APPENDIX

IN CONCERT WITH THE ENVIRONMENT

ENERGY SURVEY

Southern California Edison

ENI GY S

In Concert With The Environment

Energy Survey

Getting Started

You are about to begin the process of collecting information about energy use in your home. "HELP" screens have been provided in this booklet to assist you in determining the best answers for completing the survey. Accuracy is very important, so be especially careful in researching the energy users in your household.

Account Information

Part of the data needed for the survey may be found on your monthly energy bills: \$8 you may want to discuss your project with the person who pays your energy bills before you begin gathering information. If a copy of your electric bill is not available, you may obtain the information by calling your electric utility.

Gathering information

The entire process of collecting information should take no more than one hour. The other members of your household should be able to assist your in collecting some of the information. Most of your activities will involve writing down information from equipment in your home. Before you begin, it will be helpful to gather any owners manuals you may have on your water heater, refrigerator/freezer, and pool equipment. Answers to some of the questions can be found in these manuals.

Recording Information

Record ALL information which applies to your household energy use lifestyle. Record the correct NUMBERED RESPONSE for each question. REMEMBER THAT THE ACCURACY OF THIS ANALYSIS WILL ONLY BE AS ACCURATE AS THE RESPONSES AND THE INFORMATION WHICH YOU INPUT INTO THE COMPUTER.

If you need additional assistance in answering the survey or using the computer, you may call this special HELP number between 9 a.m. and 9 p.m.

1-800-756-9770



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Identification Information

Enter your fi	rst and last name	·	
Enter your e	lectric utility account number <	Salatina specials reflect	
Head of Hou	usehold name		
our street a	ddress	HELP Enter your Southern California Edison (SCE)	
City ZIP code		account number with NO spaces or dashes. The account number information is on your monthly electric bill. If you are served by a utility company	
nergy	Information	other than SCE, please enter your telephone number (without the area code).	
a present.	Which utility supplies electricity to your home?	phut birt Sort i da	
	1. Southern California Edison	2. Other	
2.	If you are served by Southern California Edison (indicated-on bill)?	(SCE), which rate schedule are you on	
	1. Domestic (D) 4. Time-of-Use 2. Domestic Seasonal (DS) 5. DLI Service 3. Time-of-Use (TOU-D-1) 6. Not served		
3.	In which type home do you live?	ROBERT CONTROL PROCESSOR STATES OF THE STATE	
	Single story Two or more stories/Split level	HELP (3) Do not count a basement as a separate story.	
	3. Townhouse/Condo	Do not coon a conserver a conserver.	
	4 Multifamily 12 to 4 units)	2 2 to A peals out 6	
	4. Multifamily (2 to 4 units) 5. Apartment (5 units or more) 6. Manufactured home (mobile home)	HELP (6) If your home is new, the sales information proba-	
4.	5. Apartment (5 units or more)	If your home is new, the sales information proba includes a floor plan which shows the livable	
4. 5.	5. Apartment (5 units or more) 6. Manufactured home (mobile home) Including yourself, how many people live in	If your home is new, the sales information proba includes a floor plan which shows the livable square feet. Make sure YOU DO NOT INCLUDE	
4. 5. 6.	5. Apartment (5 units or more) 6. Manufactured home (mobile home) Including yourself, how many people live in your home? Including yourself, how many people are usually home between 10 a.m. and 6 p.m.	If your home is new, the sales information probation includes a floor plan which shows the livable square feet. Make sure YOU DO NOT INCLUDE UNHEATED OR UNCOOLED AREAS like garages, porches or unconditioned basements.	



