	SCP-P5-266	Switch Control Processor	7043
Fore Systems	ASX-200BX	ATM Chassis w/modules	1195
Fore Systems	ACCA0081	Power supply module	0746
Fore Systems	ACCA0081	Power supply module	0778
Fore Systems	NM-4/155UTPE	Four Port OC-3C UTP	0635
Fore Systems	NM-4/155SMIRD	Four Port OC-3C SMIR SC	0957
Fore Systems	NM-1/622SMIRE	Single Port OC-12C SMIR SC	0618
Fore Systems	NM-1/622SMIRE	Single Port OC-12C SMIR SC	0504
Fore Systems	SCP-P5-266	Switch Control Processor	7085
Fore Systems	ASN-9000	Chasis	1106
Fore Systems	05D-0199-02B	Power Supply	0631
Fore Systems	PE1	Main Board	0915
Fore Systems	ATM	ATM DUAL OC MM	0533
Fore Systems	ATM	ATM DUAL OC MM	0764
Fore Systems	ES-3810	ATM Chasis	2242
Fore Systems	PWSP0023	Power Supply Module	0205
Fore Systems	ATM1/155MMSC	ATM module OC-3 Multimode SC	5741
Fore Systems	NMM		0918
Fore Systems	SSM-16	16 port UTP module ATM	0096
Fore Systems	SSM-12/FL	12 ST FIBER	0030
Fore Systems	ASX-200BX	ATM Chassis w/modules	2128
Fore Systems	ACCA0081	Power supply module	0585
Fore Systems	ACCA0081	Power supply module	0564
Fore Systems	SCP-P5-266	Switch Control Processor	7030
Fore Systems	NM-1/622SMIRE	Single Port OC-12C SMIR SC	0604
Fore Systems	NM-1/622SMIRE	Single Port OC-12C SMIR SC	0566
Fore Systems	NM-4/155MMSCD	Four Port OC-3C MM SC	0971
Fore Systems	NM-4/155MMSCD	Four Port OC-3C MM SC	0659
Fore Systems	LE-25	ATM Switch w/ 4 copper OC-3 ports	1339
Fore Systems	LE-25	ATM Switch w/ 4 copper OC-3 ports	3460
Fore Systems	ACCA0081	Power supply module	0187
MARCONI	ASX-1200	Enclosure	1077
MARCONI		PS Enclosure Frame	1113
MARCONI	HPS10X-SP2-00	Power Supply Module	0823
MARCONI	HPS10X-SP2-00	Power Supply Module	0661
MARCONI	CEC-1000-B	CE Slot Card	
MARCONI	SCP-P5-400	Switch Control Processor	3873
MARCONI	SCP-P5-400	Switch Control Processor	3873
MARCONI	NM-1/622SMIRE	Single Port OC-12C SMIR SC	0546
MARCONI	NM-1/622SMIRE	Single Port OC-12C SMIR SC	0508
MARCONI	SCP-P5-400	Switch Control Processor	3853

MARCONI	SCP-P5-400	Switch Control Processor	3941
MARCONI	NM-4/155MMSCD	ATM module OC-3 Multimode SC	0819
Marconi	LE-25	ATM Switch w/ 4 copper OC-3 ports	8350
3Com	3C16820	4005 Chassis	0957
3Com	10013990	4005 Fan Tray	6771
3Com	10013990	4005 Fan Tray	6772
APC	SU1000 XLNET	Smart-UPS 1000XL	2820
Powerware	3000P3HVSE	Prestige 3000 UPS	1225
Powerware		Battery Cabinet for Prestige 3000 UPS	0016
Powerware		Bypass/Distribution cab. for UPS	0546
Worldwide Packets	LE-216	Former HHT-216	0376
Worldwide Packets	LE-217	Former HLS-217	0029
Teleprocessing Prod	3030/31T	High Speed Fiber Modem	31
Teleprocessing Prod	3030/31T	High Speed Fiber Modem	28
TrippLite	SB/BC4000LAN	UPS	
dbx Products	dbxDDP	Digital dynamics processor	46
dbx Products	dbxDDP	Digital dynamics processor	67
Radio Shack		Radio Shack RF Modulator 15-1283	8458
Liebert	GXT2-1000	Liebert GXT2-1000RT120 UPS	F031
Liebert	MP2-115A	Liebert MP2-115A POD	2321
Knurr	ACU1800	Cabinet mount air conditioner	69
Knurr	ACU1800	Cabinet mount air conditioner	13

ATTACHMENT 5

Surplus Information Technology Materials – Technology Department

Manufacturer	Model	Description	Serial No
Gateway	E4600	Desktop	7075
Gateway	ALR-6400	Server	3325
Gateway	E3600	Desktop	5128
Micron PC	ClientPro DX5000		66-0001
NSS Inc	NAS1502	NAS	0442
Sieko	SLP-220	Smart Label Printer 220	6547
HP	C2691A	HP Inkjet 2250tn Printer	3JPG
Samsung	712N	17" LCD Monitor	526Z

**HOLLAND BOARD OF PUBLIC WORKS
Utility Services Department
October 12, 2009**

**Engineering Services for
18th Street, Cleveland Avenue to River Avenue and
Harrison Avenue, 18th to 19th Street Reconstruction Project**

Introduction

The water and sewer infrastructure in 18th Street between Cleveland and River Avenues has deteriorated to a condition where replacement is advisable.

