

Manhattan Beach Takes *Climate* Action



March 29, 2011

Local Government
Partnership
Meeting

Introduction

- Green History
- “Cool” Commitment
- Beginnings of a Climate Action Plan
- Energy Leader Partnership
- Actions to Reduce GHG Emissions
- Q & A



“Green” Community History

- Community Involvement
 - Environmental Task Force (ETF), VOICE, 350, Transition South Bay, Surfrider, Heal the Bay, Environmental Priorities Network
- Existing Environmental Programs
 - Residential & Commercial Recycling
 - Clean Bay Restaurant Certification
 - Reclaimed Irrigation Water
 - **Efficient (VFD) Motors at Pump Stations**
 - **Facility Lighting Retrofit**
 - **LED Traffic Signals**
 - **Solar permitting fee waivers**



Manhattan Beach’s “Cool” Commitment

- January 2007: signed US Mayors Climate Protection Agreement
- Summer 2007: inter-departmental Green Team Formed to:
 - Review Entire Environmental Spectrum
 - Document Current Environmental Programs
 - Identify Opportunities for Improvement & BMPs
 - Develop Community Involvement Alternatives
- November 2007: Green Team issued a comprehensive Green Report (available online)
- 2008 - 2011: City hired staff and created a resident based Environmental Task Force to carry out the goals of the Green Report



Climate Action Plan

- City pledged to cut carbon emissions **7% below 1990 levels by 2012**
- Joined ICLEI (Local Governments for Sustainability) to conduct a baseline emissions inventory and develop reduction goals
- With the help of the resident-based ETF, developed a municipal Climate Action Plan to meet Milestone 3
- Partnered with SBESC to obtain community-wide emissions inventory



Milestone 1

Conduct a Baseline Emissions Inventory

Milestone 2

Establish an Emissions Reduction Goal

Milestone 3

Develop a Local Climate Action Plan to Achieve the Goal

Milestone 4

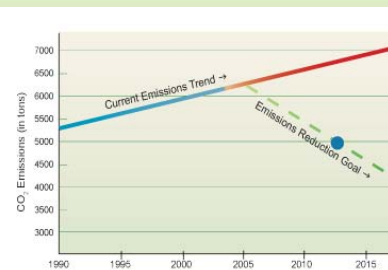
Implement the Local Climate Action Plan

Milestone 5

Track Progress and Report Performance

Current Climate

GHG Emissions Reduction Goal	Actual Emissions (Metric Tons)
1990 Emissions	4,711
2005 Emissions	5,517
2007 Emissions	5,172
2009 Emissions (estimate)	5,306
Goal: 7% below 1990 levels	4,381
Reduction needed from estimated 2009 Emissions Level = 925 MT	Approximately 17.5%



• Emissions measurements focus on Fossil Fuels and Energy usage

• **We need to reduce City emissions to approximately 4,381 metric tons of CO₂e**

• Left unchecked, we can expect emissions to increase to **5,459 2012**

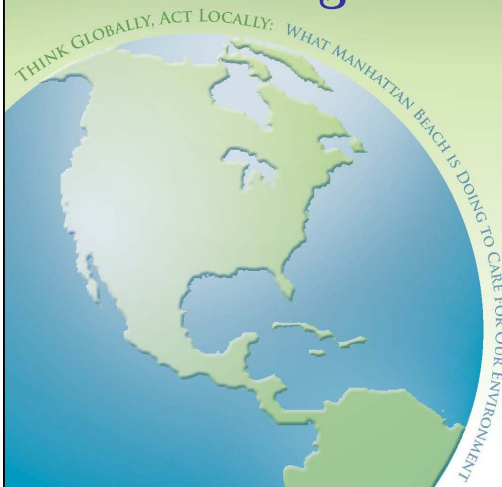
• As the City moves towards environmentally friendly practices, we hope to meet this goal

