



Reading Municipal Light Department
RELIABLE POWER FOR GENERATIONS

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AGENDA
RMLD CITIZENS' ADVISORY BOARD (CAB)

WEDNESDAY, MAY 16, 2012

7:00 P.M.

at

**WILMINGTON TOWN HALL – ROOM 9
121 GLEN ROAD
WILMINGTON, MA 01887**

1. Call Meeting to Order – A. Carakatsane, Chairman
2. FY 13 Operating Budget – (See attached) V. Cameron
Note: Budget discussion will be held jointly with RMLD Board Budget Committee
3. FY13 Capital Budget – (See attached) V. Cameron
4. Other Items for Discussion
5. Schedule Next Meeting – A. Carakatsane
6. Executive Session – A. Carakatsane
Suggested Motion:
MOVE that the CAB go into Executive Session based on Chapter 164, Section 47D exemption from public records and open meeting requirements in certain instances, to approve minutes, to discuss power supply, renewable energy, and return to regular session.
7. Power Supply – V. Cameron, J. Parenteau
 - a. Solar Energy Hub – 16 Upton Drive, Wilmington
 - b. Solar Energy Hub – 24 Industrial Way, Wilmington
 - c. Summit Hydro
 - d. Pioneer and Collins Hydro (Swift River)
8. Memo on Solar Energy Projects Approval for On-System Projects – (See attached) V. Cameron
9. Adjournment

This Agenda has been prepared in advance and does not necessarily include all matters, which may be taken up at this meeting.

Upcoming RMLD Board Meetings:

Wednesday, May 30, 2012 – G. Hooper - CAB Rep.

#2

FY 13 Draft 1 Operating Budget Changes

2:53 PM
5/11/2012

RMLD
FY 13 DRAFT 1 OPERATING BUDGET CHANGES
5/10/12

DRAFT 1 NET INCOME \$ 3,402,567

DECREASES TO NET INCOME:

DIVISION	DEPT / PAGE	DESCRIPTION		
E&O	LINE / P12	UG EXCAVATION LYNNFIELD STREETS	\$ (119,458)	
E&O	STAT / P19	CAPITAL LABOR RECLASS FROM \$0 TO \$2,400	<u>\$ (2,400)</u>	<u>\$ (121,858)</u>

DRAFT 2 NET INCOME \$ 3,280,709

#3

FY 13 Draft 2 Capital Budget

FY13 - DRAFT 2 - Budget Summary List

Project Description		Town	FY12 Carryover	FY13 First Draft Amount	Additions/ Deletions	FY13 Budget Draft 2 Amount	FY12 Budget Amount
E&O Construction-System Projects							
1	Essex Street - Reconductoring	Lynnfield		\$ 197,855		\$ 197,855	
2	4W13 OH Reconductoring - West Street	Wilmington		\$ 188,193		\$ 188,193	
3	Upgrading of Old Lynnfield Center URDs (Partial CARRYOVER)	Lynnfield	\$ 108,050	\$ 326,721	\$ 165,422	\$ 492,143	\$ 579,927
5	Shady Lane Area - Reconductoring	Wilmington		\$ 199,042		\$ 199,042	
6	Federal Street - Reconductoring	Wilmington		\$ 175,565		\$ 175,565	
Total System Projects			\$ 108,050	\$ 1,087,376	\$ 165,422	\$ 1,252,797	\$ 980,342
Station Upgrades							
Station #4							
8	Relay Replacement Project - (Partial CARRYOVER)	Reading	\$ 74,656	\$ 119,309		\$ 119,309	\$ 99,656
9	Station 4 Getaway Replacement - 4W13	Reading		\$ 161,779		\$ 161,779	
Total Station Projects			\$ 74,656	\$ 281,088	\$ -	\$ 281,087	\$ 188,241
DA Projects (Not in FY13)							\$ 534,339
SCADA Projects							
10	Station 5 RTU (Remote Terminal Unit) Replacement	Wilmington		\$ 63,032	(\$6,869)	\$ 56,163	
4	Station 4 RTU Replacement (Partial CARRYOVER)	Reading	\$ 78,255	\$ -	\$ 80,653	\$ 80,653	\$ 130,255
Total SCADA Projects			\$ 78,255	\$ 63,032	\$ 73,784	\$ 136,817	\$ 130,255
New Customer Service Connections							
12	Service Installations-Commercial/Industrial Customers	All		\$ 63,074		\$ 63,074	\$ 62,530
13	Service Installations - Residential Customers	All		\$ 207,923		\$ 207,923	\$ 206,017
Total Service Connections			\$ -	\$ 270,997	\$ -	\$ 270,997	\$ 268,547
14	Routine Construction						
	a. Capital Construction	All		\$ 394,596	(\$98,456)	\$ 296,140	\$ 352,334
	b. Street Light Installations	All		\$ 62,918		\$ 62,918	\$ 35,771
	c. Pole Setting/Transfers	All		\$ 256,526	(\$73,842)	\$ 182,684	\$ 215,017
	d. Engineering Labor	All		\$ 27,158		\$ 27,158	\$ 27,096
	e. General Line Foreman Labor	All		\$ 80,083		\$ 80,083	\$ 81,955
	f. U/G Construction	All		\$ 135,488	(\$24,195)	\$ 111,293	\$ 122,940
	g. Police Details	All		\$ 48,000		\$ 48,000	\$ 3,600
	h. Overtime	All		\$ 179,935		\$ 179,935	\$ 177,669
Total Routine Construction			\$ -	\$ 1,184,704	(\$196,493)	\$ 988,211	\$ 1,016,382
TOTAL E&O Construction			\$ 260,961	\$ 2,887,197	\$ 42,713	\$ 2,929,909	\$ 3,118,106
Other Projects							
15	GIS			\$ 97,495		\$ 97,495	
16	Transformers/Capacitors Annual Purchases			\$ 284,000		\$ 284,000	
17	A. Meter Annual Purchases			\$ 49,710		\$ 49,710	
	B. Meter Upgrade Project - (Partial CARRYOVER)		\$ 298,775	\$ 383,822	\$ 180,594	\$ 564,416	\$ 1,740,656
	C. Meter Upgrade Project - Commercial			\$ 551,853		\$ 551,853	
18	Purchase Vehicles			\$ 65,000		\$ 65,000	
19	Purchase Line Department Vehicles			\$ 570,000		\$ 570,000	
20	Purchase New Pole Dolly			\$ 12,000		\$ 12,000	
21	Automated Building Systems			\$ 150,000		\$ 150,000	
22	Engineering Analysis Software & Data Conversion - (CARRYOVER)		\$ 76,690	\$ 31,789	\$ 45,000	\$ 76,789	\$ 121,690
23	Gaw Station Generator			\$ 55,000		\$ 55,000	
24	Repairs - Station One			\$ 400,000		\$ 400,000	
25	New Carpeting			\$ 35,000		\$ 35,000	
26	Water Heater Demand Response Technology			\$ 336,611		\$ 336,611	
27	Hardware Upgrades			\$ 126,629		\$ 126,629	
28	Software and Licensing			\$ 119,002		\$ 119,002	
Total Other Projects			\$ 375,465	\$ 3,267,911	\$ 225,594	\$ 3,493,505	\$ 2,791,942
TOTALS			\$ 636,426	\$ 6,155,108	\$ 268,307	\$ 6,423,414	\$ 5,910,048