Recommendation

Approve a design and construction engineering services contract with OMM Engineering of Grand Rapids, MI in the amount of \$124,393 with a 10% contingency in the amount of \$12,439, subject to City Attorney approval.

Discussion

The customers on Harrison Avenue between 18th and 19th Streets are presently served with under sized mains. Staff has received proposals for design and construction engineering services for this project. The FY2010 Capital Improvement Budget dedicates \$640,000 for water main replacement and \$540,000 for sanitary main replacement. For this project, the HBPW will partner with the City's Transportation Services Department to share in the cost of the design and construction engineering services. The HBPW and the City will each share 50% of the costs initially and adjust the ultimate engineering liability for each agency based upon the respective share of reconstruction bid prices.

The water main and most of the sanitary main in 18th Street was installed prior to 1930. Several failures have occurred, and many service laterals are failing as well. The 6" sanitary main in Harrison Avenue was installed prior to 1930 and an undersized 2-inch water service serves the customers.

Due to uncertain financial constraints, the HBPW has reserved the right in the contract to revise the construction limits of the project for calendar year 2010 to include any portion of the project, including the possibility of no construction. In the event the scope of construction is modified and construction on any portion is delayed beyond 2010, the consultant will revise the construction plans and contract documents and bid out only that portion of the project designated for construction in 2010. The agreement in place with the consultant will be modified to include only the appropriate amount of construction fees and the HBPW and City may decide at a later date to distribute a

separate Request for Proposal (RFP) for construction services for the remaining portions of the project. This will be done at no additional cost to the HBPW or City.

Requests for proposals were sent to twelve engineering firms qualified to prepare bid packages and on September 29, 2009, nine proposals were received. Of the proposals received, OMM Engineering presented the best overall price, meets specifications and has performed successfully in the past.

Bidder Name	Location of business	Quote Amount	Meets Specifications	Previous contracts
OMM Engineering	Grand Rapids, MI	\$124,393	Y	Y
Paradigm Design	Grand Rapids, MI	\$130,935	Y	Y
Holland Engineering	Holland, MI	\$159,200	Y	Y
Moore & Bruggink	Grand Rapids, MI	\$159,705	Y	Y
Prein & Newhof	Byron Center, MI	\$165,017	Y	Y
Driesenga & Associates	Holland, MI	\$170,969	Y	Y
FTC&H	Grand Rapids, MI	\$191,302	Y	Y
Progressive AE	Grand Rapids, MI	\$194,295	Y	N
C2AE	Grand Rapids, MI	\$203,138	Y	N

Submitted by John G Van Uffelen, Utility Services Director

**HOLLAND BOARD OF PUBLIC WORKS
Business Services
October 12, 2009**

Alternative Energy Systems Review

Introduction

This recommendation is for Black & Veatch to conduct an engineering review of alternative energy systems being developed by ADVEC Power Systems.

Recommendation

Approve a contract with Black & Veatch in the amount of \$25,000, pending contract language approval by the City Attorney. Approve an associated budget transfer from contingency in the amount of \$25,000. Forward this recommendation to City Council for approval.

Discussion

The Board approved a recommendation to enter into a Mutual Confidentiality Agreement with ADVEC Power Systems, Inc. on March 9, 2009 and the City Council approved the same agreement on March 18, 2009.

The engineering review that Black & Veatch will perform and report on includes the following:

- Technological challenges
- Environmental impacts
- Constructability
- Operations & Maintenance
- Financial Pro Formas
- Feasibility

The results of this investigation will help the Holland BPW evaluate alternatives of energy production and emissions control.

Report prepared by Michael Radakovitz, P.E. Planning Engineering Manager
Submitted by Daniel E. Nally, Business Services Director

HOLLAND BOARD OF PUBLIC WORKS
Business Services
October 12, 2009

Carbon Dioxide Sequestration Site Characterization

Introduction

The Holland Board of Public Works submitted a grant application in response to the Department of Energy Funding Opportunity Announcement, FOA-0000033 to perform work to characterize the geology situated beneath the Holland area for possible future carbon dioxide sequestration.

Recommendation

Approve acceptance the DOE FOA-0000033 grant in the amount of \$3,708,722. Approve Holland BPW funding in the amount of \$973,539 and an associated budget transfer from contingency. Forward this recommendation to City Council for their approval.

