

Enjoying Trees Safely

Trees, shrubs, and other vegetation can cause safety hazards and power outages if they grow into or near power lines. You can help keep trees away from power lines by positioning your trees and shrubs far from overhead power lines.

Also, keep safety considerations in mind when it comes to selecting species to plant. Taller trees should be planted far away from overhead power lines. Remember, trees grow outward as well as up. For trees that will grow taller than 25 feet in height, choose locations that offer plentiful space – at least 20 feet away from power poles or overhead lines when the tree is fully grown.

Visit us at www.sce.com/safety for more safety information on trees and power lines. Stay aware. Stay safe.

Stay Connected to Us

Get energy-saving tips,
program updates,
and much more.



www.LinkedIn.com
Search for Group: SCE Business



www.twitter.com/SCE_Business

Proposition 65 Warnings

The Safe Drinking Water and Toxic Enforcement Act of 1986, commonly referred to as Proposition 65, requires the governor to publish a list of chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. It also requires California businesses to warn the public of potential exposures to these chemicals that result from their operations.

Providing safe and reliable service to all of our customers is a top priority for Southern California Edison and we want you to be aware of these chemicals so that you can reduce exposure to chemicals associated with electricity generation and distribution.

We handle all equipment and materials at our sites carefully for your good health as well as ours. However, if you are at or near our facilities and work sites, you can be exposed to the following chemicals on the state's Proposition 65 list. Reduce, limit, or avoid activities at and near the sources of exposure described below.

For more information go to www.P65Warnings.ca.gov.

1. Diesel Generation: Diesel Exhaust

SCE uses diesel-fueled emergency generators during emergencies and other times to help minimize the interruption of our customers' supply of electricity. The generators are used at some SCE facilities like substations and service centers, and at locations where repairs are made to the electrical system. SCE also uses diesel as the primary fuel for electricity generation on Catalina Island.

Diesel engines produce exhaust as a by-product of the combustion of diesel fuel. The exhaust contains gas compounds and fine particles (called "soot" or "particulate matter"). It also contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Breathing diesel exhaust can expose you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm, including benzene and 1,3-butadiene.

2. Wooden Utility Poles

SCE uses wooden poles that have been treated with chemical preservatives. These chemicals include pentachlorophenol, which is known to the State of California to cause cancer, and petroleum products such as diesel fuel, which contains chemicals including toluene and benzene that are known to the State of California to cause cancer and birth defects or other reproductive harm. If you come into contact with a wooden utility pole or the dust, debris, soil surrounding the pole, or water runoff that may contain dust, debris, and soil previously in contact with the pole, you could be exposed to these chemicals. Avoid contact with wooden utility poles and the dust, debris, soil surrounding the poles, or water runoff that may contain dust, debris, and soil previously in contact with the poles.

Important Summer Discount Plan Program Eligibility Changes

We want to inform participants in SCE's **Summer Discount Plan (SDP)** of important changes to the eligibility requirements that may affect participation

Effective as of January 1, 2017

We have implemented the following **NEW** requirements in 2017 for participation in the SDP program:

- ♦ **Meter Requirement:** An Edison SmartConnect® meter or interval data recorder (IDR) meter capable of registering hourly interval usage data is required for enrollment.
- ♦ **Minimum Electric Usage Threshold:** Your account must register a minimum of 0.2 kWh per A/C ton, one hour before or after an event at least one time per calendar year to remain eligible for the SDP program.
 - Example: If your A/C tonnage is 5 tons, your minimum usage threshold before or after an event is 1 kWh

These changes will make the program more effective and help ensure customers earning bill credits provide valuable load reduction during SDP event periods. We will conduct an ongoing review, and remove any account from the program that does not meet the new Meter Requirement. We will also conduct an annual review, beginning in 2018, and remove any account from the program that fails to meet the new Minimum Electric Usage Threshold. If your account is removed from the SDP program for not meeting the minimum electric usage threshold, you will not be eligible to re-enroll for the subsequent 12 months.

We'd like to thank you for participating in the **SDP program**, and if you have any questions regarding this change, please feel free to contact **1-800-990-7788**.

Your New Green Power Options... Supporting Local Solar Power to Create a Clean-Energy Future

As an SCE customer, as of February 2016 you can join one of two available programs that enable you to tap into the power of the sun through new solar energy options – without installing solar panels on your roof. These programs play a key role in creating a cleaner, healthier environment.

Green Rate Program

- ♦ We purchase solar energy on your behalf from California developers, and you in turn purchase this green power to support 50 percent or 100 percent of your electricity use.

Community Renewables Program

- ♦ You enter into an agreement with a renewable energy provider to help fund a share of a community-scale renewable project. We purchase the electricity that is produced under your agreement – up to 120 percent of the load forecasted to meet your monthly usage needs – and we pay you directly via bill credits.

Why Participate?

Enrolling in either the Green Rate or Community Renewables program helps you make a difference in our region by:

- ♦ Supporting local renewable power in our communities
- ♦ Supporting clean energy for a brighter future in Southern California
- ♦ Reducing your greenhouse gas emissions associated with electricity and contributing to a cleaner, healthier environment

Both programs are voluntary and optional, and are available to bundled service customers, meaning those who pay SCE for generation, transmission, and distribution services. You can participate in either of the programs, but not both. In addition, if you are on one of the following rate schedules you are not eligible to participate:

- ♦ Direct Access
- ♦ Economic Development Rates
- ♦ Community Choice Aggregation
- ♦ Non-metered streetlights

Load served on either of the programs cannot exceed 2 megawatts unless you are a government customer.

For SCE, the Green Rate and Community Renewables programs complement our existing solar and other renewable energy initiatives. We currently deliver more renewable power than any other U.S. utility – about 24.3 percent of our energy portfolio in 2015 – helping to provide clean energy for our future.

To Learn More and Enroll

For more information on the Green Rate and Community Renewables programs, and to enroll, visit on.sce.com/Greenrate or on.sce.com/CommRenew.

Power Up Your Knowledge

Looking to make the most informed choices about energy use in your home or business? We're here to help.

Our Energy Education Centers in Irwindale and Tulare offer free classes and seminars, interactive hands-on displays, energy demonstrations and consultations to help you make the best energy decisions for your home or business.

Visit us on line at www.sce.com/energycenters or come by our facilities. We're open to the public Monday – Friday from 8 a.m. – 5 p.m.

For more information or to schedule a tour at either one of our facilities, contact us at:

Energy Education Center – Irwindale
6090 N. Irwindale Ave, Irwindale, CA 91702
1-626-812-7380 – general information
energycentersmarketing@sce.com

Energy Education Center – Tulare
4175 S. Laspina St, Tulare, CA 93274
1-559-625-7126 – general information
ectularemarketing@sce.com



Go paperless at www.sce.com/ebilling. It's fast, easy and secure.

P.O. Box 300
Rosemead, CA
91772-0001
www.sce.com

Your electricity bill

JOSHUA MEMORIAL / Page 1 of 6

FEB 20 2017

For billing and service inquiries call 1-800-974-2356,

Customer account 2-03-189-5097

Date bill prepared: Feb 14 '17

PO BOX 4055
DANVILLE, IL 61834-4055

Your account summary

Previous Balance	\$350.05
Payment Received 02/01	-\$350.05
Balance forward	\$0.00
Your new charges	\$381.00
Total amount you owe by Mar 6 '17	\$381.00

Summary of your billing detail

Service account	Service address	Billing period	Your rate	New charges
3-000-4430-87	808 E LANCASTER BLVD LANCASTER, CA	Jan 11 '17 to Feb 10 '17	TOU-PA-2-B (SCE)	\$346.83
3-044-2455-27	808 E LANCASTER BLVD LANCASTER, CA	Jan 11 '17 to Feb 10 '17	TOU-PA-2-B	\$34.17
				\$381.00

Please return the payment stub below with your payment and make your check payable to Southern California Edison.
If you want to pay in person, call 1-800-747-8908 for locations, or you can pay online at www.sce.com.

(14-574)

Tear here

Tear here



SOUTHERN CALIFORNIA
EDISON
An EDISON INTERNATIONAL Company

Customer account 2-03-189-5097
Please write this number on your check. Make your
check payable to Southern California Edison.

Amount due by Mar 6 '17

\$381.00

Amount enclosed

\$

STMT 02142017 P5



JOSHUA MEMORIAL
PO BOX 4055
DANVILLE, IL 61834-4055

P.O. BOX 300
ROSEMEAD, CA 91772-0001

03 189 5097 00000093 0000000000000381000000038100

Go paperless at www.sce.com/ebilling. It's fast, easy and secure.

Contact Information

Customer service numbers

General Services (U.S. & Canada)	1-800-655-4555
Account Balance & Extensions	1-800-950-2356
Emergency Services & Outages	1-800-611-1911
California Alternate Rates for Energy (CARE)	1-800-447-6620
Electric Industry Restructuring	1-800-799-4723
Energy Theft Hotline	1-800-227-3901
Hearing & Speech Impaired (TTY)	1-800-352-8580

Multicultural services

Cambodian / ខ្មែរ	1-800-843-1309
Chinese / 中文	1-800-843-8343
Korean / 한국어	1-800-628-3061
Vietnamese / Tiếng Việt	1-800-327-3031
Spanish / Español	1-800-441-2233

Correspondence: Southern California Edison (SCE)
P. O. Box 8400, Rancho Cucamonga, CA 91729-6400

Important information

Rotating outages

A rotating outage is a controlled electric outage that lasts approximately one hour for a group of circuits, which is used during electric system emergency conditions to avoid widespread or uncontrolled blackouts. Each SCE customer is assigned a rotating outage group, shown on the upper part of the SCE bill. If your rotating outage group begins with the letters A, M, R, S, or X, you are subject to rotating outages. If it begins with N or Exempt, you are not. Your rotating outage group may change at any time. For more information, and to see which rotating outage groups are likely to be called in the event of a system emergency, visit www.sce.com or call 1-800-655-4555.

Options for paying your bill

On-line	www.sce.com or Electronic Fund Transfer	
Mail-in	Check or Money order	
In Person	Authorized payment locations	1-800-747-8908
Phone	QuickCheck	1-800-950-2356
	Credit Card-Visa/MasterCard*	1-800-254-4123
	Debit Card-ACCEL/NYCE/Pulse/Star*	1-800-254-4123

*The Credit/Debit card payment options are not available for payment of commercial services or security deposits for commercial services.