Energy Leader Partnership

- As an Energy Leader participant, the City receives a premium on incentives from Edison (30% increase by being a partner!)
- City of Manhattan Beach received a check for \$57,398.20 from Southern California Edison
- Implementation of future energy efficiency projects will move City to next program level, which will increase the rebate incentive



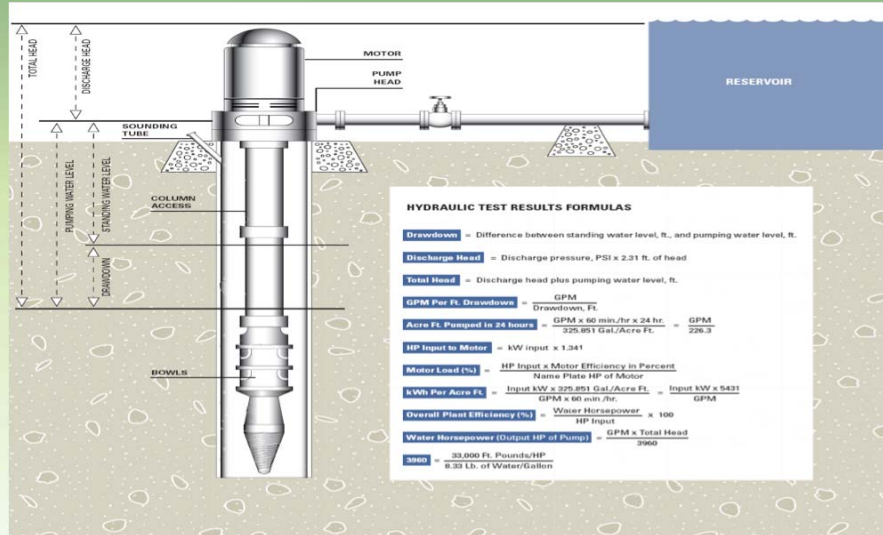
Manhattan Beach Enhancing Well Efficiency



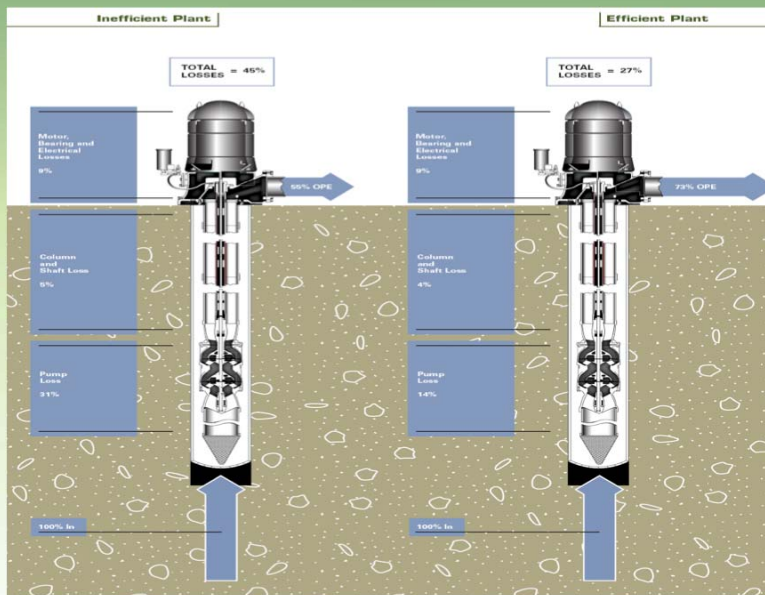
March 29, 2011

Local Government
Partnership
Meeting

Deep Turbine Well Profile



Inefficient vs. Efficient





Confidential/Proprietary Information

January 16, 2009

RAUL SAENZ
CITY OF MANHATTAN BEACH
3621 BELL AVE
MANHATTAN BEACH, CA 90266

HYDRAULIC TEST RESULTS, Plant: WELL #15
Location: VALIREDONDO BCH AVE HP: 300
Cust #: 0-000-0964 Serv. Acct. #: 000-0052-90
Meter: PO726-8122 Pump Ref #: 4374

In accordance with your request, an energy efficiency test was performed on your turbine well pump on December 4, 2008. If you have any questions regarding the results which follow, please contact ADAM MCCAMISH at (909)820-5266.