Discussion

The DOE announced on September 16, 2009 that it had awarded Holland BPW a grant in the amount of \$3,708,722 to perform a site characterization of the geology beneath the Holland area to determine the potential for storage of carbon dioxide. The terms of the grant requires that the HBPW provide a total of \$1,075,385 in matching funds of which \$927,180 is cash and \$148,203 is in-kind contribution to support the project in the form of HBPW employee's salary and benefits and the use of HBPW land located on 48th Street. This makes the total project cost equal to \$4,784,105.

This project will include three phases. The first phase will entail design of the test well and developing a plan for all site work including testing procedures and health and safety plans. Purchase of drilling services and equipment necessary for the test well will also be made at this time. Major field activities will take place during the second phase of the project including drilling of the 6000 ft. deep test well, well logging, rock coring, regional integration, and testing of the reservoir. During the final phase, the data gathered from the second phase will be analyzed and modeling of the reservoir will be performed. A regional CO₂ sequestration strategy will also be developed during this last phase.

The project is proposed to start on January 1, 2010 and end on September 30, 2012.

Besides the Holland BPW participants, the project would include Battelle Memorial Institute and Western Michigan University (WMU). The HBPW would be responsible for overall project management including scheduling, budgeting, reporting, and site access. Battelle's Carbon Management Department will be contracted by the HBPW for the

technical side of the project including design, field work and analysis. The regional assessment will be completed by WMU by subcontracting to Battelle.

In order to receive funding from the DOE for this project the HBPW will be required to enter into a contract with the DOE. This contract will specify terms of award including reporting requirements. Because this project is funded by the American Recovery and Reinvestment Act of 2009 (ARRA) additional requirements will need to be followed such as buy American and prevailing wages. Staff will present this contract along with a contract with Battelle to the Board at a later date for approval.

In addition to optimizing CO₂ storage efficiency and helping to develop a regional strategy for CO₂ sequestration, this site characterization will also support the HBPW and Praxair with the grant that has recently been submitted to the DOE under the Clean Coal Power Initiative (CCPI). A key component of CCPI is developing technology that can capture CO₂ from fossil fueled power plants and sequester it in geologic formations.

Report prepared by Michael Radakovitz, Planning Engineering Manager
Submitted by Dan Nally, Business Services Director

STATEMENT OF PROJECT OBJECTIVES (SOPO)

FOCUSED SITE CHARACTERIZATION FOR CARBON DIOXIDE STORAGE ALONG A MT. SIMON SANDSTONE FAIRWAY IN THE MICHIGAN BASIN

A. OBJECTIVES

The primary objective of this project is to characterize CO2 storage potential in a Mt. Simon Sandstone in the Michigan Basin, Lower Peninsula region. The project includes installation of 6,000 ft deep test well to define hydraulic parameters, develop regional geologic cross sections, and demonstrate regional storage potential.

B. SCOPE OF WORK

The project includes the following main tasks: (1) design and plan full characterization program for test well which shall include but not be limited to drilling and characterizing the test well; (2) monitor deep injection interactions with other Mt. Simon injection wells in the area to evaluate overall reservoir behavior; (3) data analysis, reservoir modeling, and regional integration of data to understand and optimize storage efficiency in the Mt. Simon; (4) develop regional CO2 sequestration strategy for up scaling storage in this area; and (5) stakeholder outreach and education, regulatory, and NEPA support.

Comment [den1]: Are we going to obtain a core sample when we drill this well? Shouldn't we if this isn't being done?

Deleted: with other

C. TASKS AND SUBTASKS TO BE PERFORMED

TASK 1: Project Management Plan and Reporting

Subtask 1.1. Project Management Plan (PMP)

The Recipient shall work collaboratively with the DOE Project Officer to modify and update the PMP submitted as part of the original application package, as necessary. The revised PMP shall be submitted within 30 days of the award. The DOE project Officer shall have 20 calendar days from receipt of the PMP to review and provide comments to the Recipient. Within 15 calendar days after receipt of the DOE's comments, the Recipient shall submit a final PMP to the DOE Project Officer for review and approval.

Subtask 1.2 Planning and Reporting

The Recipient shall submit project planning, budgeting, subcontracting, milestones and achievements tracking through quarterly technical progress reports, and annual renewal applications. The Recipient shall include revisions to the project management plan. The Recipient shall participate in DOE's risk assessment working group and participate in an annual project review meeting with the DOE.

Subtask 1.3 ARRA Reporting Requirements

The Recipient shall complete Federal Assistance Reporting. Reports will include Management Reporting, Scientific/Technical Reporting, Financial Reporting, and Closeout Report.