You may call us for electronic payment options, to make payment arrangements, or for information on agencies to assist you in bill payment. If service has been disconnected, on the day of the service reconnection, be sure all appliances and other electric devices are turned off. For additional home safety tips, visit www.sce.com/safety or you may call SCE Customer Service at 1-800-655-4555.

Past due bills

Your bill was prepared on February 14, 2017. Your bill is due when you receive it and becomes past due 19 days after the date the bill was prepared. You will have 15 days at your new address to pay a bill from a prior address before your service will be terminated. SCE does not terminate residential service for non-payment of bills for other classes of service. Termination of electric service requires a Service Connection charge. If you are a residential customer, and claim an inability to pay and payment arrangements have not been extended to you by SCE pursuant to SCE's filed tariffs, you may contact the California Public Utilities Commission (CPUC).

Rules and rates

SCE's rules and rates are available in full at www.sce.com or upon request.

Late Payment Charge (LPC)

A late payment charge of 0.8% will be applied to the total unpaid balance on your account if full payment is not received by the due date on this bill (except for CARE and state agency accounts).

Disputed bills

If you think your bill is incorrect, call us and speak with a customer service representative, or if necessary, with a manager. If you feel unsatisfied with the result of such discussion(s), contact the CPUC, Consumer Affairs Branch by mail at: 505 Van Ness, Room 2003, San Francisco, CA 94102; or at: www.cpuc.ca.gov, 1-800-649-7570, TTY: 1-800-229-6846. Include a copy of your bill; why you believe SCE did not follow its rules and rates, and a check or money order made out to the CPUC for the disputed amount. You must pay the disputed amount, or send it to the CPUC, before the past-due date to avoid disconnection. The CPUC accepts payment only for matters relating directly to bill accuracy. While the CPUC is investigating your complaint, you must pay any new SCE bills that become due.

Electronic Fund Transfers (EFT)

When you provide a check as payment, you authorize us either to use information from your check to make a one-time electronic fund transfer from your account or to process the payment as a check transaction. When we use information from your check to make an electronic fund transfer, funds may be withdrawn from your account as soon as the same day we receive your payment. You will not receive your check back from your financial institution, but the transaction will appear on your financial institution statement. If you do not wish to authorize an electronic fund transfer, please call the 800 number on the front of your bill.

Definitions

- DWR Bond Charge: Bonds issued by the Department of Water Resources (DWR) to cover the cost of buying power for customers during the energy crisis are being repaid through this charge.
- SCE Generation: These charges recover energy procurement and generation costs for that portion of your energy provided by SCE. Beginning April 11, 2010, pursuant to CPUC Decision 10-03-022, Direct Access (DA) is again open to all non-residential customers, subject to annual limits during a four year phase-in period, and absolute limits following the phase-in. All residential customers currently returning to Bundled Service may not elect to return to DA service.
- CA Climate Credit: Credit from state effort to fight climate change. Applied monthly to eligible businesses and semi-annually to residents.

To change your contact information or enroll in SCE's payment option, complete the form below and return it in the enclosed envelope.

Change of mailing address: 2-03-189-5097

STREET#	STREET NAME	APARTMENT #
CITY	STATE	ZIP CODE
TELEPHONE #	E-MAIL ADDRESS	

Direct Payment (Automatic Debit) Enrollment: 2-03-189-5097

I hereby authorize SCE and my financial institution to automatically deduct my monthly payment from the checking account as shown on my enclosed check, ten calendar days after my bill is mailed.

Signature _____ Date _____

To change your checking account information or to be removed from the Direct Payment program please call SCE at 1-800-655-4555.

Energy Assistance Fund (EAF): I want to help people pay their energy bill through EAF. For info visit www.sce.com/eaf or call (800) 205-8596.

Round-up my bill to next whole dollar amount for EAF

☐

Every Month

☐

One Month only

Add this amount for EAF \$ _____

☐

Every Month

☐

One Month only

Select one box only and sign below for EAF:

CP 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000

Service account 3-000-4430-87
Service address 808 E LANCASTER BLVD
LANCASTER, CA 93535

Rotating outage Group N001

Compare the electricity you are using

For meter 254000-004620 from Jan 11 '17 to Feb 10 '17
Total electricity you used this month in kWh

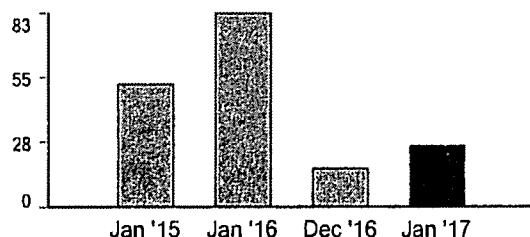
785

Your next billing cycle will end on or about Mar 14 '17.

	Electricity (kWh)	Demand (kW)
Winter Season		
Mid peak	454	25 (Feb 9 '17 10:15 to 10:30)
Off peak	331	25 (Feb 3 '17 07:15 to 07:30)
Total	785	

Maximum demand is 25 kW

Your daily average electricity usage (kWh)



Usage comparison

	Jan '15	Jan '16	Feb '16	Mar '16	Apr '16	May '16	Jun '16	Jul '16	Aug '16	Sep '16	Oct '16	Nov '16	Dec '16	Jan '17
Total kWh used	1,524	2,414	2,782	3,552	8,880	10,414	12,294	10,281	9,783	6,988	3,987	2,169	480	785
Number of days	29	29	32	30	29	32	30	29	32	30	29	33	29	30
Appx. average kWh used/day	52	83	86	118	306	325	409	354	305	232	137	65	16	26

Details of your new charges

Your rate: TOU-PA-2-B (SCE)
Billing period: Jan 11 '17 to Feb 10 '17 (30 days)

Delivery charges

Facilities rel demand 25 kW x \$11.26000
Energy-Winter
Mid peak 454 kWh x \$0.01822
Off peak 331 kWh x \$0.01822
Customer charge

\$281.50
\$8.27
\$6.03
\$41.63

Your Delivery charges include:

- \$60.99 transmission charges
- \$262.72 distribution charges
- \$0.01 nuclear decommissioning charges
- \$8.59 public purpose programs charge
- \$4.79 new system generation charge

CCA cost responsibility surcharge

PCIA 785 kWh x \$0.00632
DWR Bond Charge 785 kWh x \$0.00549
CTC 785 kWh x -\$0.00023

\$4.96
\$4.31
-\$0.18

Your overall energy charges include:

- \$3.15 franchise fees

(Continued on next page)

(Continued on next page)

Details of your new charges (continued)

Other charges or credits

Generation Municipal Surcharge

\$0.31

Subtotal of your new charges**\$346.83****Your new charges****\$346.83****Additional Information:**

- Service voltage: 480 volts
- Generation Municipal Surcharge (GMS) factor: 0.009095
- 2014 Vintage CRS

Service account 3-044-2455-27
Service address 808 E LANCASTER BLVD
LANCASTER, CA 93535

Rotating outage Group N001

Details of your new charges

LANCASTER CHOICE ENERGY

Your rate: TOU-PA-2-B

Service Account: 3-044-2455-27

Billing period: Jan 11 '17 to Feb 10 '17 (30 days)

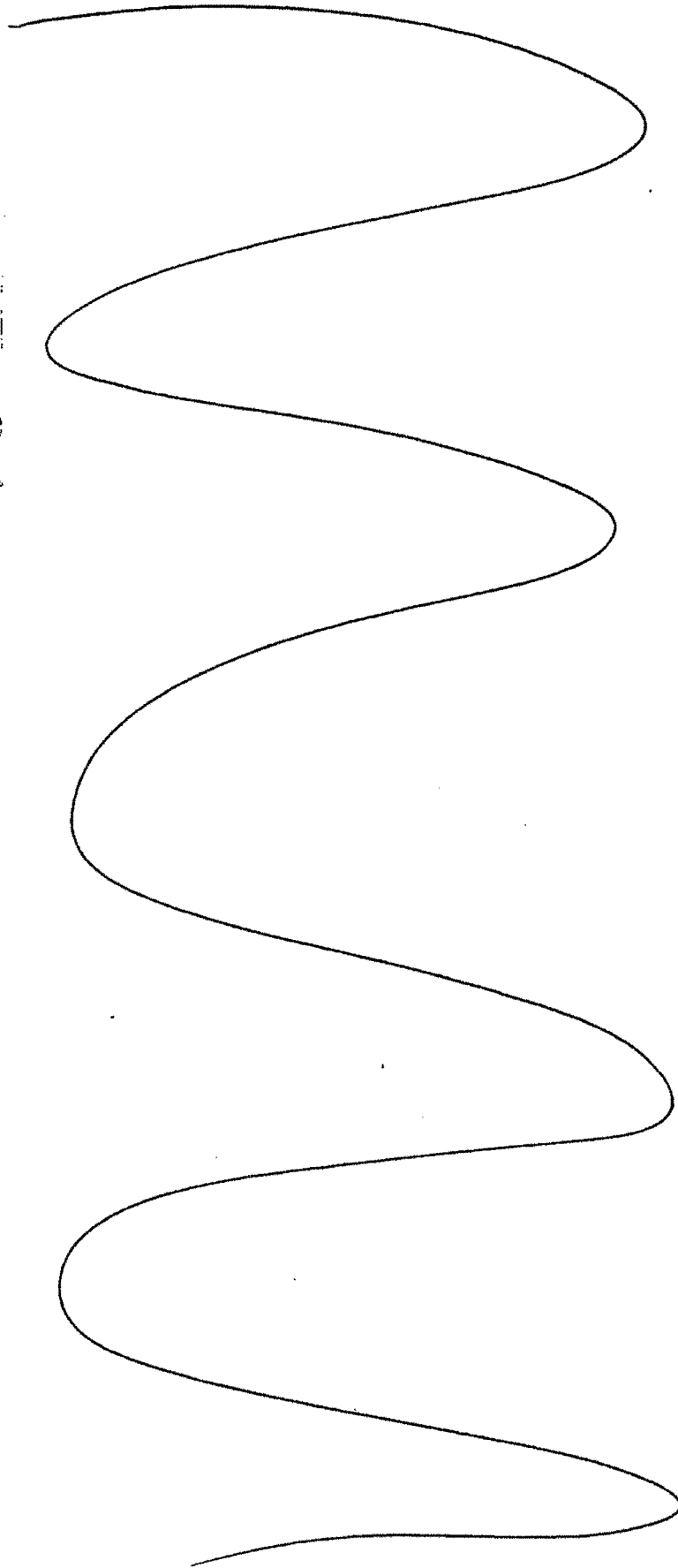
Generation Charges

9% MARKET DEMAND ADJ -		- \$3.36
WINTER		
OFF-PEAK WINTER GEN.	330.92 KWH @ 0.03583	\$11.86
MID-PEAK WINTER GEN.	453.66 KWH @ 0.05608	\$25.44
ENERGY SURCHARGE		\$0.23
Sub-Total of LCE Generation Charges		\$34.17
Your New Charges		\$34.17

Things you should know

Lancaster Choice Energy Information

FOR MORE DETAIL ON YOUR LANCASTER CHOICE ENERGY BILL, CALL US AT 844-288-4523.