Pump: N/A Equipment No: N/A
Motor: SIEMENS No: 151231699211

Results

Discharge Pressure, PSI	60.0
Standing Water Level, Feet	67.0
Drawdown, Feet	22.6
Discharge Head, Feet	138.6
Pumping Water Level, Feet	89.6
Total Head, Feet	229.2
Capacity, GPM	648
GPM per Foot Drawdown	28.7
Acre Feet Pumped in 24 Hours	2,894
KW Input to Motor	167.0
HP Input to Motor	223.9
Motor Load (%)	70.5
Measured Speed of Pump, RPM	1,757
Customer Meter, GPM	643
kWh per Acre Foot	1,460
Overall Plant Efficiency (%)	16.7

SCE PILOT

MB METER

$\Delta = 0.8\%$

This pump is operating inefficiently. The inefficiency is most likely caused by pump wear, the failure of the pump design to meet existing conditions, or a combination of both. Please see the attached pumping cost analysis for possible savings from pump replacement.

DAN L. JOHNSON
Manager
Hydraulic Services

300 N. Pepper Ave.
Redlands, CA 92370



Confidential/Proprietary Information

January 16, 2009

RAUL SAENZ
CITY OF MANHATTAN BEACH
3621 BELL AVE
MANHATTAN BEACH, CA 90266

PUMPING COST ANALYSIS, Plant: WELL #15
Location: VALIREDONDO BCH AVE HP: 300
Cust #: 0-000-0964 Serv. Acct. #: 000-0052-90
Meter: PO726-8122 Pump Ref #: 4374

The following energy efficiency analysis is presented as an aid to your cost accounting. This is an estimate based on the conditions present during the Edison pump test performed on December 4, 2008, billing history for the past 12 months, and your current rate of PA-2.

Assuming that water requirements will be the same as for the past year, and all operating conditions (annual hours of operation, head above, and water pumping level) will remain the same as they were at the time of the pump test, it is estimated that:

1. Overall plant efficiency can be improved from 16.7% to 72.0%.
2. This can save you up to 468,792 kWh and \$55,153.41 annually.
3. These kWh savings translate to a 204-ton decrease in CO₂ emissions.

	Existing	Plant Efficiency Improved	Savings
Total kWh	610,080	141,288	468,792
kW Input	167.0	38.7	128.3
kWh per Acre Foot	1,400	324	1,075
Acre Feet per Year	435.9		
Average Cost per kWh	\$0.12		
Average Cost per Acre Foot	\$164.86	\$38.13	\$126.53
Overall Plant Efficiency (%)	16.7	72.0	
Total Annual Cost	\$71,775.91	\$16,622.50	\$55,153.41

It is sincerely hoped that this information will prove helpful to you, and that your concerns over maintaining optimum pumping efficiency will be continued. If you have any questions regarding this report, please contact ADAM MCCAMISH at (909)820-5266.

DAN L. JOHNSON
Manager
Hydraulic Services

300 N. Pepper Ave.
Redlands, CA 92370

Larry D Sutton Southern California Edison Acct Exec. - Energy Efficiency Local Government



Rebate Application Process Part 1

EDISON Business Incentives & Services
2009 Calculated Measures (SPC) - FORM 3

Project Name: Well # 15 Project Sponsor: City
 Anticipated Installation Date: Aug 09 Enter date in yellow cells
 Please indicate your anticipated completion date.

Calculated Measures (SPC) require a pre-installation inspection. Submit the application prior to installation.