TASK 2: Regional Assessment

The Recipient shall utilize the completed preliminary geologic assessment and expand to a more thorough regional geologic evaluation which shall be used to develop both the drilling program and the well prognosis.

Subtask 2.1. Preliminary Regional Assessment

The Recipient shall review current knowledge of geologic structure, storage reservoirs, and caprock layers for the project area. A general geologic assessment for the Mt. Simon has been completed as part of a feasibility study completed for Holland BPW. This work included geologic maps, cross sections, cross-plots, and other data on a State-wide scale for the deeper Paleozoic layers. This task will build on this effort and incorporate other data from shallower units and focus on the project area (~25 mile radius of test site). The task will include literature review, well log compilation, examination of facies trends in key rock formations, and updating geologic maps and cross sections.

Comment [R2]: This should describe what type of data is already been collected as baseline, including any well logs , stratigraphic maps, structural maps, etc.

Subtask 2.2. Detailed Regional Assessment

The Recipient shall compile well logs within 30 miles of the project site and analyze these logs for CO₂ storage factors such as net porosity, permeability, and storage capacity. Based on this data, a 3-D EarthVision© geologic model will be prepared for the test site. The model will integrate stratigraphy, geotechnical data, structures, other deep injection wells, abandoned boreholes, oil and gas wells, surface features, and environmental features for the test site area. This task will also include data compilation for deep injection wells in the Holland area. Publically available injection data will be obtained from USEPA Region 5.

Comment [R3]: This should describe in detail what you are going to be doing...I am looking for specifics here, are you developing a stratigraphic framework, Structural framework, earth model, conceptual model...what is being done for the Regional Assessment

Subtask 2.3. Evaluation of Seismic Survey

The Recipient shall review existing seismic survey data for the study area as it applies to the test site (several seismic surveys have been completed in the area in association with other deep injection well operations and oil and gas exploration). Seismic brokers will be consulted for existing seismic data and this data will be obtained if possible. If necessary, the data will be reprocessed and re-interpreted to focus on the deeper Paleozoic formations being considered for CO₂ storage. Seismic data will be integrated with the geologic model for the site.

Subtask 2.4. Development of initial drilling program and well prognosis

The Recipient shall prepare a well prognosis with estimated formation depths, features that may affect drilling, recommended casing points, and other geologic features. This assessment will be used to finalize the drilling program including

well design specifics. A test well design will be prepared including casing points, well materials, drilling schedule, cement plan, completion plan, etc.

TASK 3: Environmental and Regulatory Screening

The recipient shall complete an environmental screening for the Holland site summarizing potential environmental impacts of the project. The screening will be completed based on the available information on the site and general specifications for the project. Screening will include review of natural areas, historic sites, flood plains, wetlands, and buried pipelines. A site walk will also be completed to develop drilling layout. Information necessary for pertinent state drilling permits will be prepared for Michigan Department of Environmental Quality Office of Geological Survey.

Comment [R4]: NEPA will have to be completed prior the AWARD. I think you mean this to be the paperwork necessary to get the Drilling Permit. This should also include all the work that will need to be done to get the Drilling Permit.

TASK 4: Site Characterization Work Plan

The Recipient shall develop a Site Characterization Work Plan (SCWP) that shall include a more detailed description of site geology, location of the test well, and a detailed description of the well drilling, coring, logging, and testing activities. The SCWP shall also include a site-specific assessment of health, safety, and environmental protection issues; protocols for site visits; and actions needed to address any contingencies. The SCWP shall also include extensive input from the host site owners/operators and with regional geologic experts, such as Holland BPW and Western Michigan University. Key subcontractors for drilling and well services will be identified, schedule developed and the key regulatory and permitting issues will be addressed.

TASK 5: –Outreach and Education Plan

The Recipient shall develop an Outreach and Education Plan (OEP) to: identify and communicate early with stakeholders at all levels (local, state and national) to ensure that they are fully aware of the need and potential benefits of the project, as well as planned field activities at each stage of the project; (2) establish and maintain the project’s credibility, through open communication with these stakeholders; (3) help the technical research team understand stakeholders’ perspectives and identify potential issues that would need to be addressed if this new technology was deployed on a large scale. Regular conference calls shall be held among outreach team members from HBPW, Battelle, and WMU to identify stakeholders and develop agreement on the types of materials to be prepared and the type of activities to be undertaken for each stakeholder group (e.g., telephone calls, briefings, and public meetings).

TASK 6: Pre-Drilling Planning, Permitting and Preparation

The Recipient shall involve all necessary preparation needed to begin active drilling. It will include finalizing designs and procuring all appropriate subcontracts.

Subtask 6.1. Well Design

The Recipient shall develop stratigraphic well design and take into account, but not be limited to casing sizes and number of strings, well depth, borehole stability issues, potential water zones, and utilization of the wellbore in the future. The well design shall also take into consideration the types of data that will be needed to successfully complete the objective of this project as well as maintaining a competent borehole. The design shall then be approved by the State of Michigan prior to the beginning of active site work.