Go paperless at www.sce.com/ebilling. It's fast, easy and secure.

P.O. Box 300
Rosemead, CA
91772-0001
www.sce.com

Your electricity bill

JOSHUA MEMORIAL / Page 1 of 6

For billing and service inquiries call 1-800-974-2356.

Customer account 2-03-189-5097

Date bill prepared: Jan 13 '17

JAN 20 2017

PO BOX 4055
DANVILLE, IL 61834-4055

Your account summary

Previous Balance	\$459.45
Payment Received 01/04	-\$459.45
Balance forward	\$0.00
Your new charges	\$350.05
Total amount you owe by Feb 1 '17	\$350.05

Summary of your billing detail

Service account	Service address	Billing period	Your rate	New charges
3-000-4430-87	808 E LANCASTER BLVD LANCASTER, CA	Dec 13 '16 to Jan 11 '17	TOU-PA-2-B (SCE)	\$331.22
3-044-2455-27	808 E LANCASTER BLVD LANCASTER, CA	Dec 13 '16 to Jan 11 '17	TOU-PA-2-B	\$18.83
				\$350.05

Things you should know

You may notice a change in your billing statement...

Effective 1/1/2017, the billing rates used to calculate your bill have been modified. For more information, please visit www.sce.com/bill_change.

Please return the payment stub below with your payment and make your check payable to Southern California Edison.
If you want to pay in person, call 1-800-747-8908 for locations, or you can pay online at www.sce.com.

(14-574)

Tear here

Tear here



Customer account 2-03-189-5097
Please write this number on your check. Make your
check payable to Southern California Edison.

Amount due by Feb 1 '17 **\$350.05**
Amount enclosed \$

STMT 01132017 P5



JOSHUA MEMORIAL
PO BOX 4055
DANVILLE, IL 61834-4055

P.O. BOX 300
ROSEMEAD, CA 91772-0001

03 189 5097 00000099 000000000000035005000035005

Go paperless at www.sce.com/ebilling. It's fast, easy and secure.

Contact Information

Customer service numbers

General Services (U.S. & Canada)	1-800-655-4555
Account Balance & Extensions	1-800-950-2356
Emergency Services & Outages	1-800-611-1911
California Alternate Rates for Energy (CARE)	1-800-447-6620
Electric Industry Restructuring	1-800-789-4723
Energy Theft Hotline	1-800-227-3901
Hearing & Speech Impaired (TTY)	1-800-352-8580

Multicultural services

Cambodian / ភ្នំ	1-800-843-1309
Chinese / 中文	1-800-843-8343
Korean / 한국어	1-800-628-3061
Vietnamese / Tiếng Việt	1-800-327-3031
Spanish / Español	1-800-441-2233

Correspondence: Southern California Edison (SCE)
P. O. Box 8400, Rancho Cucamonga, CA 91729-8400

Important information

Rotating outages

A rotating outage is a controlled electric outage that lasts approximately one hour for a group of circuits, which is used during electric system emergency conditions to avoid widespread or uncontrolled blackouts. Each SCE customer is assigned a rotating outage group, shown on the upper part of the SCE bill. If your rotating outage group begins with the letters A, M, R, S, or X, you are subject to rotating outages. If it begins with N or Exempt, you are not. Your rotating outage group may change at any time. For more information, and to see which rotating outage groups are likely to be called in the event of a system emergency, visit www.sce.com or call 1-800-655-4555.

Options for paying your bill

On-line	www.sce.com or Electronic Fund Transfer	
Mail-In	Check or Money order	
In Person	Authorized payment locations	1-800-747-8908
Phone	QuickCheck	1-800-950-2356
	Credit Card-Visa/MasterCard*	1-800-254-4123
	Debit Card-ACCEL/NYCE/Pulse/Star*	1-800-254-4123

*The Credit/Debit card payment options are not available for payment of commercial services or security deposits for commercial services.

You may call us for electronic payment options, to make payment arrangements, or for information on agencies to assist you in bill payment. If service has been disconnected, on the day of the service reconnection, be sure all appliances and other electric devices are turned off. For additional home safety tips, visit www.sce.com/safety or you may call SCE Customer Service at 1-800-655-4555.

Past due bills

Your bill was prepared on January 13, 2017. Your bill is due when you receive it and becomes past due 19 days after the date the bill was prepared. You will have 15 days at your new address to pay a bill from a prior address before your service will be terminated. SCE does not terminate residential service for non-payment of bills for other classes of service. Termination of electric service requires a Service Connection charge. If you are a residential customer, and claim an inability to pay and payment arrangements have not been extended to you by SCE pursuant to SCE's filed tariffs, you may contact the California Public Utilities Commission (CPUC).

Rules and rates

SCE's rules and rates are available in full at www.sce.com or upon request.

Late Payment Charge (LPC)

A late payment charge of 0.8% will be applied to the total unpaid balance on your account if full payment is not received by the due date on this bill (except for CARE and state agency accounts).

Disputed bills

If you think your bill is incorrect, call us and speak with a customer service representative, or if necessary, with a manager. If you feel unsatisfied with the result of such discussion(s), contact the CPUC, Consumer Affairs Branch by mail at: 505 Van Ness, Room 2003, San Francisco, CA 94102; or at: www.cpuc.ca.gov, 1-800-649-7570, TTY: 1-800-229-6846. Include a copy of your bill, why you believe SCE did not follow its rules and rates, and a check or money order made out to the CPUC for the disputed amount. You must pay the disputed amount, or send it to the CPUC, before the past-due date to avoid disconnection. The CPUC accepts payment only for matters relating directly to bill accuracy. While the CPUC is investigating your complaint, you must pay any new SCE bills that become due.

Electronic Fund Transfers (EFT)

When you provide a check as payment, you authorize us either to use information from your check to make a one-time electronic fund transfer from your account or to process the payment as a check transaction. When we use information from your check to make an electronic fund transfer, funds may be withdrawn from your account as soon as the same day we receive your payment. You will not receive your check back from your financial institution, but the transaction will appear on your financial institution statement. If you do not wish to authorize an electronic fund transfer, please call the 800 number on the front of your bill.

Definitions

- **DWR Bond Charge:** Bonds issued by the Department of Water Resources (DWR) to cover the cost of buying power for customers during the energy crisis are being repaid through this charge.
- **SCE Generation:** These charges recover energy procurement and generation costs for that portion of your energy provided by SCE. Beginning April 11, 2010, pursuant to CPUC Decision 10-03-022, Direct Access (DA) is again open to all non-residential customers, subject to annual limits during a four year phase-in period, and absolute limits following the phase-in. All residential customers currently returning to Bundled Service may not elect to return to DA service.
- **CA Climate Credit:** Credit from state effort to fight climate change. Applied monthly to eligible businesses and semi-annually to residents.

To change your contact information or enroll in SCE's payment option, complete the form below and return it in the enclosed envelope.

Change of mailing address: 2-03-189-5097

STREET#	STREET NAME	APARTMENT #
CITY	STATE	ZIP CODE
TELEPHONE #	E-MAIL ADDRESS	

Direct Payment (Automatic Debit) Enrollment: 2-03-189-5097

I hereby authorize SCE and my financial institution to automatically deduct my monthly payment from the checking account as shown on my enclosed check, ten calendar days after my bill is mailed.

Signature _____ Date _____

To change your checking account information or to be removed from the Direct Payment program please call SCE at 1-800-655-4555.

Energy Assistance Fund (EAF): I want to help people pay their energy bill through EAF. For info visit www.sce.com/eaf or call (800) 205-8596.

Round-up my bill to next whole dollar amount for EAF

☐

Every
Month

☐

One Month
only

Add this amount for EAF \$ _____

☐

Every
Month

☐

One Month
only

Select one box only and sign below for EAF: _____

Service account 3-000-4430-87
Service address 808 E LANCASTER BLVD
LANCASTER, CA 93535

Rotating outage Group N001

Compare the electricity you are using

For meter 254000-004620 from Dec 13 '16 to Jan 11 '17
Total electricity you used this month in kWh

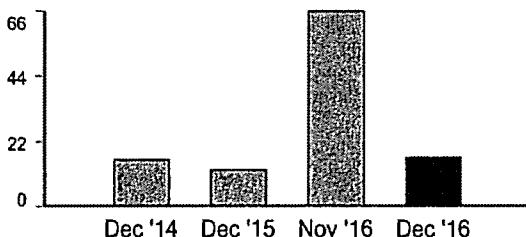
480

Your next billing cycle will end on or about Feb 10 '17.