Energy Efficiency Measure Information for Calculated Projects
 Provide a brief description of each measure. Identify whether the measure is lighting, air conditioning/heating/ventilation (ACHV), air conditioning/lighting/ventilation (ACLHV), or other.
 Provide costs for each measure. Total measure cost includes, but is not limited to, scuff, design, engineering, construction, materials, permits, fees, overhead and labor.

Calculated Measures	Lighting	ACHV	ACLHV	Other	Measure Costs (\$)
1 <u>Well # 15</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>.07</u>
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Energy On-Peak Demand Savings and Incentive Summary
 Match actual energy savings calculations, either using SPC software or engineering plans. Enter the summarized energy savings and demand reduction parameters below.

Calculated Measure # from above	Energy Savings				Energy Incentive (\$)	*Total Project Cost (\$)
	Baseline Usage (kWh)	Installed Usage (kWh)	Energy Savings (kWh)	Incentive Rate* (\$/kWh)		
1	<u>98,820</u>	<u>70,354</u>	<u>28,466</u>	<u>.07</u>	<u>1,992.62</u>	<u>98,820</u>
2						
3						
4						
5						

Calculated Energy Savings Totals kWh Calculated Savings Incentive (\$)

Calculated Measure # from above	On-Peak Demand Reduction				Peak Demand Reduction Incentive (\$)
	Baseline On-Peak Demand (kW)	Installed On-Peak Demand (kW)	On-Peak Demand Reduction (kW)	Peak Demand Reduction (\$)	
1	<u>167.0</u>	<u>35.7</u>	<u>131.3</u>	<u>73,720</u>	
2					
3					
4					
5					

On-Peak Demand Reduction 131.3 kW

*The incentive is capped at 50% of the total project cost. Project sites are limited to \$2.4 million in incentives. An adjustment may be made after review of project costs.

Rebate Application Process Part 1

EDISON Business Incentives & Services
2009 APPLICATION FORM 2

PAYMENT INFORMATION

Customer Name: CITY OF MANTHAN BCH - PUBLIC WORKS Account Number: 310.802.5315
 Project Name: 3121 BELL AVE City: MANTHAN BCH CA Zip: 90266
 Customer Contact Name: RAUL SAENZ Title: UTILITIES MGR Email: RSAENZ@CITYMB.CA.GOV

Customer Tax ID: 95-6000742 (Federal Tax ID) RAUL SAENZ (Contact Name)

AGREEMENT

I understand that SCE has made no warranty or representation regarding the qualifications of the Project Sponsor and that I am solely responsible for the selection of the Project Sponsor to implement the Project. I understand that the Project Sponsor is an independent contractor and is not authorized to make any representation or contract on behalf of SCE. I agree that SCE will not be responsible for any claims, damages, costs, expenses, and liability legal, contractual, or otherwise, which may arise from or be connected with the measures installed.

I understand that the energy savings, incentives and rebates are not subject to change based on SCE rates and approval, and that I am solely responsible for the accuracy, completeness and consistency of the measures and services under the program.

I have authorized in writing the Project Sponsor to act on my behalf in the implementation of the measures, or have obtained the permission of the Project Sponsor to do so. I understand that my release of the project to the Project Sponsor may require inspections, measurements and/or verification of installations of measures applied for, and I agree to provide access to the Project Site for these purposes to SCE and its agents or assigns.

I understand that the Rebate Measures must be installed, installed and fully operational prior to submitting an Application, and I understand that submission of this Application is not a guarantee of payment by SCE. For a guarantee of rebate payment, the program has specific requirements as set forth in the program rules, and rebate rules are posted on the website (www.sce.com). I agree that I will not receive a rebate until 100% of the project cost for rebated measures, 100% of the rebate amount and for rebated measures, not to exceed 10% of the utility rebate budget (\$1 million for SCE and \$1 million for Southern California Edison). I agree that I have not received rebates, incentives or services for the same measure(s) from another utility, state or local program funded by the Public Goods Charge (PGC), and that this program is funded by California ratepayers and administered under the authority of the California Public Utilities Commission. The program may be modified or terminated without notice.