7.	When was your home built?	Identification information
	1. Pre – 1975 3. 1979 – 19	982
	2. 1975 – 1978 4. 1983 – Pri	enter your first and last name
8.	Does your family own or rent this home?	Enter your electric utility account number <
ETHIN!	1. Own 2. Rent	aman bloderunkt to man
Heating	g Your Home	HELP (9)
9.	What is your home's main source of heat?	An electric furnace (response #4) uses heating coils
	Gas Heating	(resistance heat) which distributes heat throughout your home. An electric heat pump will be located
	 Gas furnace only (forced air) Gas wall heater Gas boiler/radiator (hot water or steam) 	either on the ground outside your home or on your roof, and usually has a backup source (second
	Electric Heating	fuel) for heating. It is used for both heating and cooling. When the heat or air conditioning is on,
	4. Electric furnace only 5. Electric heat pump 6. Electric baseboard/wall heating units 7. Radiant ceiling/floor system	you will be able to hear the outside fan running. Electric baseboard heating units (response #6) are placed in each room in the house and are located along the baseboards (where the wall meets the
	Other Types of Heating	floor). A gas furnace uses a flame to heat the air
	 8. Wood stove or fireplace 9. Propane 10. Solar 11. Other 12. None/Heating system rarely or never used 	and is usually found in a garage, basement, crawl- space, laundry room or closet. Choose wood (response #8) if you heat with it more than half the time.
10.	If your home has a secondary (supplemental) has listed above is used? Note: If you do not use	
11.	What is the approximate age of your main hea	ting system?
	1. Less than 2 years old 5. 15 years of 2. 2 to 4 years old 6. Don't know 3. 5 to 9 years old 7. None/Hea 4. 10 to 14 years old	그 있는데 어느는 이 그들은 그들은 이 없는데 가는데 하는데 되었다면 하면 내가 되었다면 하는데 하는데 하는데 그는데 그는데 그를 되었다면 하는데
12.	If your home has a natural gas or propane hear instant-on ignition, or is the pilot light on all the	
	 Pilot light on all the time during the heating Electronic/Instant-on ignition No natural gas or propane gas heating system 	S. Including yoursel, new train people usually home between 10 am set
13.	If your heating system has a thermostat, what is WINTER (degrees Fahrenheit)? If you do not have zero "0."	
14.	If you set back (lower) your thermostat at NIGH do you set it? If you have no heating thermostat thermostat during the night, enter a zero "0."	



	그리카지(1) 1일 2 -12152(1 [[2116/44/2]] 1	regular filter replacement)?	Please answer the following quast
OF WOOD to question 1	1. Yes 2. No uses wood for heating, enter ourned per year. If you use woo 7 and enter the TOTAL NUMB ter a zero "0" in questions 15 a	od pellets instead of logs, go ER OF BAGS of pellets burned	HELP (16) A full cord of wood measures 4 feet wide by 4 feet high by 8 feet deep (4x4x8).
16.	Number of cords	organe gas backup, ranolisp to	HELP (17)
17.	Number of bags of wood per	llets Godosa onto Bes Harry 1830	Pellets are small, cylindrically-shaped
Cooling	Your Home	re (number of gallons)	wood fuel compressed from wood shavings and sawdust, and are normally sold in 40-pound bags.
18.	Does your home have air con	nditioning?	2 Medium 45 to 8
fing the water sook You can when the unit	 Yes – central air conditionii Yes – evaporative (swamp) Yes – window or through- No air conditioning/Air coused throughout the year 	cooler the-wall units nditioning rarely	HELP (18) A heat pump system (response 1) provides heating in addition to cooling.
19.	How old is your air condition	ning unit?	S CHEE
	 Less than 2 years old 2 to 4 years old 5 to 9 years old 	4. 10 to 14 years old5. 15 years old or older6. Don't know/No air conditioning	HELP (19) If you use more than one air conditioning unit, please enter that age of the largest air conditioning unit.
20.	units, enter the total number window or through-the-wall	units, enter zero "0."	20.1 trible water 1 ater 1
21.	If your cooling system has a (degrees Fahrenheit)? If you	thermostat, what is your norma r cooling system does not have a or you do not have a cooling sys	I SETTING DURING THE SUMMER a thermostat (some swamp stem, enter a zero "0."
22.	normal daytime setting (deg thermostat (swamp cooler), up your thermostat during t	rees Fahrenheit)? If your cooling you do not use it, you have no he daytime, enter a zero "0."	cooling system, or you do not turn
23.	Is regular maintenance perfo	ormed on your cooling equipme	ent (periodic "tuneup" AND regular
	1. Yes 2. No	3. No cooling system	low showerhead or shower flow
Water	Heaters	v showerheads restricts	HELP, (24)
24.	. Do you have a recirculating attached to your water hea	water pump system	A recirculating water pump moves hot water throughout the hot water pipes in your home so that hot water is immediate
		-	available when you turn on the faucet.