Note: Yellow highlighted projects are partial or full carryovers.

READING MUNICIPAL LIGHT DEPARTMENT



FY 13 CAPITAL BUDGET

DRAFT 2
May 9, 2012

Vincent F. Cameron, Jr.
General Manager

FY13 - DRAFT 2 - Budget Summary List

Project Description		Town	Amount	Total
E&O Construction-System Projects				
1	Essex Street - Reconductoring	Lynnfield	\$ 197,855	
2	4W13 OH Reconductoring - West Street	Wilmington	\$ 188,193	
3	Upgrading of Old Lynnfield Center URDs (Partial CARRYOVER)	Lynnfield	\$ 492,143	
5	Shady Lane Area - Reconductoring	Wilmington	\$ 199,042	
6	Federal Street - Reconductoring	Wilmington	\$ 175,565	
Total System Projects				<u>\$1,252,797</u>
Station Upgrades				
	<i>Station #4</i>			
8	Relay Replacement Project - (Partial CARRYOVER)	Reading	\$ 119,309	
9	Station 4 Getaway Replacement - 4W13	Reading	\$ 161,779	
Total Station Projects				<u>\$ 281,087</u>
SCADA Projects				
10	Station 5 RTU (Remote Terminal Unit) Replacement	Wilmington	\$ 56,163	
4	Station 4 RTU (Remote Terminal Unit) Replacement (Partial CARRYOVER)	Reading	\$ 80,653	
Total SCADA Projects				<u>\$ 136,817</u>
New Customer Service Connections				
12	Service Installations-Commercial/Industrial Customers	All	\$ 63,074	
13	Service Installations - Residential Customers	All	\$ 207,923	
Total Service Connections				<u>\$ 270,998</u>
14	Routine Construction			
	a. Capital Construction	All	\$ 296,140	
	b. Street Light Installations	All	\$ 62,918	
	c. Pole Setting/Transfers	All	\$ 182,684	
	d. Engineering Labor	All	\$ 27,158	
	e. General Line Foreman Labor	All	\$ 80,083	
	f. U/G Construction	All	\$ 111,293	
	g. Police Details	All	\$ 48,000	
	h. Overtime	All	\$ 179,935	
Total Routine Construction				<u>\$ 988,211</u>
TOTAL E&O Construction			\$2,929,910	\$2,929,910
Other Projects				
15	GIS		\$ 97,495	
16	Transformers/Capacitors Annual Purchases		\$ 284,000	
17	A. Meter Annual Purchases		\$ 49,710	
	B. Meter Upgrade Project - (Partial CARRYOVER)		\$ 564,416	
	C. Meter Upgrade Project - Commercial		\$ 551,853	
18	Purchase Vehicles		\$ 65,000	
19	Purchase Line Department Vehicles		\$ 570,000	
20	Purchase New Pole Dolly		\$ 12,000	
21	Automated Building Systems		\$ 150,000	
22	Engineering Analysis software & data conversion - (CARRYOVER)		\$ 76,789	
23	Gaw Station Generator		\$ 55,000	
24	Repairs - Station One		\$ 400,000	
25	New Carpeting		\$ 35,000	
26	Water Heater Demand Response Technology		\$ 336,611	
27	Hardware Upgrades		\$ 126,629	
28	Software and Licensing		\$ 119,002	
Total Other Projects			\$ 3,493,505	\$ 3,493,505
TOTAL CAPITAL BUDGET			\$ 6,423,416	\$ 6,423,416