	Electricity (kWh)	Demand (kW)
Winter Season		
Mid peak	165	25 (Dec 14 '16 16:45 to 17:00)
Off peak	315	25 (Dec 15 '16 07:15 to 07:30)
Total	480	

Maximum demand is 25 kW

Your daily average electricity usage (kWh)



Usage comparison

	Dec '14	Dec '15	Jan '16	Feb '16	Mar '16	Apr '16	May '16	Jun '16	Jul '16	Aug '16	Sep '16	Oct '16	Nov '16	Dec '16
Total kWh used	505	369	2,414	2,782	3,552	8,880	10,414	12,294	10,281	9,783	6,988	3,987	2,169	480
Number of days	32	30	29	32	30	29	32	30	29	32	30	29	33	29
Appx. average kWh used/day	15	12	83	86	118	306	325	409	354	305	232	137	65	16

Details of your new charges

Your rate: TOU-PA-2-B (SCE)

Billing period: Dec 13 '16 to Jan 11 '17 (29 days)

Delivery charges

Facilities rel demand	25 kW x \$11.07000 x 19/29 days
Facilities rel demand	25 kW x \$11.26000 x 10/29 days
Energy-Winter	
Mid peak	164 kWh x \$0.01560
Off peak	315 kWh x \$0.01560
Mid peak	1 kWh x \$0.01822
Customer charge	
Customer charge	

\$181.32
\$97.07

\$2.56
\$4.91
\$0.02
\$27.68
\$14.36

Your Delivery charges include:

- \$56.55 transmission charges
- \$265.08 distribution charges
- -\$0.41 nuclear decommissioning charges
- \$5.07 public purpose programs charge
- \$1.47 new system generation charge

CCA cost responsibility surcharge

(Continued on next page)

Your overall energy charges include:

- \$3.01 franchise fees

(Continued on next page)

Details of your new charges (continued)

PCIA	479 kWh x \$0.00122	\$0.58
PCIA	1 kWh x \$0.00632	\$0.01
DWR Bond Charge	479 kWh x \$0.00539	\$2.58
DWR Bond Charge	1 kWh x \$0.00549	\$0.01
CTC	479 kWh x -\$0.00009	-\$0.04

Additional Information:

- Service voltage: 480 volts
- Generation Municipal Surcharge (GMS) factor: 0.009095
- 2014 Vintage CRS

Other charges or credits

Generation Municipal Surcharge	\$0.16
--------------------------------	--------

Subtotal of your new charges	\$331.22
-------------------------------------	-----------------

Your new charges	\$331.22
-------------------------	-----------------



Service account 3-044-2455-27
Service address 808 E LANCASTER BLVD
LANCASTER, CA 93535

Rotating outage Group N001

Details of your new charges

LANCASTER CHOICE ENERGY

Your rate: TOU-PA-2-B
Service Account: 3-044-2455-27
Billing period: Dec 13 '16 to Jan 11 '17 (29 days)

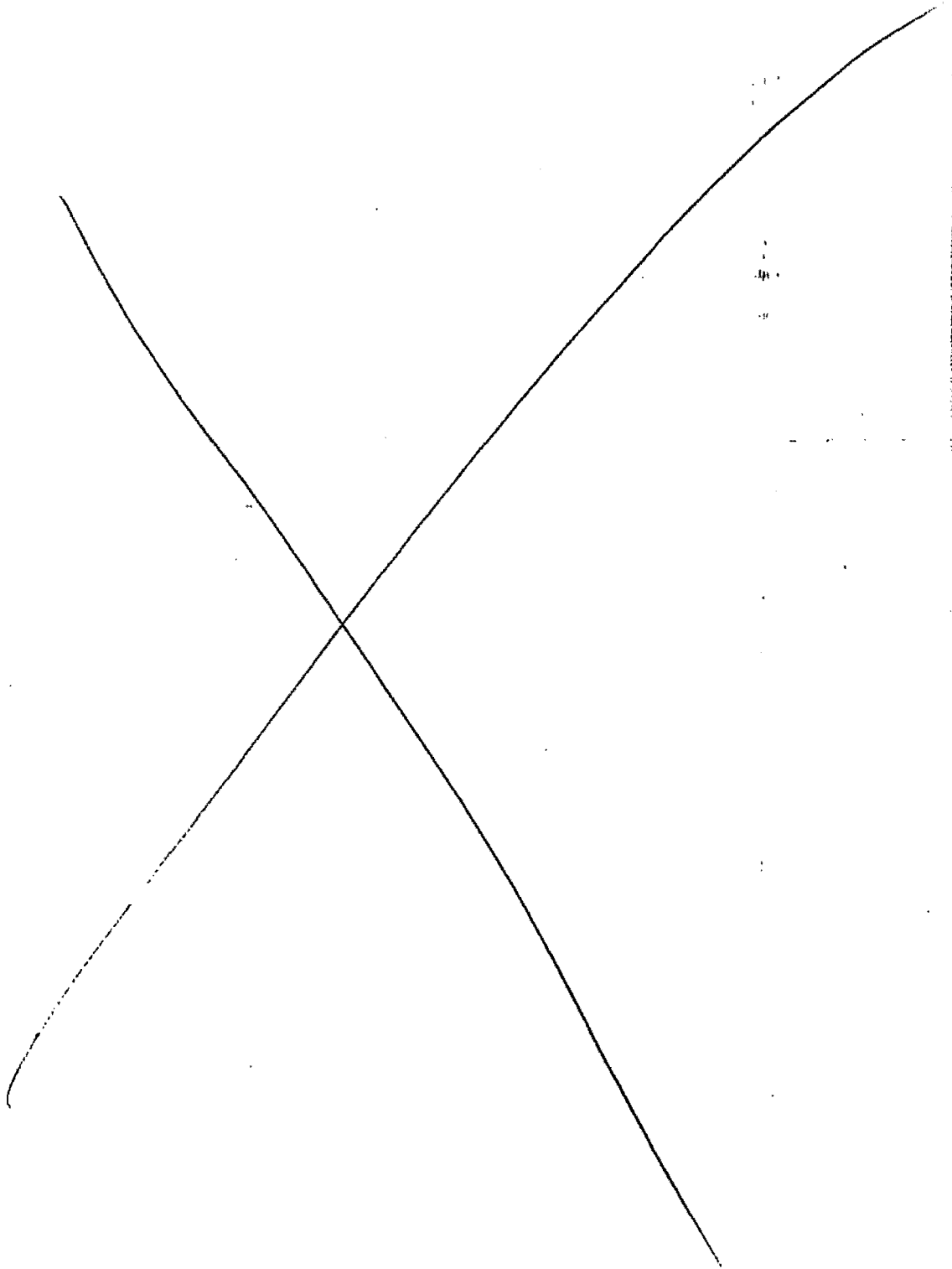
Generation Charges

9% MARKET DEMAND ADJ -		-\$1.85
WINTER		
OFF-PEAK WINTER GEN.	315.24 KWH @ 0.03583	\$11.30
MID-PEAK WINTER GEN.	164.83 KWH @ 0.05608	\$9.24
ENERGY SURCHARGE		\$0.14
Sub-Total of LCE Generation Charges		\$18.83
Your New Charges		\$18.83

Things you should know

Lancaster Choice Energy Information

FOR MORE DETAIL ON YOUR LANCASTER CHOICE ENERGY BILL, CALL US AT 844-288-4523.



Joshua Memorial Park Mortuary
S/A # 000-4430-87
Billing History

Cust Name	Cust Num	Serv Acct Num	Meter Num	Service Street Addr	City Name	Zip	Billing Month Year	Meter Read Date	Stmnt Rate	Bill Amt	Kwh Usage	Maximum kW	Billing Days	Annual kWh Usage
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jan 2000	1/12/2000	PA-1	\$300.41	2,184	6	33	91,344
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Feb 2000	2/9/2000	PA-1	\$232.02	1,440	30	28	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Mar 2000	3/13/2000	PA-1	\$295.99	2,136	30	33	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Apr 2000	4/10/2000	PA-1	\$653.37	6,024	30	28	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	May 2000	5/9/2000	PA-1	\$801.99	8,040	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jun 2000	6/8/2000	PA-1	\$1,171.80	11,664	30	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jul 2000	7/10/2000	PA-1	\$1,418.89	14,352	30	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Aug 2000	8/8/2000	PA-1	\$1,354.91	13,656	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Sep 2000	9/7/2000	PA-1	\$990.91	9,696	30	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Oct 2000	10/6/2000	PA-1	\$1,237.99	12,384	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Nov 2000	11/8/2000	PA-1	\$688.67	6,408	30	33	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Dec 2000	12/11/2000	PA-1	\$408.50	3,360	30	33	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jan 2001	1/9/2001	PA-1	\$366.58	2,904	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Feb 2001	2/8/2001	PA-1	\$292.89	1,896	30	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Mar 2001	3/12/2001	PA-1	\$190.16	888	30	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Apr 2001	4/10/2001	PA-1	\$468.70	3,768	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	May 2001	5/10/2001	PA-1	\$1,056.07	9,384	30	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jun 2001	6/8/2001	PA-1	\$1,428.91	12,600	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jul 2001	7/11/2001	PA-1	\$1,989.75	15,408	30	33	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Aug 2001	8/9/2001	PA-1	\$1,624.69	12,432	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Sep 2001	9/10/2001	PA-1	\$1,592.29	12,168	30	32	86,616
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Oct 2001	10/9/2001	PA-1	\$899.69	8,352	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Nov 2001	11/8/2001	PA-1	\$667.86	4,632	30	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Dec 2001	12/11/2001	PA-1	\$367.56	2,184	30	33	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jan 2002	1/10/2002	PA-1	\$296.90	1,608	30	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Feb 2002	2/8/2002	PA-1	\$470.60	3,024	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Mar 2002	3/12/2002	PA-1	\$502.99	3,288	30	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Apr 2002	4/10/2002	PA-1	\$932.83	6,792	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	May 2002	5/10/2002	PA-1	\$1,205.28	9,120	30	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jun 2002	6/10/2002	PA-1	\$1,633.51	12,504	30	31	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jul 2002	7/10/2002	PA-1	\$1,760.11	13,536	30	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Aug 2002	8/8/2002	PA-1	\$1,836.66	14,160	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Sep 2002	9/9/2002	PA-1	\$1,937.24	14,976	30	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Oct 2002	10/8/2002	PA-1	\$1,366.94	10,320	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Nov 2002	11/8/2002	PA-1	\$1,092.86	8,088	30	31	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Dec 2002	12/11/2002	PA-1	\$470.99	3,024	30	33	100,440
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jan 2003	1/10/2003	PA-1	\$367.85	2,184	30	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Feb 2003	2/10/2003	PA-1	\$376.69	2,256	30	31	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Mar 2003	3/13/2003	PA-1	\$303.01	1,656	30	31	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Apr 2003	4/10/2003	PA-1	\$718.56	5,040	30	28	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	May 2003	5/12/2003	PA-1	\$1,029.58	7,728	30	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jun 2003	6/10/2003	PA-1	\$1,573.25	12,000	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jul 2003	7/10/2003	PA-1	\$1,691.14	12,960	96	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Aug 2003	8/8/2003	PA-1	\$1,388.54	10,872	1	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Sep 2003	9/9/2003	PA-1	\$1,578.30	14,064	30	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Oct 2003	10/8/2003	PA-1	\$458.06	9,192	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Nov 2003	11/10/2003	PA-1	\$822.43	6,768	30	33	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Dec 2003	12/10/2003	PA-1	\$714.91	5,760	30	30	90,480
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jan 2004	1/13/2004	PA-1	\$233.25	1,128	30	34	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Feb 2004	2/10/2004	PA-1	\$200.51	936	30	28	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Mar 2004	3/11/2004	PA-1	\$313.75	2,040	30	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Apr 2004	4/12/2004	PA-1	\$1,015.70	8,904	30	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	May 2004	5/11/2004	PA-1	\$1,293.70	11,520	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jun 2004	6/9/2004	PA-1	\$1,336.27	11,976	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jul 2004	7/12/2004	PA-1	\$1,671.73	15,144	30	33	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Aug 2004	8/10/2004	PA-1	\$1,460.29	13,128	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Sep 2004	9/9/2004	PA-1	\$1,290.85	11,760	30	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Oct 2004	10/7/2004	PA-1	\$1,059.11	9,408	30	28	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Nov 2004	11/9/2004	PA-1	\$388.07	2,616	30	33	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Dec 2004	12/10/2004	PA-1	\$415.91	2,880	6	31	91,440
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jan 2005	1/12/2005	PA-1	\$282.33	1,560	35	33	