I understand that SCE makes no representation or warranty regarding the qualifications of the Project Sponsor and that I am solely responsible for the selection of the Project Sponsor to implement the Project. I understand that the Project Sponsor is an independent contractor and is not authorized to make any representation or contract on behalf of SCE. I agree that SCE will not be responsible for any claims, damages, costs, expenses, and liability legal, contractual, or otherwise, which may arise from or be connected with the measures installed.

I have read and understand the program requirements and terms and conditions set forth in this Application. I certify that the information I have provided is true and correct, and the projects for which I am requesting incentives meet the requirements in this application package. Furthermore, I understand and agree that I am not eligible to receive a rebate until the program is approved.

Project Sponsor Signature: RAUL SAENZ Title: UTILITIES MGR Date: 06/22/09
 Project Sponsor Title: UTILITIES MGR Date: 06/22/09

PLEASE MAKE A COPY OF THIS DOCUMENT FOR YOUR FILES

Rebate Application Process Part 1

EDISON Business Incentives & Services
2009 APPLICATION FORM 1

Please complete form 1 and 2 for all projects. Form 3 should be submitted with calculated projects and form 4 should be submitted with itemized projects. If your project includes both types of measure please submit all forms. For more information on eligibility of equipment please review the terms and conditions. For calculated measures please check several boxes.

CUSTOMER INFORMATION (CUSTOMER | BUSINESS OWNER | PARENT COMPANY | PROPERTY MGR.)

Customer Name: CITY OF MANTHAN BENCH
 Customer Address: 3121 BELL AVE City: MANTHAN BCH CA Zip: 90266
 Customer Contact Name: RAUL SAENZ Title: UTILITIES MANAGER
 Customer Phone Number: 310.802.5315 Cell Phone Number: 310.802.5314 Email: RSAENZ@CITYMB.CA.GOV

PROJECT TYPE(S)

CALCULATED (SPC) Form 3 ITEMIZED (Express Efficiency) Form 4 COMBINED (SPC & Express measures) Form 3 & 4

Project Description: MOTOR & PUMP REPLACEMENT

PROJECT SITE INFORMATION (SITE OF MEASUREMENTS AND A DETAILED DESCRIPTION OF THE PROJECT)

Address: 3121 BELL AVE City: MANTHAN BCH CA Zip: 90266
 Project Name: WELL # 15
 Project Address: WELL AVE / REDONDO AVE City: REDONDO BCH CA Zip: 90266
 Contact Name: RAUL SAENZ Title: UTILITIES MGR
 Contact Phone Number: 310.802.5315 Contact E-Mail Address: RSAENZ@CITYMB.CA.GOV

PROPERTY TYPE:

Elementary Hospital Manufacturing/Industrial Secondary schools K-5 Multi-family residential Community/Trade college Commercial warehouse University Unconditioned warehouse Hotel/Motel common areas Unconditioned warehouse Guest Rooms Grocery store Small office Fast food restaurant Large office Sit down restaurant Small retail Miscellaneous Commercial Store retail Pump/Motor (check) Large retail

PROJECT SPONSOR (PARENT COMPANY OR CONTACT)

Company/Business Name of Project Sponsor: _____
 Address: _____ City: _____ State: _____ Zip: _____
 Contact Name: _____
 Contact Telephone Number: _____ Contact E-Mail Address: _____

FOR UTILITY USE ONLY

Project Number: _____ Date: _____
 SCE Rep: _____
 Phone: _____
 SCE Engineer: _____
 Name: _____

Rebate Application Process Part 1

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

Confidential/Proprietary Information
May 18, 2009

RAUL SAEMZ
CITY OF MANHATTAN BEACH
3021 BELL AVE.
MANHATTAN BEACH, CA 90266

HYDRAULIC TEST RESULTS, Plant: WELL #15
Location: VALREDONDO BCH AVE HP: 300
Cost #: 0-000-0964 **Serv. Acct. #:** 000-0052-90
Meter: PO726-8122 **Pump Ref. #:** 4374

In accordance with your request, an energy efficiency test was performed on your turbine well pump on May 15, 2009. If you have any questions regarding the results which follow, please contact ADAM MCCAMISH at (909)820-5269.