READING MUNICIPAL LIGHT DEPARTMENT					
FISCAL 2013 CAPITAL PROJECT QUARTERLY PROJECTIONS					
CAPITAL PROJECT	FISCAL 2013 QUARTERLY PROJECTIONS				Total
DESCRIPTION - CONSTRUCTION	1ST	2ND	3RD	4TH	Capital Budget
E&O Construction-System Projects					
Essex Street - Reconductoring, Lynnfield	\$ -	\$ -	\$ 98,928	\$ 98,928	\$ 197,855
4W13 OH Reconductoring - West Street, Wilmington	\$ -	\$ 94,096	\$ 94,096	\$ -	\$ 188,193
Upgrading of Old Lynnfield Center URDs, Lynnfield	\$ 165,422	\$ -	\$ -	\$ 326,721	\$ 492,143
Shady Lane Area - Reconductoring, Wilmington	\$ 49,760	\$ 149,281	\$ -	\$ -	\$ 199,042
Federal Street - Reconductoring, Wilmington	\$ 175,565	\$ -	\$ -	\$ -	\$ 175,565
Station Upgrades					
<i>Station #4</i>					
Relay Replacement Project - (CARRYOVER)	\$ 59,654	\$ 59,654	\$ -	\$ -	\$ 119,309
Station 4 Getaway Replacement - 4W13	\$ -	\$ -	\$ 161,779	\$ -	\$ 161,779
SCADA Projects					
Station 5 RTU (Remote Terminal Unit) Replacement	\$ -	\$ 28,082	\$ 28,082	\$ -	\$ 56,163
Station 4 RTU (Remote Terminal Unit) Replacement	\$ -	\$ -	\$ 80,653	\$ -	\$ 80,653
New Customer Service Connections					
Service Installations-Commercial/Industrial Customers	\$ 15,769	\$ 15,769	\$ 15,769	\$ 15,769	\$ 63,074
Service Installations - Residential Customers	\$ 51,981	\$ 51,981	\$ 51,981	\$ 51,981	\$ 207,923
Routine Construction					
a. Capital Construction	\$ 74,035	\$ 74,035	\$ 74,035	\$ 74,035	\$ 296,140
b. Street Light Installations	\$ 15,730	\$ 15,730	\$ 15,730	\$ 15,730	\$ 62,918
c. Pole Setting/Transfers	\$ 45,671	\$ 45,671	\$ 45,671	\$ 45,671	\$ 182,684
d. Engineering Labor	\$ 6,789	\$ 6,789	\$ 6,789	\$ 6,789	\$ 27,158
e. General Line Foreman Labor	\$ 20,021	\$ 20,021	\$ 20,021	\$ 20,021	\$ 80,083
f. U/G Construction	\$ 27,823	\$ 27,823	\$ 27,823	\$ 27,823	\$ 111,293
g. Police Details	\$ 12,000	\$ 12,000	\$ 12,000	\$ 12,000	\$ 48,000
h. Overtime	\$ 44,984	\$ 44,984	\$ 44,984	\$ 44,984	\$ 179,935
Total Construction Projects					
	\$ 765,204	\$ 645,916	\$ 778,340	\$ 740,451	\$ 2,929,910

OTHER PROJECTS	FISCAL 2012 QUARTERLY PROJECTIONS				Total Capital Budget
	1ST	2ND	3RD	4TH	
GIS - (CARRYOVER)	\$ 19,499	\$ 38,998	\$ 38,998	\$ -	\$ 97,495
Transformers/Capacitors Annual Purchases		\$ 142,000	\$ -	\$ 142,000	\$ 284,000
A. Meter Annual Purchases		\$ 24,855	\$ -	\$ 24,855	\$ 49,710
B. Meter Upgrade Project - (CARRYOVER)	\$ 423,312	\$ 141,104	\$ -	\$ -	\$ 564,416
C. Meter Upgrade Project - Commercial	-	\$ 275,926	\$ 275,926	\$ -	\$ 551,853
Purchase Vehicles	\$ 30,000	\$ 35,000	\$ -	\$ -	\$ 65,000
Purchase Line Department Vehicles	-	-	-	\$ 570,000	\$ 570,000
Purchase New Pole Dolly	-	-	-	\$ 12,000	\$ 12,000
Automated Building Systems	-	-	-	\$ 150,000	\$ 150,000
Engineering Analysis software & data conversion - (Portion CARRYOVER)	\$ 38,395	\$ 38,395	\$ -	\$ -	\$ 76,789
Gaw Station Generator	-	\$ 55,000	\$ -	\$ -	\$ 55,000
Repairs - Station One	-	-	\$ 400,000	\$ -	\$ 400,000
New Carpeting	-	\$ 35,000	\$ -	\$ -	\$ 35,000
Water Heater Demand Response Technology	\$ 245,000	\$ 45,806	\$ 45,806	\$ -	\$ 336,611
Hardware Upgrades	\$ 31,657	\$ 31,657	\$ 31,657	\$ 31,657	\$ 126,629
Software and Licensing	\$ 29,751	\$ 29,751	\$ 29,751	\$ 29,751	\$ 119,002
Total Other Projects	\$ 817,613	\$ 893,491	\$ 822,138	\$ 960,263	\$ 3,493,505
TOTAL FY13 QUARTERLY BUDGET	\$ 1,582,817	\$ 1,539,407	\$ 1,600,478	\$ 1,700,713	\$ 6,423,416

FISCAL 2013 CAPITAL BUDGET REQUEST SUMMARY

System Projects

Capital Project Name: 3. Upgrading of Old Lynnfield Center URDs

Reason for Expenditures:

There are three underground residential developments (URDs) in Lynnfield that are over 45 years old and are in need of an upgrade. These were some of the first underground construction projects on the RMLD system. These areas do not conform to the RMLD's current construction standards, and an U/G cable failure could result in a significant outage for these customers. The streets include Cooks Farm Lane, Cortland Lane, Tophet Road, Needham Road, Townsend Road, Russell Road, Charring Cross, and Trog Hawley.