Joshua Memorial Park Mortuary
S/A # 000-4430-87
Billing History

Cust Name	Cust Num	Serv Acct Num	Meter Num	Service Street Addr	City Name	Zip	Billing Month Year	Meter Read Date	Stmnt Rate	Bill Amt	Kwh Usage	Maximum kW	Billing Days	Annual kWh Usage
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Feb 2005	2/10/2005	PA-1	\$200.71	744	30	29	79,032
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Mar 2005	3/14/2005	PA-1	\$183.43	576	30	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Apr 2005	4/12/2005	PA-1	\$345.71	2,208	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	May 2005	5/11/2005	PA-1	\$731.01	5,520	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jun 2005	6/10/2005	PA-1	\$983.08	7,608	6	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jul 2005	7/12/2005	PA-1	\$1,790.04	14,568	30	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Aug 2005	8/10/2005	PA-1	\$1,750.77	14,136	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Sep 2005	9/9/2005	PA-1	\$1,706.56	13,776	6	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Oct 2005	10/12/2005	PA-1	\$1,223.39	9,672	30	33	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Nov 2005	11/10/2005	PA-1	\$649.99	4,776	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Dec 2005	12/12/2005	PA-1	\$545.55	3,888	30	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jan 2006	1/12/2006	PA-1	\$212.36	1,008	30	31	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Feb 2006	2/10/2006	PA-1	\$343.81	1,944	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Mar 2006	3/14/2006	PA-1	\$779.65	4,656	30	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Apr 2006	4/12/2006	PA-1	\$316.41	1,560	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	May 2006	5/11/2006	PA-1	\$1,258.71	7,800	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jun 2006	6/12/2006	PA-1	\$2,106.81	13,392	52	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jul 2006	7/12/2006	PA-1	\$1,236.39	7,632	30	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Aug 2006	8/10/2006	PA-1	\$703.19	4,080	35	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Sep 2006	9/11/2006	PA-1	\$747.24	4,344	28	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Oct 2006	10/10/2006	PA-1	\$550.34	3,048	30	29	52,416
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Nov 2006	11/9/2006	PA-1	\$307.22	1,440	29	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Dec 2006	12/11/2006	PA-1	\$317.70	1,512	6	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jan 2007	1/10/2007	PA-1	\$112.59	144	30	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Feb 2007	2/8/2007	PA-1	\$193.13	696	42	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Mar 2007	3/12/2007	PA-1	\$531.74	3,096	30	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Apr 2007	4/10/2007	PA-1	\$120.71	96	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	May 2007	5/10/2007	PA-1	\$409.39	2,208	30	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jun 2007	6/8/2007	PA-1	\$587.72	3,504	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jul 2007	7/10/2007	PA-1	\$613.71	3,720	30	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Aug 2007	8/8/2007	PA-1	\$958.63	6,240	6	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Sep 2007	9/7/2007	PA-1	\$287.81	1,320	30	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Oct 2007	10/9/2007	PA-1	\$510.21	2,952	30	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Nov 2007	11/8/2007	PA-1	\$342.25	1,728	30	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Dec 2007	12/11/2007	PA-1	\$205.43	720	30	33	26,424
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jan 2008	1/10/2008	PA-1	\$136.74	216	30	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Feb 2008	2/8/2008	PA-1	\$146.06	288	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Mar 2008	3/11/2008	PA-1	\$239.65	984	30	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Apr 2008	4/10/2008	PA-1	\$422.50	2,328	30	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	May 2008	5/12/2008	PA-1	\$499.01	2,784	30	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jun 2008	6/10/2008	PA-1	\$493.66	2,736	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jul 2008	7/10/2008	PA-1	\$580.50	3,360	30	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Aug 2008	8/8/2008	PA-1	\$573.59	3,312	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Sep 2008	9/9/2008	PA-1	\$573.35	3,312	30	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Oct 2008	10/8/2008	PA-1	\$475.08	2,616	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Nov 2008	11/10/2008	PA-1	\$354.95	1,728	30	33	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Dec 2008	12/12/2008	PA-1	\$293.80	1,296	30	32	24,960
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jan 2009	1/12/2009	PA-1	\$161.29	312	30	31	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Feb 2009	2/10/2009	PA-1	\$186.93	504	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Mar 2009	3/12/2009	PA-1	\$213.25	696	30	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Apr 2009	4/13/2009	PA-1	\$336.18	1,608	30	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	May 2009	5/12/2009	PA-1	\$385.20	1,848	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jun 2009	6/11/2009	PA-1	\$517.87	2,808	30	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jul 2009	7/13/2009	PA-1	\$574.06	3,264	42	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Aug 2009	8/11/2009	PA-1	\$539.03	3,072	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Sep 2009	9/10/2009	PA-1	\$526.56	2,976	30	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Oct 2009	10/13/2009	PA-1	\$472.64	2,640	30	33	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Nov 2009	11/12/2009	PA-1	\$280.91	1,224	30	30	21,648
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Dec 2009	12/11/2009	PA-1	\$209.57	696	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jan 2010	1/12/2010	PA-1	\$174.49	432	30	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Feb 2010	2/11/2010	PA-1	\$136.04	144	30	30	

Joshua Memorial Park Mortuary
S/A # 000-4430-87
Billing History

Cust Name	Cust Num	Serv Acct Num	Meter Num	Service Street Addr	City Name	Zip	Billing Month Year	Meter Read Date	Stmnt Rate	Bill Amt	Kwh Usage	Maximum kW	Billing Days	Annual kWh Usage
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Mar 2010	3/15/2010	PA-1	\$192.74	528	30	32	18,192
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Apr 2010	4/13/2010	PA-1	\$254.76	936	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	May 2010	5/11/2010	PA-1	\$346.76	1,584	30	28	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jun 2010	6/11/2010	PA-1	\$472.03	2,496	30	31	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jul 2010	7/12/2010	PA-1	\$488.07	2,640	30	31	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Aug 2010	8/10/2010	PA-1	\$500.26	2,688	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Sep 2010	9/9/2010	PA-1	\$497.70	2,688	30	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Oct 2010	10/8/2010	PA-1	\$447.49	2,328	42	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Nov 2010	11/9/2010	PA-1	\$293.58	1,224	30	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Dec 2010	12/13/2010	PA-1	\$217.85	504	30	34	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jan 2011	1/11/2011	PA-1	\$148.36	120	30	29	17,568
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Feb 2011	2/9/2011	PA-1	\$191.08	432	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Mar 2011	3/11/2011	PA-1	\$161.93	216	30	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Apr 2011	4/11/2011	PA-1	\$211.10	576	30	31	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	May 2011	5/10/2011	PA-1	\$342.26	1,536	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jun 2011	6/9/2011	PA-1	\$461.74	2,472	30	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jul 2011	7/11/2011	PA-1	\$483.76	2,736	30	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Aug 2011	8/9/2011	PA-1	\$487.85	2,760	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Sep 2011	9/8/2011	PA-1	\$505.36	2,880	30	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Oct 2011	10/12/2011	PA-1	\$413.92	2,016	30	34	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Nov 2011	11/9/2011	PA-1	\$322.49	1,392	30	28	73,448
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Dec 2011	12/12/2011	PA-1	\$191.88	432	30	33	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jan 2012	1/11/2012	PA-1	\$176.49	312	30	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Feb 2012	2/9/2012	PA-1	\$194.43	432	30	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Mar 2012	3/13/2012	PA-1	\$393.41	1,904	30	33	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Apr 2012	4/11/2012	PA-1	\$622.42	3,598	26	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	May 2012	5/10/2012	PA-1	\$960.53	6,099	26	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jun 2012	6/11/2012	PA-1	\$1,485.25	9,945	25	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jul 2012	7/11/2012	PA-1	\$1,810.15	12,262	28	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Aug 2012	8/9/2012	PA-1	\$1,711.01	11,575	26	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Sep 2012	9/10/2012	PA-1	\$1,690.28	11,547	26	32	72,953
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Oct 2012	10/11/2012	PA-1	\$1,070.21	6,930	26	31	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Nov 2012	11/9/2012	PA-1	\$921.42	5,828	26	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Dec 2012	12/12/2012	PA-1	\$543.88	3,016	25	33	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jan 2013	1/11/2013	PA-1	\$207.16	464	25	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Feb 2013	2/11/2013	PA-1	\$339.00	1,314	25	31	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Mar 2013	3/13/2013	PA-1	\$637.70	3,354	25	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Apr 2013	4/11/2013	PA-1	\$713.93	3,985	25	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	May 2013	5/10/2013	PA-1	\$1,247.01	8,014	25	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jun 2013	6/11/2013	PA-1	\$1,420.39	9,280	25	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jul 2013	7/11/2013	PA-1	\$1,618.90	10,720	25	30	85,957
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Aug 2013	8/9/2013	PA-1	\$1,621.21	10,737	25	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Sep 2013	9/10/2013	PA-1	\$1,402.79	9,133	26	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Oct 2013	10/9/2013	PA-1	\$1,290.25	8,316	25	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Nov 2013	11/8/2013	PA-1	\$834.33	4,991	25	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Dec 2013	12/11/2013	PA-1	\$518.89	2,645	25	33	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jan 2014	1/13/2014	PA-1	\$527.55	2,614	25	33	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Feb 2014	2/11/2014	PA-1	\$544.10	2,691	26	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Mar 2014	3/13/2014	TOU-PA2B	\$493.08	3,082	25	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Apr 2014	4/14/2014	TOU-PA2B	\$615.50	4,474	26	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	May 2014	5/13/2014	TOU-PA2B	\$931.36	8,757	26	29	85,957
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jun 2014	6/12/2014	TOU-PA2B	\$1,316.74	11,066	25	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jul 2014	7/14/2014	TOU-PA2B	\$1,903.20	13,603	25	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Aug 2014	8/12/2014	TOU-PA2B	\$1,648.30	10,530	25	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Sep 2014	9/11/2014	TOU-PA2B	\$1,796.42	12,463	25	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Oct 2014	10/10/2014	TOU-PA2B	\$1,374.39	9,096	25	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Nov 2014	11/10/2014	TOU-PA2B	\$806.95	6,257	25	31	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Dec 2014	12/12/2014	TOU-PA2B	\$372.87	1,324	25	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jan 2015	1/13/2015	TOU-PA2B	\$302.11	505	25	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Feb 2015	2/11/2015	TOU-PA2B	\$409.33	1,524	25	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Mar 2015	3/13/2015	TOU-PA2B	\$677.41	2,835	41	30	