Equipment	
Pump:	N/A
Motor:	SIEMENS
No:	N/A
No:	151231699211

Results

Discharge Pressure, PSI	55.9
Standing Water Level, Feet	74.7
Drawdown, Feet	17.1
Discharge Head, Feet	127.1
Pumping Water Level, Feet	91.8
Total Head, Feet	218.9
Capacity, GPM	518
GPM per Foot Drawdown	30.3
Acfs Feet Pumped in 24 Hours	2,290
KW Input to Motor	167.0
Motor Load (%)	223.9
Measured Speed of Pump, RPM	70.8
Customer Meter, GPM	1,782
KWh per Acre Foot	504
Overall Plant Efficiency (%)	12.8

This pump is operating inefficiently. The inefficiency is most likely caused by pump wear, the failure of the pump design to meet existing conditions, or a combination of both. Please see the attached pumping cost analysis for possible savings from pump replacement.

DAN L. JOHNSON
Manager
Hydraulic Services

300 N. Pepper Ave.

Rebate Application Process Part 1

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

Confidential/Proprietary Information
May 18, 2009

RAUL SAEMZ
CITY OF MANHATTAN BEACH
3021 BELL AVE.
MANHATTAN BEACH, CA 90266

PUMPING COST ANALYSIS, Plant: WELL #15
Location: VALREDONDO BCH AVE HP: 300
Cost #: 0-000-0964 **Serv. Acct. #:** 000-0052-90
Meter: PO726-8122 **Pump Ref. #:** 4374

The following energy efficiency analysis is presented as an aid to your cost accounting. This is an estimate based on the conditions present during the Edison pump test performed on May 15, 2009, billing history for the past 12 months, and your current rate of PA-2.

Assuming that water requirements will be the same as for the past year, and all operating conditions (annual hours of operation, head above, and water pumping level) will remain the same as they were at the time of the pump test, it is estimated that:

- Overall plant efficiency can be improved from 12.8% to 72.0%.
- This can save you up to 418,446 kWh and \$51,611.07 annually.
- These kWh savings translate to a 182-ton decrease in CO₂ emissions.

	Existing	Plant Efficiency Improved	Savings
Total kWh	608,800	90,354	418,446
KW Input	167.0	29.7	137.3
KWh per Acre Foot	1,751	311	1,440
Acres Feet per Year	290.8		
Average Cost per kWh	\$0.12		
Average Cost per Acre Foot	\$215.99	\$38.35	\$177.60
Overall Plant Efficiency (%)	12.8	72.0	
Total Annual Cost	\$62,766.39	\$11,144.32	\$51,611.07

It is sincerely hoped that this information will prove helpful to you, and that your concerns over maintaining optimum pumping efficiency will be continued. If you have any questions regarding this report, please contact ADAM MCCAMISH at (909)820-5269.

DAN L. JOHNSON
Manager
Hydraulic Services

300 N. Pepper Ave.

Plant Efficiency After Well Rehabilitation

PUMP TEST **CONFIDENTIAL AND PROPRIETARY** 4374
 Ref. No. 24102

Acct. Annual kWh _____ Cost/kWh _____ Rate _____
 Name Larry D. Sutton Simulation Coach
 Mailing Address _____
 Contacts/Phone _____

Customer Name _____ Customer # _____ Type _____
 Customer Plant Description _____ Date of Test _____ Service Associate # _____
 Well # #15 Pump Location _____ Pump No. _____
 Well ID Field 1100 02101 1410 Well ID _____

Motor Mfg	HP	Serial No.	Bar HP	Acct. Monthly kWh	Pump Monthly kWh
<u>118</u>	<u>250</u>	<u>053071127896701</u>			