Brief Description/Scope:

The first phase of this project is the Townsend and Needham Road Subdivision, which began in FY12 and will continue in FY13; the second phase will be Cooks Farm Lane, Cortland Lane, and Tophet Road to be done in FY13, and the third phase will be Russell Road, Charring Cross, and Trog Hawley in FY14.

This project requires building a new underground distribution system within the public way. This involves the installation of manholes, conduits, transformers, underground primary and secondary cable, pull boxes, etc. The transformers would be replaced in the same location. The RMLD would intercept the customers existing service and place a pull box on the property. If the customer wants to upgrade their service at the same time they would be responsible from the pull box to the house. Engineering will need to meet with the customers affected by this construction to explain the project and scope of work.

This project will require an excavation contractor and will require repaving the roadway.

Cash Requirements:

	Quarter 1	Quarter 2	Quarter 3	Quarter 4	TOTAL
Fiscal 2013	\$165,422			\$326,721	\$492,143

TOTAL PROJECT COST: **\$492,143**

FISCAL 2013 CAPITAL BUDGET COST SHEET

CAPITAL PROJECT NAME: Upgrading of Old Lynnfield Center URDsCAPITAL PROJECT NUMBER: 3PROJECT NUMBER: 13-

ITEM	CREW WEEKS 4-Man	RMLD CREW LABOR COST	RMLD CREW VEHICLE COST	OTHER LABOR	OTHER VEHICLE	NEW MATERIAL & MISC	QUARTER	TOTAL
Install: 6,000 feet of U/G conduit @ 1.00/ft 5,400 feet of U/G 1/0 primary @ 1.50/ft 1,800 feet of U/G 4/0 secondary @ 1.00/ft 11 manholes, 9 transformers, etc.	16.0	\$170,672	\$26,240			\$75,000	4	\$271,912
	Unit Cos	\$10,667	\$1,640			See box at left		
Underground Contractor One mile of trench	22.0			\$132,194	\$880		4	\$133,074
	Unit Cost			\$6,009	\$40	per week		
	Unit Cost							
	Unit Cost							
Engineering labor				\$27,158			4	\$27,158
8.0 weeks	Unit Cost			\$3,395				
	Unit Cost							
Police Details (if applicable)						\$60,000	4	\$60,000
25.0 weeks	Unit Cost					\$2,400	per week	

Total RMLD Crew Weeks 16.0

Total U/G Crew Weeks 22.0

TOTAL	38.0	\$170,672	\$26,240	\$159,351	\$880	\$135,000
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TOTAL PROJECT COST: **\$492,143**

FISCAL 2013 CAPITAL BUDGET REQUEST SUMMARY

System Projects

Capital Project Name: 6. Federal Street, Wilmington - Reconductoring Project

Reason for Expenditures:

Federal Street is a heavily treed area that has experienced outages over the past years due to tree limbs making contact with the open primary wire and secondary cable.

Brief Description/Scope:

Verizon to replace 10 poles; RMLD to reconductor the open wire primary and secondary cables on Federal Street and the associated side streets of Grant, Wilson, Lincoln, Pershing, Liberty and Bancroft Streets.

Cash Requirements:

	Quarter 1	Quarter 2	Quarter 3	Quarter 4	TOTAL
Fiscal 2013	\$175,565				\$175,565

TOTAL PROJECT COST: **\$175,565**

FISCAL 2013 CAPITAL BUDGET COST SHEET

CAPITAL PROJECT NAME: Federal Street, W - Reconductoring Project

CAPITAL PROJECT NUMBER: 6

PROJECT NUMBER: 13-

ITEM	CREW WEEKS 4-Man	RMLD CREW LABOR COST	RMLD CREW VEHICLE COST	OTHER LABOR	OTHER VEHICLE	NEW MATERIAL & MISC	QUARTER	TOTAL
Install: 7,000 linear feet of 1/0 primary	5.0	\$53,335	\$8,200			\$7,000	1	\$68,535
Unit Cost		\$10,667	\$1,640					
Install: 5,000 linear feet of 4/0 secondary	5.0	\$53,335	\$8,200			\$10,000	1	\$71,535
Unit Cost		\$10,667	\$1,640					
Replace poles - Verizon Set & Charge Transfer cost/material/pole 10 - 40' poles @ \$360						\$3,600	1	\$3,600
Unit Cost						\$360 per pole		
Miscellaneous hardware \$100/pole for approx. 45 poles.						\$4,500	1	\$4,500
Unit Cost						See box at left		
Engineering 1.0 week				\$3,395			1	\$3,395
Unit Cost				\$3,395				
Police Details (if applicable) 10.0 week						\$24,000	1	\$24,000
Unit Cost						\$2,400 per week		

Total RMLD Crew Weeks 10.0

Total U/G Crew Weeks

TOTAL	10.0	\$106,670	\$16,400	\$3,395	\$49,100
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TOTAL PROJECT COST: **\$175,565**

FISCAL 2013 CAPITAL BUDGET REQUEST SUMMARY

Station Upgrades

Capital Project Name: 8. Gaw Substation - Relay Replacement Project

Reason for Expenditures:

To replace the existing electromechanical protective relay systems on the 15kV feeder breakers at Gaw Substation. These relays will be able to provide more information back to the SCADA, and they also store vast amounts of data for down loading and evaluating.