Subtask 6.2. Well Permitting

The Recipient shall complete the required Michigan State drilling permit applications including required forms, bond, survey platt, well design, blow-out prevention plan, and site restoration plan. The Recipient shall follow Michigan Department of Environmental Quality oil and gas drilling regulations for permits to drill test well.

Subtask 6.3. Vendor Selection and Procurement

The Recipient shall be responsible for selection and procurement of vendors for test site. This shall potentially include site visits to the selected drill rig, negotiation of costs and negotiation of terms and conditions. During this task, the Recipient shall also compile well materials costs such as casing, cement, and gauges.

Subtask 6.4. Site Preparation

The Recipient shall be responsible for all activities necessary to establish the base infrastructure needed for well construction such as but not limited to site grading, fencing, and access road construction.

TASK 7: Active Site Work

The Recipient shall complete and characterize a Mt. Simon deep test well at the HBPW 48th Street site, under subcontract to an appropriate drilling firm.

Subtask 7.1 Drilling and Well Construction

The Recipient shall construct an approximately 6,000 ft deep test well at the HBPW 48th St. property (or an alternate site if necessary) under subcontract to an appropriate drilling firm. The well will be drilled in several drilling runs with standard drilling practices. This will be the largest field task of the project and will take several weeks to complete. The well will be completed with the option for use as future monitoring well for CO2 storage. Safety will be the primary concern during this phase of the project.

Subtask 7.2 Wireline Logging

The Recipient shall implement a comprehensive geophysical wireline logging program in the test well. The data collected may include, but are not limited to, the following: density, neutron porosity, gamma ray, sonic, image log, resistivity and nuclear magnetic resonance. The logs will be completed in several runs in

the entire well depth, but concentrate on the deeper rock units being considered for CO2 storage.

Subtask 7.3 Rock Testing

The Recipient shall collect approximately 80 rotary sidewall core samples (subject to recovery rate) from the test well across the 1,600 ft thick interval of interest (every 200 ft). All core samples taken from the well will be analyzed for standard rock density, permeability, and porosity. Other test parameters may include, but are not limited to: capillary entry pressure, relative permeability, mineralogy, and geomechanical properties.

Subtask 7.4 Reservoir Testing and Completion

The Recipient shall complete a reservoir testing program in the test well. The testing will involve testing up to three discrete zones within the Mt. Simon that have been identified through petrophysical analysis. For each interval, after swabbing out a sufficient amount of fluid, a small duration brine injection step rate test will be conducted, followed by a constant rate injection. After injection has been completed, the well will be shut in. Pressure and temperature will be recorded over the entire test. In addition, pressure/temperature gauges will be left in across the test intervals for a time to monitor the response from the nearby injection wells. Open-hole tests are planned, which will allow monitoring intercommunication across overlying/underlying zones in the Mt. Simon to define stratigraphic trapping mechanisms. However, it may be necessary to install deep casing depending on well stability as determined in the field.

Subtask 7.5 Brine Sampling and Analysis

The Recipient shall collect 10-15 brine samples from formations that produce appreciable amounts of fluid and have been targeted for further analysis. At a minimum, this will include the Mt. Simon; however, it also may include the overlying Dresbach-Galesville formation. The samples will be analyzed for major cations and anions and the results will be used in the geochemical analysis of brine dissolution trapping, CO2-rock interactions, and mineralization.

Subtask 7.6 Temporary Well Abandonment and Permit Reporting

The Recipient shall temporarily abandon the test well according to the State of Michigan requirements. At a minimum, bridge plugs will be set above each perforated zone and the wellhead and site will be secured. All appropriate permit reporting will be completed.

TASK 8: Data Compilation and Analysis

The Recipient shall compile and complete detailed analyses of test well data to characterize and model the heterogeneities in the Mt. Simon Sandstone to maximize storage potential across the Mt. Simon fairway.

Subtask 8.1 Petrophysical Analysis

The Recipient shall complete petrophysical analysis of well logs and core test data from the test well to assess the Mt. Simon CO₂ sequestration potential. Detailed log integration will be performed to calibrate the wireline data including log processing, neutron-density cross plots, net porosity, net pay, v-shale, fracture analysis, water saturation, and other methods. Data will be analyzed to make formation picks and evaluation of facies relationships for key formations.

Subtask 8.2 Regional Data Integration

The Recipient shall integrate more detailed characterization results from the test well with the regional understanding of the Mt. Simon. Regional formation maps, cross sections, and structure maps will be updated with test well data. The EarthVision geologic model for the site area will also be updated with test data.