Joshua Memorial Park Mortuary
S/A # 000-4430-87
Billing History

Cust Name	Cust Num	Serv Acct Num	Meter Num	Service Street Addr	City Name	Zip	Billing Month Year	Meter Read Date	Stmt Rate	Bill Amt	Kwh Usage	Maximum kW	Billing Days	Annual kWh Usage
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Apr 2015	4/14/2015	TOU-PA2B	\$1,016.76	5,582	56	32	77,305
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	May 2015	5/13/2015	TOU-PA2B	\$1,100.26	10,219	26	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jun 2015	6/12/2015	TOU-PA2B	\$1,185.56	9,268	25	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Jul 2015	7/14/2015	TOU-PA2B	\$1,720.96	12,390	25	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Aug 2015	8/12/2015	TOU-PA2B	\$1,258.33	6,676	25	29	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Sep 2015	9/11/2015	TOU-PA2B	\$1,483.24	9,421	25	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Oct 2015	10/13/2015	TOU-PA2B	\$1,425.97	11,001	25	32	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Nov 2015	11/12/2015	TOU-PA2B	\$427.74	5,124	25	30	
JOSHUA MEMORIAL	112472	443087	254000-004620	808 E LANCASTER BLVD	LANCASTER	93535	Dec 2015	12/14/2015	TOU-PA2B	\$346.16	2,760	25	32	

Appendix B
Grundfos Pump Curve 230S-300-9

SP

Submersible pumps, motors, and accessories
60 Hz

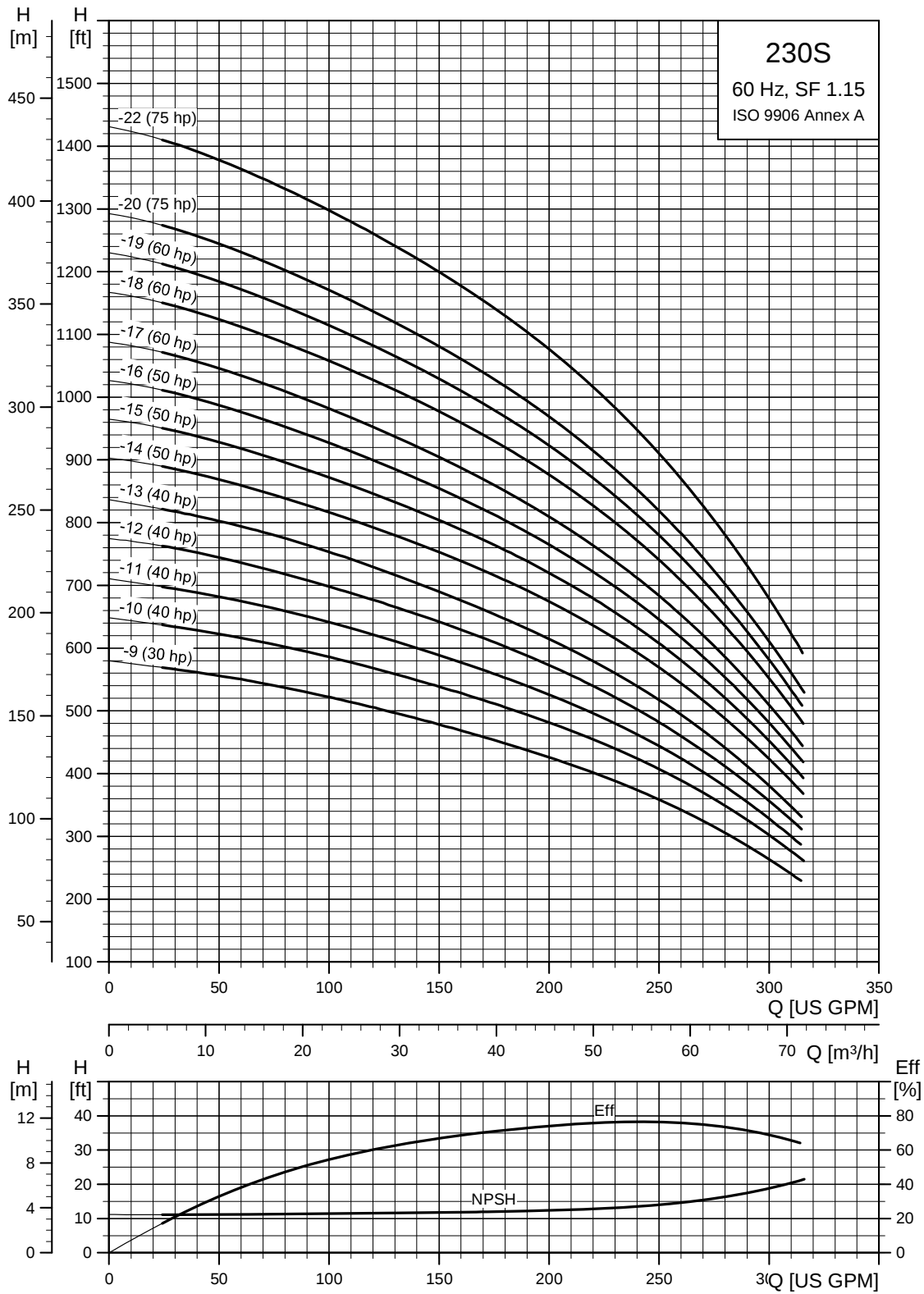


be
think
innovate

GRUNDFOS 

6" and larger wells - continued

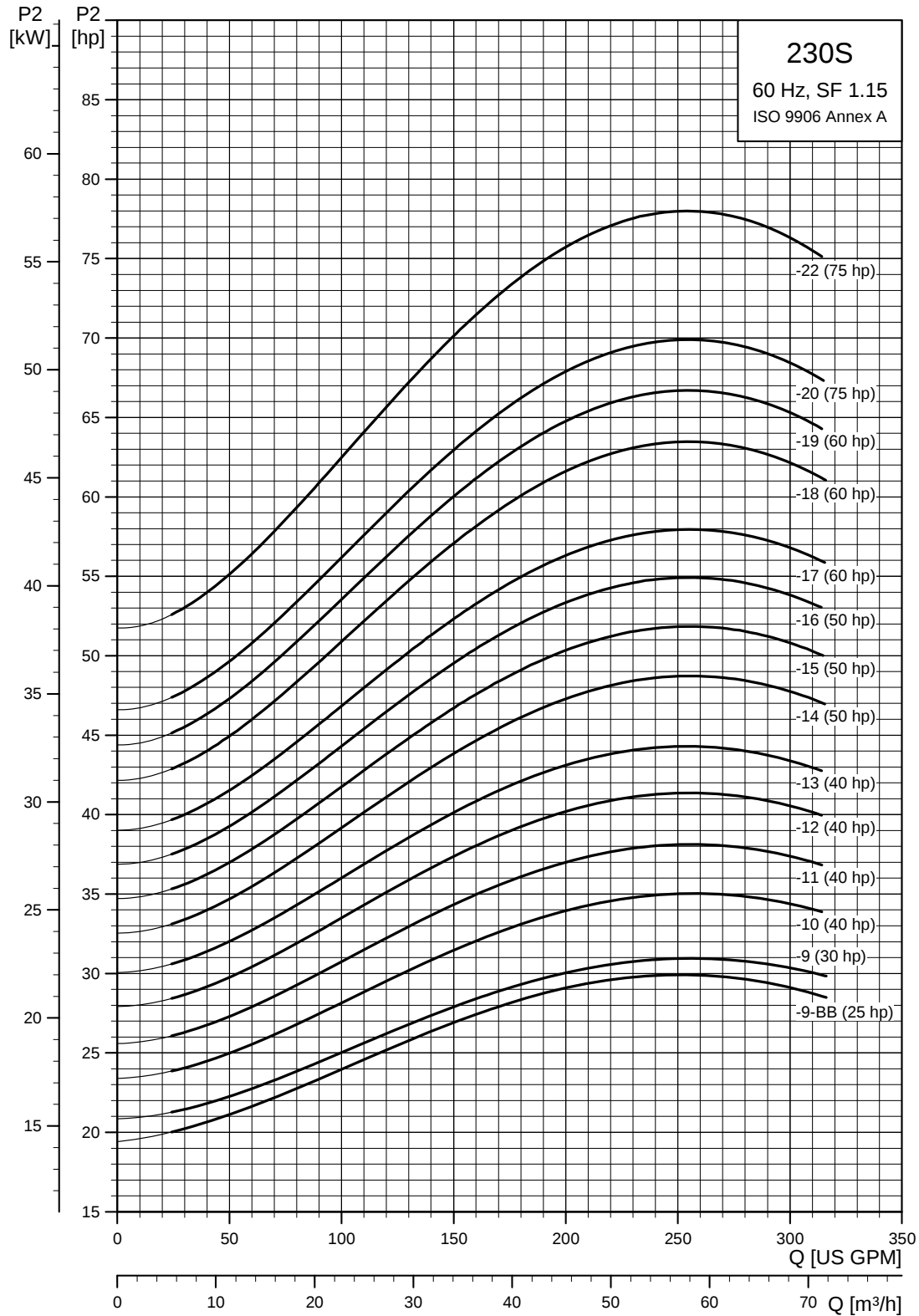
SP 230S (230 gpm)