Brief Description/Scope:

Replace relays and rewire feeder cubicle for installation of this equipment purchased in FY12. Test and commission new relays.

Cash Requirements:

	Quarter 1	Quarter 2	Quarter 3	Quarter 4	TOTAL
Fiscal 2013	\$59,654	\$59,654			\$119,309

TOTAL PROJECT COST: **\$119,309**

FISCAL 2013 CAPITAL BUDGET REQUEST SUMMARY

SCADA Projects

Capital Project Name: 10. Station 5 RTU Replacement

Reason for Expenditures:

The existing RTU is a legacy system and unsupported. This RTU does not have enough points for all the alarm, analog, control, and indication points that will be needed for the future relay upgrades at Station 5.

Brief Description/Scope:

Bid and purchase a pre-wired RTU enclosure that will replace the existing RTU enclosure at Station 5. Because of space constraints, the existing RTU will need to be removed before the new RTU can be installed. Technical Services Manager and Senior Technician(s) will re-wire SCADA points from the interposition cabinet to the new RTU. Engineering will program and configure SCADA for new com-line and RTU.

Cash Requirements:

	Quarter 1	Quarter 2	Quarter 3	Quarter 4	TOTAL
Fiscal 2013		\$28,082	\$28,082		\$56,163

TOTAL PROJECT COST: \$56,163

FISCAL 2013 CAPITAL BUDGET COST SHEET

CAPITAL PROJECT NAME: Station 5 RTU Replacement

CAPITAL PROJECT NUMBER: 10

PROJECT NUMBER: 13-

ITEM	CREW WEEKS	RMLD CREW LABOR COST	RMLD CREW VEHICLE COST	OTHER LABOR	OTHER VEHICLE	NEW MATERIAL & MISC	QUARTER	TOTAL
Purchase RTU and pre-wired enclosure & misc equipment						\$36,000	2 and 3	\$36,000
	Unit Cost							
Mount and re-wire SCADA points inter-position cabinet to new RTU 4.0 weeks - Sr. Tech (1)				\$9,900			2 and 3	\$9,900
	Unit Cost			\$2,475			per week	
Technical Services Manager 2.0 weeks				\$6,869			2 and 3	\$6,869
	Unit Cost			\$3,434			per week	
Create new DNP com line and and program SCADA Master 1.0 week Engineering Labor				\$3,395			2 and 3	\$3,395
	Unit Cost			\$3,395			per week	
	Unit Cost							
	Unit Cost							
Police Details (if applicable) week								
	Unit Cost							

Total RMLD Crew Weeks

Total U/G Crew Weeks

TOTAL

\$20,163

\$36,000

TOTAL PROJECT COST: **\$56,163**

FISCAL 2012 CAPITAL BUDGET REQUEST SUMMARY

SCADA Projects

Capital Project Name: 4. Remote Terminal Unit (RTU) Replacement - Station 4

Reason for Expenditures: The existing RTU is a legacy system and unsupported. This RTU does not have enough points for all the alarm, analog, control, and indication points that are needed for the ongoing relay upgrades at Station 4.

Brief Description/Scope:

Install a pre-wired RTU enclosure that was purchased in FY12 that would be placed next to the interposition cabinet at Station 4. Station Manager and Senior Technicians would re-wire SCADA points from the legacy RTU to the new RTU.

Cash Requirements:

	Quarter 1	Quarter 2	Quarter 3	Quarter 4	TOTAL
Fiscal 2012			\$80,653		\$80,653

TOTAL PROJECT COST: \$80,653

FISCAL 2012 CAPITAL BUDGET COST SHEET

CAPITAL PROJECT NAME: RTU Replacement - Station 4

CAPITAL PROJECT NUMBER: 4

PROJECT NUMBER: 12-

ITEM	CREW WEEKS	RMLD CREW LABOR COST	RMLD CREW VEHICLE COST	OTHER LABOR	OTHER VEHICLE	NEW MATERIAL & MISC	QUARTER	TOTAL
		Unit Cost						N/A
Senior Techs - mount and re-wire SCADA points from old RTU to new RTU				\$39,599			3	\$39,599
8.0 weeks		Unit Cost						\$2,475 per person/per week
Technical Services Manager				\$27,475			3	\$27,475
8.0 weeks		Unit Cost						\$3,434 per week
Engineering labor Create new DNP com line and and program SCADA Master				\$13,579			3	\$13,579
4.0 weeks		Unit Cost						\$3,395 per week
		Unit Cost						
		Unit Cost						
Police Details (if applicable)								
		Unit Cost						

Total RMLD Crew Weeks
Total U/G Crew Weeks
TOTAL
\$80,653
TOTAL PROJECT COST: \$80,653

FISCAL 2013 CAPITAL BUDGET COST SHEET**CAPITAL PROJECT NAME:** Service Installations - Residential Customers**CAPITAL PROJECT NUMBER:** 13**WORK ORDER NUMBER:** 13-

ITEM	CREW WEEKS 2-Man	RMLD CREW LABOR COST	RMLD CREW VEHICLE COST	OTHER LABOR	OTHER VEHICLE	NEW MATERIAL & MISC	QUARTER	TOTAL
Labor for installation of new service connections. Approximately 500 units per year	24	\$130,553	\$21,120				All	\$151,673
Unit Cost		\$5,440	\$880				per week	
Installation of service cable for new service connections. Approx. 75 feet per installation						\$56,250	All	\$56,250
Unit Cost						\$1.50	per foot	
Unit Cost								
Unit Cost								
Unit Cost								
Police Details (if applicable)								
Unit Cost								

Total RMLD Crew Weeks 24.0**Total U/G Crew Weeks**

TOTAL	24.0	<u>\$130,553</u>	<u>\$21,120</u>	<u>\$56,250</u>
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TOTAL PROJECT COST **\$207,923**

FISCAL 2013 CAPITAL BUDGET REQUEST SUMMARY

Capital Project Name: 14. Routine Construction

Reason for Expenditures:

Covers capital projects that develop during the year involving items shown below.