Imp. Eff.	Motor Eff.	Shut Off Head	Type	Code	Frame	V-Its	Amps	RPM	Amp
<u>92.2</u>	<u>92.2</u>	<u>11</u>	<u>16</u>	<u>11</u>	<u>11</u>	<u>11</u>	<u>11</u>	<u>11</u>	<u>11</u>

Check. PSI	Standing Lvl.	Pumping Lvl.	Suction PSI	Suction Lvl.	GPM	Wtr Input	HP	Site GPM

Test Point	Discharge PSI	Artline-Suction	Drawdown	Discharge Ft.	Pumping Level	Total Head - Ft.	Revs. / Secs.	Cost. GPM	Turns	Hall Flo Meter	GPM	GPM/FT. DD	Acct. EL24 Hours	Revs. / Secs.	Input kW	Input HP	Water HP	BHP @ 90.2 %	% of Load	Pump RPM	KWH/Acct Ft.	Over all ER
<u>200</u>	<u>90.6</u>	<u>192.5</u>		<u>209.3</u>	<u>236.2</u>	<u>225.9</u>	<u>343.0</u>	<u>1723</u>		<u>1824</u>	<u>1825</u>	<u>111</u>	<u>20</u>	<u>6.18</u>	<u>153.0</u>	<u>205.2</u>	<u>151.6</u>	<u>186.6</u>	<u>76.4</u>	<u>1824</u>	<u>4578</u>	<u>74.2</u>

Meter No.	Code	Volts	KVA	M.C.	Head	Demand	Water Level	Flow	Article	No.	PI	N.L. Voltage	Test Point #	Volts	Amps	Volts Ac	Amps Ac	KVA	PF	Ground	L	Yes	No	Pump Cond.	Switch Board	Off	On	Off	On	Wtr Mtr #	Mtr	Cal	Total
<u>6107216-81122</u>		<u>480</u>	<u>173.59</u>	<u>47.1</u>	<u>67.6</u>	<u>0.05</u>	<u>113.59</u>		<u>12 1/2"</u>			<u>480</u>	<u>437</u>	<u>480</u>	<u>437</u>	<u>480</u>	<u>437</u>	<u>153.0</u>	<u>0.92</u>				<u>OK</u>	<u>OK</u>	<u>OK</u>	<u>OK</u>	<u>OK</u>	<u>OK</u>	<u>OK</u>	<u>OK</u>	<u>OK</u>	<u>OK</u>	

Plant being rehabilitated
 Transformers _____
 Tested By AS/Ch Last Test _____ Improvement Y2M Hour Clock 11:20:57
 100-430-200-100-010

Larry D Sutton
 Southern California Edison
 Acct Exec. - Energy Efficiency
 Local Government



Rebate Application Process Part 2

EDISON Agricultural Energy Efficiency Program
2009 Installation Report

After project is installed and operational, please submit this form to:
 Agricultural Energy Efficiency Program
 6000 N. Nevada Ave., Suite A
 Irwinville, GA 31702

Project Name: Walt # 15 Project Sponsor: City of Manhattan Beach
 Installation Date: JUNE 15, 2010 Application #: 1204-000298
 (Date that equipment was installed and operating properly)

Energy/On-Peak Demand Savings and Incentive Adjustment

No changes to the proposed measures have been made since the Application and the Project Sponsor verify that the Application approved savings calculations are correct.

Due to changes to the proposed measures, appropriate adjustments in the savings calculations have been made.
 For measures with changes made during installation, use the section to calculate the revised expected energy usage, energy savings, peak demand reduction, and incentives. Attach the appropriate calculations for the report from the Estimation Software, Calculate Energy Savings Total or the calculation sheets that document the engineering calculations.