TM05 0244 5014

6" and larger wells - continued

SP 230S (230 gpm) pump power requirement (P2)



TM05 0246 5014

7. Electrical data

Grundfos submersible pump motors - 60 Hz											
Hp	Ph	Volt [V]	S.F.	Circuit breaker or fuses		Amperage		Full load		Max. thrust [lb]	Product number
				Std.	Delay	Start [A]	Max. [A]	Eff. [%]	PF [%]		
4-inch, single-phase, 2-wire motors (control box not required)											
.5	1	115	1.60	35	15	55.0	12.0	62	76	900	96465574
.5	1	230	1.60	15	7	34.5	6.0	62	76	900	96465616
.75	1	230	1.50	20	9	40.5	8.4	62	75	900	96465618
1	1	230	1.40	25	12	48.4	9.8	63	82	900	96465620
1.5	1	230	1.30	35	15	62.0	13.1	64	85	900	96465622
4-inch, single-phase, 3-wire motors											
.5	1	115	1.60	35	15	42.5	12.0	61	76	900	96023039
.5	1	230	1.60	15	7	21.5	6.0	62	76	900	96465606
.75	1	230	1.50	20	9	31.4	8.4	62	75	900	96465608
1	1	230	1.40	25	12	37.0	9.8	63	82	900	96465610
1.5	1	230	1.30	35	15	45.9	11.6	69	89	900	96465612
2	1	230	1.25	35	20	57.0	13.2	72	86	1500	96449947
3	1	230	1.15	45	30	77.0	17.0	74	93	1500	96449948
5	1	230	1.15	70	45	110.0	27.5	77	92	1500	96449949
4-inch, three-phase motors											
1.5	3	230	1.30	15	8	40.3	7.3	75	72	900	96465629
1.5	3	460	1.30	10	4	20.1	3.7	75	72	900	96465651
1.5	3	575	1.30	10	4	16.1	2.9	75	72	900	96785912
2	3	230	1.25	20	10	48	8.7	76	75	900	96465630
2	3	460	1.25	10	5	24	4.4	76	75	900	96465652
2	3	575	1.25	10	4	19.2	3.5	76	75	900	96785917
3	3	230	1.15	30	15	56	12.2	77	75	1500	96405801
3	3	460	1.15	15	7	28	6.1	77	75	1500	96405810
3	3	575	1.15	15	6	22	4.8	77	75	1500	96405815
5	3	230	1.15	40	25	108	19.8	80	82	1500	96405802
5	3	460	1.15	20	12	54	9.9	80	82	1500	96405811
5	3	575	1.15	15	9	54	7.9	80	82	1500	96405816
7.5	3	230	1.15	60	30	130	25.0	81	82	1500	96405805
7.5	3	460	1.15	35	15	67	13.2	81	82	1500	96405814
7.5	3	575	1.15	30	15	67	10.6	81	82	1500	96405819
10	3	460	1.15	50	30	90	18	81	80	1500	96440318
6-inch, three-phase motors											
7.5	3	208-230	1.15	65	40	114 - 130	23.4 - 27.5	81	85 - 84	6070	96166181
7.5	3	460	1.15	30	17	68	13.2	81	85	6070	96166161
7.5	3	575	1.15	30	17	51	10.2	81	85	6070	96166141
10	3	208-230	1.15	90	50	126 - 142	30.0 - 37.5	82	86 - 84	6070	96166182
10	3	460	1.15	40	25	75	17.4	82	85	6070	96166162
10	3	575	1.15	40	25	56.5	13.4	82	85	6070	96166142
15	3	208-230	1.15	130	75	198 - 224	44.5 - 53.5	83	86 - 84	6070	96166184
15	3	460	1.15	60	35	112	25	83	84	6070	96166164
15	3	575	1.15	60	35	84	19.4	83	84	6070	96166144
20	3	208-230	1.15	175	100	310 - 350	57.5 - 71.5	84	86 - 84	6070	96166186
20	3	460	1.15	80	45	186	33.5	84	84	6070	96166166
20	3	575	1.15	80	45	144	26	84	84	6070	96166146
25	3	208-230	1.15	200	125	395 - 445	71 - 87	84	87 - 84	6070	96166187
25	3	460	1.15	100	60	236	41	84	84	6070	96166167
25	3	575	1.15	100	60	180	32	84	84	6070	96166147
30	3	208-230	1.15	250	150	445 - 500	81 - 104	84	87 - 84	6070	96166188
30	3	460	1.15	125	70	265	48	85	85	6070	96166168
30	3	575	1.15	125	70	194	37	85	85	6070	96166148
40	3	460	1.15	170	90	330	65	85	84	6070	96166170
40	3	575	1.15	170	90	250	49.5	85	84	6070	96166150
50	3	460	1.15	225	125	405	73.0	83	83	6182	96879560
8-inch, three-phase motors											
40	3	460	1.15	175	100	380	55.7	83	85	13000	96023204
50	3	460	1.15	225	125	550	67.8	84	85	13000	96023205
60	3	460	1.15	250	150	640	80.4	86	85	13000	96023206
75	3	460	1.15	300	175	580	97.4	86	86	13000	96023207
100	3	460	1.15	400	225	570	130.4	87	86	13000	96023208
125	3	460	1.15	500	300	600	160.0	87	87	13000	96023209
150	3	460	1.15	600	350	580	191.3	86	87	13000	96023210
10-inch, three-phase motors											
175	3	460	1.15	700	400	570	230.4	88	85	13000	96937300
200	3	460	1.15	800	500	620	265.2	87	82	13000	96937302
250	3	460	1.15	1100	600	610	352.2	87	79	13000	96937316

Other motor manufacturers: For Hitachi motors refer to the Hitachi submersible motors application maintenance manual; for Franklin motors refer to the Franklin submersible motors application maintenance manual.

9. Energy consumption

Energy consumption of submersible pumps

The percentage distribution of service life costs of a submersible pump for water supply is:

5 % initial costs (pump)

85 % operating costs / energy consumption

10 % maintenance costs.

It is obvious that the highest savings can be achieved within energy consumption!

The annual energy consumption, E, of a submersible pump can be calculated as follows:

$E = c \times h \times P_1$ (USD)

c = specific energy price (USD/kWh)

h = operating hours/year (hours)

P_1 = power input of the submersible pump (Hp).

Example: Calculation of the annual energy consumption of the submersible pump, type 625S-3. 625S-3 with MMS 8000, 60 Hp, 3 x 460 V, 60 Hz.

Duty point:

Flow rate: Q = 528 GPM

Total head: H = 335 ft

Specific energy price: c = USD 0.15/kWh (consisting of day and night rate)

Operating hours/year: h = 3200.

$$P_1 = \frac{Q \times H \times \rho}{367 \times \eta_{\text{pump}} \times \eta_{\text{motor}}} \text{ in kW}$$

Q = GPM

H = ft

Density ρ = lb/ft³ (assumed 1)

367 = conversion factor

η_{motor} = (example 84.5 %, in equation 0.845)

η_{pump} = (not to be confused with the stage efficiency curve).

By showing the P_2/Q curve we make it easier for you to calculate the energy consumption.

$$P_1 = \frac{P_2}{\eta_{\text{motor}}}$$

P_2 = 35 Hp (power requirement of 625S-3 pump at 88 GPM, from curve P_2/Q).

Calculation of motor efficiency at duty point

As standard the SP 625S-3 is equipped with a 60 Hp (45 kW for P_1) MS 6000C motor.

At duty point (Q = 528 GPM) the pump requires 59 Hp (44 kW for P_1), thus:

a motor load of 87 % (44 kW / 45 kW) and a power reserve of 2 %.

From the table on page 86 the motor efficiency can be read as:

84.6 % at a load of 75 %. ($\eta_{75\%}$)

85.6 % at a load of 100 %. ($\eta_{100\%}$)

The interpolated value in this example is

$\eta_{\text{motor}} = 85.1\%$, $\eta_{\text{motor}} = 0.851$.

$$P_1 = \frac{44}{0.851} = 51.7 \text{ kW}$$

$E = 0.15 \text{ USD/kWh} \times 3200 \text{ h} \times 51.7 \text{ kW}$.

The annual energy costs amount to USD 24816.

The pay-off time, A, (months) is calculated as follows:

$$A = \frac{\text{Purchase price of energy - efficiency pump}}{\text{Energy savings / year}} \times 12$$

Cable sizing

In order to obtain an economical duty of the pump the voltage drop should be low.

Today large water works already size cables for a maximum voltage drop of 1 %).

The hydraulic resistance in the discharge pipe should be as low as possible.

10. Cables

Cables for Grundfos 4" submersible motors are available with or without plugs. The submersible drop cable is chosen according to application and type of installation.

Standard version: Max. liquid temperature 140 °F (60 °C).

Hot water version: Max. liquid temperature 158 °F (70 °C), for short periods up to 194 °F (90 °C) (for MS only).

Tables indicating cable dimension in borehole

The tables indicate the maximum length of drop cables in meters from motor starter to pump at direct-on-line starting at different cable dimensions.

If star/delta starting is used the current will be reduced by $\sqrt{3}$ ($I \times 0.58$), meaning that the cable length may be $\sqrt{3}$ longer ($L \times 1.73$) than indicated in the tables.

If for example the operating current is 10 % lower than the full-load current, the cable may be 10 % longer than indicated in the tables.

The calculation of the cable length is based on a maximum voltage drop of 1 % to 3 % of the rated voltage and a water temperature of maximum 86 °F (30 °C).

In order to minimize operating losses the cable cross section may be increased compared to what is indicated in the tables. This is economical only if the borehole provides the necessary space, and if the operational time of the pump is long, especially if the operating voltage is below the rated voltage.