Brief Description/Scope:

- a) Capital Construction -Transformer installation, overhead and underground system upgrades, miscellaneous projects, pole damage, etc.
- b) Street Lights - New equipment installation
- c) Pole Setting/Transfers
- d) Engineering Labor
- e) General Line Foreman Labor
- f) Underground Capital Construction
- g) Police Details
- h) Overtime

Cash Requirements:

	Quarter 1	Quarter 2	Quarter 3	Quarter 4	TOTAL
Fiscal 2013	\$247,053	\$247,053	\$247,053	\$247,053	\$988,211

TOTAL PROJECT COST: **\$988,211**

FISCAL 2013 CAPITAL BUDGET COST SHEET

CAPITAL PROJECT NAME: Routine Construction

CAPITAL PROJECT NUMBER: 14

WORK ORDER NUMBER: 13-

ITEM	CREW WEEKS	CREW LABOR COST	CREW VEHICLE COST	OTHER LABOR	OTHER VEHICLE	NEW MATERIAL & MISC	QUARTER	TOTAL
a) Capital Construction	4-Man 20	\$213,340	\$32,800			\$50,000	All	\$296,140
	Unit Cost	\$10,667	\$1,640			N/A	per week	
b) Street Light Installations	2-Man 6	\$32,638	\$5,280			\$25,000	All	\$62,918
	Unit Cost	\$5,440	\$880			N/A	per week	
c) Pole Setting/Transfers	4-Man 12	\$128,004	\$19,680			\$35,000	All	\$182,684
	Unit Cost	\$10,667	\$1,640			N/A	per week	
d) Engineering Labor				\$27,158			All	\$27,158
8.0 weeks	Unit Cost			\$3,395			per week	
e) General Line Foreman Labor				\$80,083			All	\$80,083
26.0 weeks	Unit Cost			\$3,080			per week	
f) U/G Construction	2-Man 6	\$36,053	\$240			\$75,000	All	\$111,293
	Unit Cost	\$6,009	\$40			N/A	per week	
g) Police Details						\$48,000	All	\$48,000
	20.0 weeks	Unit Cost				\$2,400	per week	
h) Overtime	4-Man 15	\$155,335	\$24,600				All	\$179,935
	Unit Cost	\$10,356	\$1,640			N/A	per week	

Total RMLD Crew Weeks 53.0

Total U/G Crew Weeks 6.0

TOTAL	59.0	\$565,370	\$82,600	\$107,241	\$233,000
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TOTAL PROJECT COST \$988,211

FISCAL 2013 CAPITAL BUDGET REQUEST SUMMARY

Capital Project Name: 15. GIS (Geographical Information System)

Reason for Expenditures:

The GIS system has been identified as a cornerstone work-management process application which will integrate several different applications.

Brief Description/Scope:

GIS will be the platform for the Outage Managements System (OMS), Customer Information System (CIS), Meter Data Management (MDM) and the Geographical Positioning System (GPS).

GIS will be enhanced to provide integration with Cogsdale for customer outage information such as meter and location I.D., the physical coordinates of a customer's call as it relates to the system overhead or underground infrastructure, power outage, power restoration and vehicle location.

This will enable real-time geographical plotting of RMLD resources for more efficient call analysis and assignment, component location, outage boundaries and vehicle analysis.

Cash Requirements:

	Quarter 1	Quarter 2	Quarter 3	Quarter 4	TOTAL
Fiscal 2013	\$19,499	\$38,998	\$38,998		\$97,495

TOTAL PROJECT COST: \$97,495

FISCAL 2013 CAPITAL BUDGET REQUEST SUMMARY

Capital Project Name: 17B. AMR High-Powered ERT Meter Upgrade Project

Reason for Expenditures:

The existing first-generation low-powered ERT meters have been in service for a period that has eclipsed the manufacturer's recommendations. These meters have been failing at an increased rate and a plan was executed in FY12 to remove these meters from service. This effort will continue through FY13.

Brief Description/Scope:

The RMLD will continue to change out all low-powered ERT residential meters. Simultaneously, installation of hardware and software will continue. The data will be transmitted to the RMLD via the fiber optic system which encircles the territory. The new data will provide reads at the desktop, additional consumption information, and outage notification.

This fixed network offers the ability to remotely:

- a. perform all reads from the office;
- b. amend the frequency of reads to maintain the read cycle;
- c. monitor customer usage from a monthly, daily, or hourly perspective;
- d. receive immediate outage and restoration notification without customer intervention.