Subtask 8.3 Modeling

The Recipient shall complete post-drilling reservoir modeling of CO₂ storage. Initial model work will include developing a conceptual model of the Mt. Simon and caprock. These data will be integrated with petrophysical results into a static geologic model of the reservoir system. The site characterization data will then be used by the state-of-the-art STOMP multiphase reservoir model developed at Battelle Northwest Division to simulate injection processes and predict the CO₂ movement in the subsurface in the Mt. Simon. If needed, other commercial or non-commercial codes will be used to supplement STOMP simulations. In addition, a limited assessment of interaction between CO₂, brine, and host rocks will be conducted using geochemistry models. Limited geomechanical analysis will also be conducted to assess the stress regime of the Mt. Simon and of the caprocks, the fracture gradient and a preliminary assessment on fracture initiation.

Subtask 8.4 Regional Upscaling

The Recipient shall complete an assessment of what type of injection system would need to be implemented for large-scale injection operations in the Holland region. This assessment will analyze maximum practical injection rates, well spacing, storage zones, surficial features, pipeline networks, and other factors to establish 2-3 large scale storage scenarios. Scenarios will be analyzed with reservoir models to estimate pressure buildup, long term storage security, and other factors related to CO₂ storage implementation.

TASK 9: Briefings/Technical Presentations

The recipient shall complete project briefings, technical presentations, and required reporting.

Subtask 9.1 Presentations

The Recipient shall present research findings at the annual project review meetings including a project kick-off meeting in Fall 2009, annual briefings, and a final project briefing. An open house event will be held at the field site by June

2011, corresponding with the planned reservoir testing phase of work. The Recipient shall make presentations at one conference per budget period. In addition, it is anticipated that Battelle and its subcontractors will present the project progress and findings at the DOE/NETL Annual Contractor's Review Meeting and a limited number of the regional, national, and international conferences.

Subtask 9.2 Progress Reports

The Recipient shall submit monthly, quarterly and annual progress reports to DOE. Reports will include an update on technical efforts, financials, milestones and upcoming work.

Subtask 9.3 Topical Reports

The Recipient shall complete Topical reports on the Site Characterization Work Plan, Outreach and Education Plan, and Field Summary Report.

Subtask 9.4 Final Report

The Recipient shall submit a final report with a synthesis of all of the information gained from this project. It will include an assessment of approaches to maximize the storage capacity in the Mt. Simon fairway.

D. DELIVERABLES

Comment [R5]: As you develop the SOPO, please add additional Deliverable to this section. Quarterly and Monthly Reports are not considered to be Deliverables.

Deliverables associated with the project will include a series of progress and topical reports describing accomplishments and reports as the project proceeds (Table 1). The major construction item for the project is the ~6,000 ft deep exploratory test well, which is projected to be completed in Fall 2010. Other major deliverables include the site characterization work plan, reservoir testing task, and final technical report.

The Recipient shall submit periodic, topical, and final reports in accordance with the Federal Assistance Reporting Checklist and the instructions accompanying the checklist.

NOTE: All new software and /or models for new capabilities developed shall be delivered to DOE/NETL in a format that can be used at the National Lab or other entities as DOE/NETL deem necessary.

The Recipient shall provide DOE a continuation application annual report at the end of each calendar year of the project. The Report shall include the status of the project, updates on results and analyses, as well as issues and mitigation to issues for the project as it moves forward.

Table 1. Deliverables List

Deliverable	Description	Deliverable Date
Site Characterization	Hydrogeologic maps showing depth,	June 2010

Work Plan	thickness, hydraulic parameters, and other data from study region	
Outreach and Education Plan	Plan to identify and communicate early with stakeholders at all levels (local, state and national) to ensure that they are fully aware of project objectives	March 2010
Deep Test Well	Completion of drilling and logging a ~6,000 ft deep test well into the Mt. Simon at the project drill site	November 2010
Field Drilling Summary Report	General "quick-look" summary of drilling program results	January 2011
Reservoir Testing	Completion of reservoir injection tests in the Mt. Simon test well	May 2011
Temporary Well Plugging and Abandonment	Complete temporary plugging and abandonment of the test well per Michigan DEQ approval	June 2011
Final Technical Report	Final technical report with detailed outcome of all tasks including characterization results, analysis, modeling, and regional integration.	Q4 2012

E. BRIEFINGS AND TECHNICAL PRESENTATIONS

The Recipient shall participate in a Project Kick Off Meeting to be held at the NETL facility located in Pittsburgh, PA, or Morgantown, WV (or at an alternative location to be agreed upon by the DOE and Recipient) within 120 days of the initiation of the agreement. An open house event will be held at the field site by June 2011, corresponding with the planned reservoir testing phase of work.

The Recipient shall prepare annual detailed briefings for presentation to the DOE Project Officer at the NETL facility located in Pittsburgh, PA or Morgantown, WV. Briefings shall be given by the Recipient to explain the plans, progress, and results of the technical effort at least once per year. DOE may substitute attendance of meetings at NETL for recipient participation in external merit reviews.