Calculated Measure #	Baseline Usage (kWh)	Installed Usage (kWh)	Energy Savings (kWh)	Incentive Rate (\$/kWh)	Energy Incentive (\$)
1	509,500	414,304	95,196	0.04	3,807.84
2					
3					
4					
5					

Calculated Energy Savings Total: 95,196 kWh Calculated Savings Incentive: \$3,807.84

Calculated Measure #	Baseline On-Peak Demand (kW)	Installed On-Peak Demand (kW)	On-Peak Demand Reduction (kW)	Incentive Rate (\$/kW)	On-Peak Demand Incentive (\$)
1	147.0	29.7	117.3	0.11	12,903.00
2					
3					
4					
5					

On-Peak Demand Reduction: 117.3 kW On-Peak Demand Incentive: \$12,903.00

Total Project Cost (\$)
\$150,000

Incentive Rate
 Utility: \$0.06/kWh Other: \$0.09/kWh
 Gas: \$0.10/kWh

Installation and Operation Statement
 City of Manhattan Beach Project Sponsor or representative, the undersigned, hereby certifies that the Energy Efficiency Measures have been installed, functionally tested, and proved capable of operating and being maintained to perform in conformity with their design intent. The installation date of operation of the Energy Efficiency Measures and any required home monitoring data collection per approved MAE is as indicated.

Signature: [Signature] Name: Utilities Manager Title: Utilities Manager Date: 06/23/10

January 2, 2007 Version 1.0

Rebate Application Process Part 2

W-9 Request for Taxpayer Identification Number and Certification

Form 1099-SS (09-01-10) Department of the Treasury Internal Revenue Service

Name (as shown on your income tax return): City of Manhattan Beach

Business name, if different from above: _____

Check appropriate box: Individual Sole proprietor or partnership Corporation Partnership Other _____ Exempt from backup withholding

Address (street, street, and apt. or suite no.): 1400 Highland Av
 City, state, and ZIP code: Manhattan Beach CA 90266

Use account numbering here (optional): _____

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on Line 1 to avoid backup withholding. For individuals, file to your social security number (SSN). However, for a resident alien, non-resident alien, or foreign entity, see the file instructions on page 3. For other entities, a TIN is not required. If the account is in more than one name, see the chart on page 4 for guidance on whose number to enter.

Business TIN: _____ or _____
 Individual TIN: 15-0000000

Part II Certification

Under penalties of perjury, I certify that:

- The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
- I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
- I am a U.S. person (including a U.S. resident alien).

Signature: [Signature] Date: 06/23/10

Purpose of Form

A person who is required to file an information return with the IRS, must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

U.S. person. Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

- Certify that the TIN you are giving is correct (or you are waiting for a number to be issued);
- Certify that you are not subject to backup withholding; or
- Chain exemption from backup withholding if you are a U.S. exempt payee.

In 3 above, if applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

Note: If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

For federal tax purposes, you are considered a person if you are:

- An individual who is a citizen or resident of the United States;
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States; or
- Any estate (other than a foreign estate) or trust. See Regulations sections 301.7701-6(a) and 7(p) for additional information.

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a partner in a partnership conducting a trade or business in the United States provides Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

The person who gives Form W-9 to the partnership for purposes of avoiding U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the following cases:

- The U.S. owner of a disregarded entity and not the entity;

Col. No. 102312 Form W-9 (Rev. 11-2009)

**City of Manhattan Beach
Well Rehabilitation Payback Period**

Project Cost:	\$155,950
SCE Rebate @ t = 0:	\$57,398
City Pay-Out:	\$98,552
Electricity Savings:	\$57,398/Year
Payback Period:	1 Year, 9 Months

**City of Manhattan Beach
Electricity Savings of Useful-Life of Well Rehabilitation
Assuming 5% Annual Efficiency Degradation**

<u>Year</u>	<u>Savings</u>
1	\$57,398
2	\$57,398
3	\$54,528
4	\$51,802
5	\$49,212
6	\$46,751
7	\$44,413
8	\$42,193
9	\$40,083
10	<u>\$38,079</u>
Total Savings	\$481,857

Questions?

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