Cash Requirements:

	Quarter 1	Quarter 2	Quarter 3	Quarter 4	TOTAL
Fiscal 2013	\$423,312	\$141,104			\$564,416

TOTAL PROJECT COST: \$564,416

FISCAL 2013 CAPITAL BUDGET COST SHEET

CAPITAL PROJECT NAME: AMR High-Powered ERT Meter Upgrade Project

CAPITAL PROJECT NUMBER: 17B

PROJECT NUMBER: 13-649

ITEM	CREW WEEKS 2-man	RMLD CREW LABOR COST	RMLD CREW VEHICLE COST	OTHER LABOR	OTHER VEHICLE	NEW MATERIAL & MISC	QUARTER	TOTAL
Line Dept. Hardware install (ST)	8.0	\$43,518	\$7,040			\$80,000	1 and 2	\$130,558
Repeater & collector testing (ST)	2.0	\$10,879	\$1,760				1 and 2	\$12,639
2.0 wks-General Line Foreman				\$6,160			1 and 2	\$6,160
Unit Cost		\$5,440	\$880	\$3,080			per week	
Technical Services Dept. Meter installation								
2.0 wks-Meter Techs (2) (ST)				\$7,913			1 and 2	\$7,913
4.0 wks-Meter Techs (2) (OT)				\$3,841			1 and 2	\$3,841
5.0 wks-Sr. Meter Techs (2) (OT)				\$6,863			1 and 2	\$6,863
3.0 wks-Sr. Tech (1) (OT)				\$1,442			1 and 2	\$1,442
3.0 wks-Sr. Tech (2) (ST) Testing				\$14,850			1 and 2	\$14,850
4.0 wks-Tech.Svs.Mgr (ST)				\$13,738			1 and 2	\$13,738
Unit Cost								
Materials and ltron costs:								
Meter Costs							1 and 2	
Miscellaneous costs						\$42,920	1 and 2	\$42,920
ltron project mgmt. services						\$145,000	1 and 2	\$145,000
Unit Cost								
MIS - Support & Testing (6 weeks)				\$13,503			1 and 2	\$13,503
Server reconfiguration costs								
6.0 weeks								
Unit Cost				\$2,251			per week	
Fiber splicing and terminating:						\$40,000	1 and 2	\$40,000
10 locations @ \$2,000/day (2 days)								
Junction boxes: 10 remaining						\$50,000	1 and 2	\$50,000
locations @ \$5,000/location								
Unit Cost						see box at left		
Engineering labor				\$6,789			1 and 2	\$6,789
2.0 weeks								
Unit Cost				\$3,395			per week	
Police Details						\$18,200	1 and 2	\$18,200
7.0 weeks								
Unit Cost						\$2,600	per week	
Equipment: patch panels, media converters, power supplies, misc hardware & connectors						\$50,000	1 and 2	\$50,000
10 locations @ \$5,000/location								
Unit Cost								
Total RMLD Crew Weeks	10.0							
TOTAL	10.0	\$54,397	\$8,800	\$75,099		\$426,120		

TOTAL PROJECT COST: \$564,416

FISCAL 2013 CAPITAL BUDGET REQUEST SUMMARY

Capital Project Name: 18. Purchase Two New Pickup Trucks

Reason for Expenditures:

Replace two existing pickup trucks with two new vehicles and dispose of the older trucks as surplus.

Brief Description/Scope:

Truck 22 is a heavy duty pick up truck purchased in 2000. It has been used as a sander/pool vehicle and is badly rotted and will be disposed of as surplus. It will be replaced with a new heavy duty pick up truck and will be assigned to the Facilities Department.

Truck 35 is the Control Center's medium duty pick up truck purchased in 2002 and has 103,000 miles on it and needs replacement. It will be disposed of as surplus and replaced with a medium duty truck.

Cash Requirements:

	Quarter 1	Quarter 2	Quarter 3	Quarter 4	TOTAL
Fiscal 2013	\$30,000	\$35,000			\$65,000

TOTAL PROJECT COST: **\$65,000**

FISCAL 2013 CAPITAL BUDGET REQUEST SUMMARY

Capital Project Name: 19. Purchase Two New Line Department Vehicles
Reason for Expenditures:

Purchase one (1) Bucket Truck (55') and one (1) Bucket Truck (40') for use as the Trouble Truck. Dispose of one Bucket Truck (33') and keep an old Bucket Truck as a spare.

Brief Description/Scope:

1) Purchase one (1) new 55' Bucket Truck to replace Truck L-44, which is a 55' Bucket Truck purchased in 2001, and is the only 55' Bucket Truck currently in the fleet.

2) Purchase one (1) 40' Bucket Truck for use as the Trouble Truck. The current Trouble Truck (L-10) will be replaced and used by the Technicians in place of Truck 17, which is being disposed as surplus.

Cash Requirements:

	Quarter 1	Quarter 2	Quarter 3	Quarter 4	TOTAL
Fiscal 2013				\$570,000	\$570,000

TOTAL PROJECT COST: \$570,000

FISCAL 2013 CAPITAL BUDGET COST SHEET

CAPITAL PROJECT NAME: Purchase Two New Line Department VehiclesCAPITAL PROJECT NUMBER: 19PROJECT NUMBER: 13-

ITEM	CREW WEEKS	RMLD CREW LABOR COST	RMLD CREW VEHICLE COST	OTHER LABOR	OTHER VEHICLE	NEW MATERIAL & MISC	QUARTER	TOTAL
Purchase one new 55' Bucket Truck						\$305,000	4	\$305,000
Unit Cost								
Purchase one new 40' Bucket Truck						\$265,000	4	\$265,000
Unit Cost								
Unit Cost								
Unit Cost								
Unit Cost								
Unit Cost								
Police Details (if applicable)								
Unit Cost								

Total RMLD Crew Weeks

Total U/G Crew Weeks

TOTAL

\$570,000

TOTAL PROJECT COST: \$570,000

FISCAL 2013 CAPITAL BUDGET REQUEST SUMMARY

Capital Project Name: 22. Engineering Analysis Software and Data Conversion

Reason for Expenditures:

This software purchase and data conversion will allow the Engineering Department to perform engineering analysis on the distribution system. Internally the Department would be able to perform fault current calculations, arc flash calculations, load flow & voltage drop calculations, load balancing, voltage regulator settings, etc. This new software would work with the existing coordination software that the Engineering Department uses.