The Recipient shall provide and present a technical paper(s) at the DOE/NETL Annual Contractor's Review Meeting to be held at the NETL facility located in Pittsburgh, PA or Morgantown, WV or at an alternative conference with the location to be agreed upon by the DOE and Recipient.

HOLLAND BOARD OF PUBLIC WORKS
Business Services Department
October 12, 2009

Enterprise Risk Management Review

Introduction

As part of its normal, ongoing business, the Holland Board of Public Works (HBPW) is exposed to a variety of risks that could significantly impact the viability of the utility. An evaluation of the business risks of the operations of the HBPW will provide identification of and mitigation strategies for those risks.

Recommendation

Approve a contract with McNeary, Inc. on a time and material basis in an amount not to exceed \$50,000 to perform an Enterprise Risk Management Review. Approve a budget transfer from contingency in the amount of \$50,000 which includes a 10% contingency. Forward this recommendation to City Council for their approval.

Discussion

There are many risks that businesses face daily. Some of them are routine and definable. Others are inherently nebulous and difficult to quantify. Traditionally, insurance products have been utilized to hedge a variety of risks. For the most part, risk associated with fuel prices, the wholesale energy market or commodity prices have not been adequately addressed. The review that will be performed by McNeary, Inc. and HBPW staff will provide a "risk map" which will identify and prioritize the various risks that the HBPW is exposed to. Utilizing this risk map, the HBPW will develop strategies to mitigate the various risks that the business is exposed to. It is anticipated that the total cost of this project will be \$45,000, but in any event, costs shall not exceed \$50,000.

Attachment:

McNeary, Inc. - Letter of Understanding dated September 4, 2009.

Report prepared and submitted by Daniel E. Nally, Business Services Director

HOLLAND BOARD OF PUBLIC WORKS
Finance Department
October 12, 2009

Revision of Renewable Energy Charge on Rates BC and BI

Introduction

After implementing the renewable energy charge approved by the Holland Board of Public Works Board of Directors on March 3, 2009, and City Council on June 3, 2009, many customers on rates BC and BI with small electrical usage realized increases to their monthly bill which in some cases doubled or tripled however, the dollar impact was relatively small at approximately \$20 to \$180.

Recommendation

Approve and forward to City Council for approval, the revised Electric Rates BC and BI per the attached rate schedules.

Discussion

The revisions for Rate BC and BI are related to the renewable energy flat rates which were adopted in accordance to Public Act 295 (PA295) standards with the threshold \$16.58 for commercial and \$187.50 for industrial customers per month. In response, the rate schedule established a rate of \$16.58 for all commercial customers and \$187.50 for all industrial customers.

The revision staff is recommending is to establish the rate at \$0.02 per kWh of usage with a minimum charge of \$3.00 for commercial customers and \$5.00 for industrial customers up to the maximum of \$16.58 and \$187.50, respectively.

The result is that commercial customers will not pay the maximum renewable charge of \$16.58 until they use 829 kWh or more. Industrial customers will not pay the full \$187.50 until they have used 9,375 kWh or more. These small commercial customers will then pay between \$3.00 per month up to \$16.58 and the small industrial customers will pay between \$5.00 and \$187.50 depending on their use.

Currently there are more than 400 commercial customers on Rate BC with usage less than 829 kWh and 20 industrial customers on Rate BI with usage less than 9,375 kWh. The revised Renewable Energy Charge for Rates BC and BI is designed to minimize the monthly bill impact for commercial and industrial customers with low usage. The total amount of the reduced rate to these customers, based on their current usage is approximately \$73,000 per year.

Attachments:

Revised BC and BI rate sheets.

Report prepared by Vahn Phanthavong

Report submitted by Freda W Velzen, CPA, Finance Director

HOLLAND BOARD OF PUBLIC WORKS
Administration
October 12, 2009

Fiscal Year 2009 Strategic Planning Results

Introduction

In 2008, the Holland Board of Public Works (HBPW) completed a comprehensive strategic planning effort resulting in the Board's adoption of a strategic framework at its October 20, 2008 meeting. Results are now available from the first year of operations under this strategic plan. A summary of these results is attached to this report.

Since 1998, the HBPW has also included a performance-based component in its compensation program for its professional employees. This performance pay program, called The Opportunity Program (TOP), was instituted to provide an incentive for employees to set and work toward goals that will improve the Holland BPW's performance as a provider of essential utility services to the Holland community. The FY2009 corporate metrics are reported below, as they relate to The Opportunity Program.