The table values are calculated on the basis of the formula:

Max. cable length of a single-phase submersible pump:

$$L = \frac{U \times \Delta U}{I \times 2 \times 100 \times \left(\cos \varphi \times \frac{\rho}{q} + \sin \varphi \times X_L \right)} [\text{ft}]$$

Max. cable length of a three-phase submersible pump:

$$L = \frac{U \times \Delta U}{I \times 1.73 \times 100 \times \left(\cos \varphi \times \frac{\rho}{q} + \sin \varphi \times X_L \right)} [\text{ft}]$$

where

U = Rated voltage [V]

ΔU = Voltage drop [%]

I = Rated current of the motor [A]

q = Cross-section of submersible drop cable [in^2]

X_L = Inductive resistance: 0.024×10^{-3} [Ω/ft]

$\cos \varphi$ = Power factor

$\sin \varphi = \sqrt{1 - \cos^2 \varphi}$

ρ = Specific resistance: 9.5×10^{-6} [$\Omega \text{ in}^2/\text{ft}$]

Example

Motor size: 40 Hp, MMS 8000

Rated current: 64.0 A

Rated voltage: 3 x 460 V, 60 Hz

Starting method: Direct-on-line

Power factor: $\cos \varphi = 0.85$

Voltage drop: 3 %

Cross-section: 0.025 in^2

$\sin \varphi$: 0.53

$$L = \frac{460 \times 3}{64.0 \times 1.73 \times 100 \times \left(0.85 \times \frac{0.0000095}{0.025} + 0.53 \times 0.024 \times 10^{-3} \right)}$$

L = 370 ft

Cable dimensions at 1 x 220 V, 60 Hz

Motor	Hp	I_n [A]	0.002 in^2	0.004 in^2	0.006 in^2	0.009 in^2	0.016 in^2
4"	0.33	3.3	315	522	833	1243	2047
	0.50	4.4	239	397	630	938	1548
	0.75	6.6	157	262	417	620	1020
	1.00	7.7	121	203	321	482	797
	1.50	9.0	98	164	259	387	643

Maximum cable length in feet from motor starter to pump.

Appendix C

Field Pictures

3 ϕ 30HP 2P
230/460V 60Hz
K16 G25666E

DUAL VOLTAGE SUBMERSIBLE MOTOR

TYPE	VCTI	HP	30	30	20	15
FORM	KK	VOLTS	460/230	460	400	30
PHASE	3	HERTZ	60	60	50	2800
POLES	2	min ⁻¹	3450	3400	3000	27
RATING	S1	AMPS	41/82	46	40	30
TEMP. RISE	80K	CODE	K	F	G	H
AMB. TEMP.	25°C					

3 ϕ 30HP 2P
230/460V 60Hz
K16 G25666E

DUAL VOLTAGE SUBMERSIBLE MOTOR

TYPE	VCTI	H P	30	30	30	30
FORM	KK	VOLTS	460/230	460	460	460
PHASE	3	HERTZ	60	60	60	60
POLES	2	min ⁻¹	3450	3400	3300	2940
RATING	S1	AMPS	41/82	46	46	47
TEMPRISE	80K	CODE	K	F	G	J
AMB.TEMP.	35°C	S.F.	1.15	1.0	1.0	1.0
DATE	K16	S.F.A.	47/94			
MADE IN JAPAN		MFG.No.		G 25666E		

Hitachi Industrial Equipment
Systems Co., Ltd.

WARNING

VERIFY MOTOR IS FILLED WITH CLEAN WATER BEFORE
INSTALLING. THE WARRANTY IS VOID IF THIS IS NOT DONE.

DIRECTIONS

1. SECURE MOTOR IN
VERTICAL POSITION
2. REMOVE UPPER PLUG
AND FILL
3. REPLACE AND TIGHTEN
THE PLUG



THIS MOTOR IS INTENDED FOR INSTALLATION BY
TECHNICALLY QUALIFIED PERSONNEL. REFER TO HANDBOOK
AND INSTALLATION INSTRUCTION. CATALOG #SME-18

CAUTION

THIS MOTOR AND LEAD ASSEMBLY ARE NOT TO BE USED
FOR USE SUBMERGED IN WATER.

DUAL VOLTAGE SUBMERSIBLE MOTOR

TYPE	VCTI	H P	30	30
FORM	KK	VOLTS	460/230	30
PHASE	3	HERTZ	60	60
POLES	2	min ⁻¹	3450	3400
RATING	S1	AMPS	41/82	46
TEMP. RISE	80K	CODE	K	F
AMB. TEMP.	35°C	S.F.	1.15	0
DATE	K1/6	S.F.A.	47/94	
MADE IN JAPAN		MFG.No.		6-2566

**Hitachi Industrial Equip
Systems Co., Ltd.**

W A R N I N G

VERIFY MOTOR IS FILLED WITH CLEAN WA
INSTALLING. THE WARRANTY IS VOID IF TH

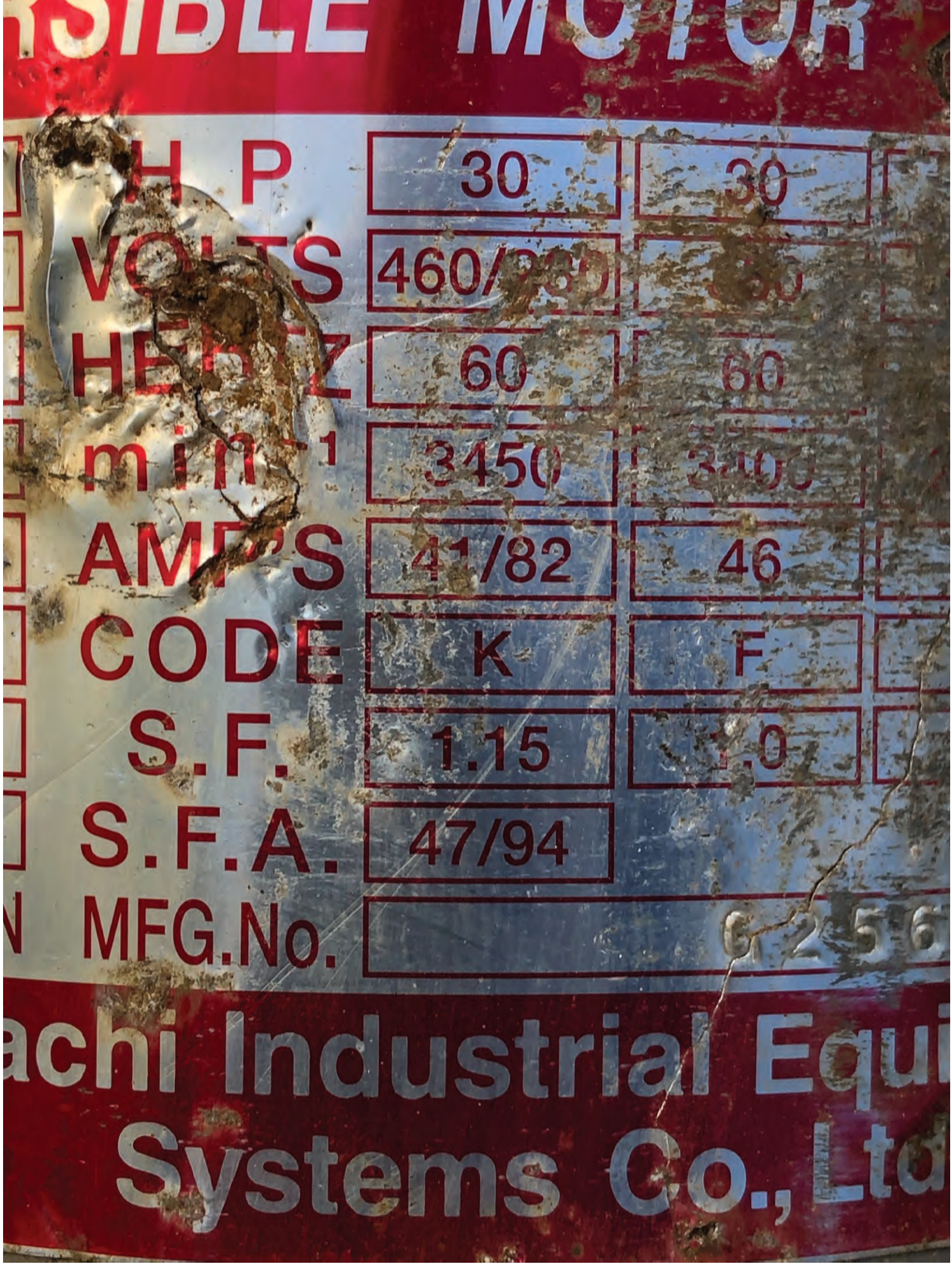
VOLTAGE SIBLE MOTOR HITACHI

H P	30	30	30	30	30
VOLTS	460/230	460	460	460	460
HERTZ	60	60	60	60	60
min ⁻¹	3450	3400	3400	3400	3400
AMPS	41/82	46	46	46	47
CODE	K	F	S	J	J
S.F.	1.15	1.0	1.0	1.0	1.0
S.F.A.	47/94				
IFG.No.	6-2-5666				

Industrial Equipment
Systems Co., Ltd.

WARNING

FILLED WITH CLEAN WATER BEFORE
ARRANTY IS VOID IF THIS IS NOT DONE.



H P

30

30

VOLTS

460/230

230

HERTZ

60

60

min⁻¹

3450

3400

AMPS

41/82

46

CODE

K

F

S.F.

1.15

1.0

S.F.A.

47/94

MFG.No.

61256

Mitsubishi Industrial Equipment
Systems Co., Ltd

3 ϕ 30HP 2P
230/460V 60Hz
K16 G25666E

TAGE
BLE MOTOR

P	30	30	30
TS	460/230	30	100
7	60	60	50









3 ϕ 30HP 2P
230/460V 60 Hz
K16 G25666E

AL VOLTAGE
BMERSIBLE MOTOR **HP TACH**

VCTI	HP	30	30	30	30	30
KK	VOLTS	460/230	460	460	400	415
3	HERTZ	60	60	60	50	50
2	min ⁻¹	3450	3400	3400	2800	2840
S1	AMPS	41/82	46	46	46	47
80K	CODE	K	F	S	J	J
35°C	S.F.	1.15	1.0	1.0	1.0	1.0

Powerformer®

DRY-TYPE
TRANSFORMER

TYPE: INDOOR/OUTDOOR INSUL. H
CLASS H

CAT. NO. 211-101 C. 115
RISE 115

KVA. 3 PH. 1 HZ. 60

HIGH VOLT 240/480

LOW VOLT 120/240

CAUTION: SEE WIRING DIAGRAM ON BACK OF COVER
BEFORE MAKING ANY CONNECTIONS.

J7211

JEFFERSON ELECTRIC

DIVISION OF LITTON INDUSTRIES

MADE IN U.S.A.

BELEVILLE, ILLINOIS 60010



TRANSFORMER

FIP COOLED

TESTED 24TH