Brief Description/Scope:

Take the existing databases and core ESRI data collected for the GIS project and have it converted for use in the electric model by the software provider. Purchase the software necessary to perform the engineering analysis and to update map/landbase data. Purchase of server for software and databases.

Cash Requirements:

	Quarter 1	Quarter 2	Quarter 3	Quarter 4	TOTAL
Fiscal 2012	\$38,395	\$38,395			\$76,789

TOTAL PROJECT COST: \$76,789

FISCAL 2012 CAPITAL BUDGET COST SHEET

CAPITAL PROJECT NAME: Engineering Analysis Software and Data ConversionCAPITAL PROJECT NUMBER: 22PROJECT NUMBER: 12-

ITEM	CREW WEEKS	RMLD CREW LABOR COST	RMLD CREW VEHICLE COST	OTHER LABOR	OTHER VEHICLE	NEW MATERIAL & MISC	QUARTER	TOTAL
Software - two licenses each for mapping, landbase, and engineering analysis software						\$40,000	1 and 2	\$40,000
Unit Cost								
Database conversion Professional Services						\$25,000	1 and 2	\$25,000
Unit Cost								
Server						\$5,000		\$5,000
Unit Cost								
Engineering				\$6,789			1 and 2	\$6,789
2.0 weeks				\$3,395			per week	
Unit Cost								
Unit Cost								
Unit Cost								
Police Details (if applicable)								
Unit Cost								

Total RMLD Crew Weeks
Total U/G Crew Weeks

TOTAL

\$6,789

\$70,000

TOTAL PROJECT COST: **\$76,789**

#8

***Memo
Solar Energy Projects – Approval for On-System Projects***

READING MUNICIPAL LIGHT DEPARTMENT

To: Power & Rate Committee
Citizens' Advisory Board

Date: May 14, 2012

From: Vinnie Cameron

Subject: Solar Energy Projects - Approval for On-System Projects

The Reading Municipal Light Department (RMLD) has been contacted recently by several developers who are working with RMLD customers to install solar projects within RMLD's service territory. Since RMLD has a closed system, its customers are required to purchase all of their electricity needs from RMLD; these developers cannot sell power directly to RMLD customers. As an alternative, they are able to negotiate a Power Supply Agreement (PSA) with RMLD for the energy produced by these solar projects. In dealing with these solar projects the RMLD has found that the developer's projects are similar in design, cost, and the developers are agreeable to the RMLD's contract terms.

Under the RMLD's present structure for accepting power supply agreements, the RMLD staff must bring these projects to the Power & Rate Committee and the Citizen's Advisory Board (CAB) for review and recommendation prior to bringing the project to the RMLD Board for approval to sign the contract. Given the size, pricing, and contractual arrangements surrounding these projects, the RMLD's approval process is cumbersome.

The Power & Rate Committee and the CAB should consider the option of allowing the RMLD staff to execute agreements with solar projects under a certain criteria (size, price, contractual terms, etc.) with the caveat that the Power & Rate Committee, CAB, and the RMLD Board are informed of the projects prior to signature.

These solar projects can come on-line very quickly. If solar projects fall under the specified criteria, it would be advantageous for the RMLD and the developer to be able to proceed to get the project on-line without the need to hold multiple meetings for explanation and approval.

This recommended change in the approval process would not go against RMLD Policy or the Twenty Year Agreement; as long as criteria is set up that will clearly delineate what projects will be included. I recommend that the criteria be set up for pre-approval of solar energy projects installed on RMLD customer premises within the RMLD's service territory, with a cumulative total of 10 MW, not to exceed a 15 year period, under the similar contract terms as is being agreed to presently, and not to exceed a levelized cost of \$.085/kWh. Once the 10 MW cumulative criteria has been attained the RMLD will come to the Power & Rate Committee and CAB to discuss the possibility of extending this arrangement.

The solar projects that are within the RMLD's service territory afford the RMLD the following advantages:

- These projects increase the RMLD's amount of renewable energy in the power supply portfolio.

- Generation on the RMLD's service territory (behind the meter) results in a reduction in demand with respect to the ISO-NE forward capacity market - demand requirements. Presently, each kW of demand reduction is worth about \$36 annually.
- The price of these solar projects will be advantageous to the RMLD fuel charge of the term of the contracts.
- These behind the meter solar projects also assist in reducing the transmission cost for a portion of the year since the solar energy is produced during the RMLD's peak demand period for about six months a year.
- These projects also help the RMLD in providing stability to its system by providing energy to the distribution system that does not go through the sub stations.
- By providing intermediate and peak period energy these projects help keeps fossil fuel units offline in the ISO-NE generator stack.
- Due to location, inherently line losses are minimized, which is an incremental cost savings.
- RMLD customers are able to receive addition revenue and improvements to their building.

Allowing the RMLD staff to proceed in this manner will streamline the process for installing solar projects on RMLD customer locations, increase the amount of renewable generation located within RMLD's service territory, and alleviate the need for many meetings of the Power & Rate Committee and the CAB for specific approval of small projects that are very beneficial to the RMLD and its customers.

c: Bob Soli - RMLD Board of Commissioners
 Marsie West - RMLD Board of Commissioners
 Jane Parenteau - RMLD
 William Seldon - RMLD
 Jared Carpenter - RMLD