Discussion

In 2008, the HBPW completed an in-depth strategic planning effort resulting in the adoption of a strategic framework. This framework includes the following elements:

- Vision
- External and Internal Core Purpose
- External and Internal Mission
- Core Values
- Key Result Areas
- Strategic Directives

The HBPW's seven Key Result Areas are Community Connections, Customer Connections, Resources, Organizational Development, Innovation, Regulatory Compliance, and Governance.

As part of its strategic effort, the HBPW undertook 35 specific tactical actions in FY2009. These tactical actions were developed to align with and support the HBPW's Key Result Areas and Strategic Directives. A summary of these tactical actions and their status is attached. Twenty tactical actions were fully completed during FY 2009, resulting in a 57% completion percentage.

Fiscal Year 2009 Strategic Planning Results

In 2008, the HBPW also completed a compensation study of its professional positions. The results of this study were presented to the Board of Directors on October 20, 2008. At that time, the Board approved implementing various compensation recommendations based upon the study. One recommendation was to replace the HBPW's former performance pay program (The Opportunity Program) with a structured variable pay program (also known as "targeted compensation" or "at-risk compensation"). Subsequent to Board action, the City Attorney determined that a City ordinance requires City Council approval of compensation structures for all City and HBPW employees. As of this date, the City Council has not ratified the Board's October 20, 2008 action. Consequently, the HBPW has continued to operate under the compensation structure that existed prior to that date, including tracking and reporting of organizational metrics under The Opportunity Program.

For FY2009, the HBPW continued tracking the twelve corporate metrics that have been previously used with The Opportunity Program. These corporate metrics cover the areas of customer satisfaction, service reliability, environmental quality, cost control and safe work environment. Each of these corporate metrics is set to measure the overall performance of the organization.

For FY2009, the corporate metrics were:

Customer Satisfaction: Customer survey response indicating a minimum rating of 80% better than neutral.

Service Reliability: (1) Achieve a System Average Interruption Duration Index (SAIDI) of less than 80 minutes and a System Average Interruption Frequency Index (SAIFI) of less than 1.4.
(2) Reduce sewer back-ups to 8 or less per year.

Environmental Quality: No more than one infraction per utility.

Cost Control: Electric: \$ 31,251,387 + \$43.29 per MWH sold (\$70,936,469)
Water: \$ 4,961,710 + \$0.0975 per CCU sold (\$5,470,268)
Wastewater: \$ 8,477,327

Safe Work Environment: Achieve an injury rate below the appropriate Occupational Safety and Health Administration (OSHA) industry rate. The target is set at no more than 10 recordable injuries during the fiscal year, including no more than four lost work day cases.

The results of the FY2009 corporate metrics are:

		<u>Goal</u>	<u>Result</u>	<u>Goal Met?</u>
Customer Satisfaction:	Overall	>=80%	92% & 94% ⁽¹⁾	Yes
Service Reliability:	SAIDI	<=80	42.2	Yes
	SAIFI	<=1.4	0.5	Yes
	Sewer Backup	<=8	>8	No
Environmental Quality:	Electric infractions	<=1	1	Yes
	Water infractions	<=1	0	Yes

Fiscal Year 2009 Strategic Planning Results

	Wastewater infractions	<=1	0	Yes
Cost Control:	Electric	<=\$70,936,469	\$67,827,040	Yes
	Water	<=\$5,470,268	\$5,315,683	Yes
	Wastewater	<=\$8,477,327	\$7,948,570	Yes
Safe Work Environment:	Recordable Injuries	<=10	10	Yes
	Lost Time Injuries	<=4	3	Yes

(1) Residential = 92%; Commercial and Industrial = 94%

In previous years, the maximum potential payout for The Opportunity Program has been set by the Board at 6% if all corporate metrics are met. With twelve metrics, each metric met is worth 0.5%. As a result the recommended payout for meeting 11 of these metrics for FY2009 would be the 5.5%. The actual payout is then modified by the company average percentage of tactical actions achieved (57%) to result in a potential program payout of 3.14% of annual salary.

The Opportunity Program is structured in a manner which requires specific Board approval for any program payout.

The General Manager notes that this year's corporate metrics results are consistent with the utility's performance in FY2008, when it also achieved 11 of the 12 corporate metric goals. The storm event of June 19th single handedly caused the Sewer Backing metric to exceed the set goal. This is also the third year in a row that all financial metrics were met.

Attachments:

FY09 Strategic Planning Results

Report prepared and submitted by Loren H. Howard, General Manager

**HOLLAND BOARD OF PUBLIC WORKS
Business Services
October 12, 2009**

Closed Session

Recommendation

Enter into closed session pursuant to the provisions of Section 8 (c) of Michigan's Open Meetings Act.

Discussion

Michigan's Open Meetings Act provides in Section 8 (c) that a public body may enter into closed session by a two-thirds roll call vote for a session necessary to discuss pending litigation.

Report prepared by Loralyn A Bunce, Secretary to the Board
Submitted by Loren H Howard, General Manager