25. Please answe	ALICE ASSET MORE	ter heaters do you have? questions for EACH water heater.
Water hear	ter #1	H CORDS of Full CORDS of the street of logs, got relieved to
26.1	Type of fuel use	ed
	 Natural gas Electric Propane gas Heat pump 	5. Solar with natural gas or propane gas backup6. Solar with electric backup
27.1	Water heater ta	ank size (number of gallons)
	 Small—less th Medium—45 Large—over 	to 80 gallons
28.1	the rest of the h	hat is heated and cooled with nome (exclude garages and porches, onditioned spaces)?
	1. Yes	2. No
29.1		ater a high-efficiency model n an insulating blanket?
	1. Yes	2. No promonionos na our
30.1	Is this water he	ater less than two years old?
	1. Yes	2. No
<u>934</u> 31.1	What is the terr water heater?	nperature setting of this
i wnat is you ve a · ou do not turr	2. 130 degrees (medium set	0 degrees Fahrenheit (low setting) to 149 degrees Fahrenheit ting) Fahrenheit or greater (high setting)
	Does this water	r heater have a timer?
	Click Broken and all	eter heater timer

HELP (25)

A water heater is a cylindrical tank which contains either electric elements or a gas burner to heat water. It is usually located in the garage, closet, laundry room or basement. If you share a water heater with other households, or you do not have a water heater, enter zero "0" and skip to question 33.

HELP (26.1)

A natural gas or propane gas water heater has a vent stack which comes out the top of the unit. A heat pump water heater extracts heat from the air surrounding the water heater by using a compressor. You can hear the compressor running when the unit is heating water.

HELP (27.1)

The label affixed to the water tank should show the number of gallons of water which the tank holds. Typically, homes have 52 gallon electric or 40 gallon gas water heaters.

HELP (29.1)

An easy way to see if your water heater is a high efficiency model is to check for a label on its side that says, "High Efficiency" or "Energy Saver." The Use & Care Manual will often tell you if the water heater is an efficient model that does not require an insulation jacket. Some manufacturers recommend NOT using the insulating blanket on the newer, more efficient model water heaters.

HELP (31.1)

If your water heater has no temperature setting, fill a glass of hot water from your kitchen faucet and use a cooking thermometer to measure the hottest water temperature.



Water heat	ter #2		
(If you do no	t have a second standard type water	er heater, go to question 33.)	
26.2	Type of fuel used		
	2. Electric	5. Solar with natural gas or propane gas backup 6. Solar with electric backup	
27.2	Water heater tank size (number of	gallons)	
	 Small—less than 45 gallons Medium—45 to 80 gallons Large—over 80 gallons 		
28.2	Is it in an area that is heated and coporches, but INCLUDE conditioned	cooled with the rest of the home (exclude garages and d spaces)?	.88
	1. Yes 2. No		
29.2	Is this water heater a high-efficience	cy model or covered with an insulating blanket?	
	1. Yes 2. No		
30.2	Is this water heater less than two y	rears old?	
	1. Yes 2. No		
31.2	What is the temperature setting of	this water heater?	
	 Less than 130 degrees Fahrenhe 130 degrees to 149 degrees Fal 150 degrees Fahrenheit or grea 	hrenheit (medium setting)	40.
32.2	Does this water heater have a time	er? I Sinoshari E 3. Harzontal a er	
Remige	Yes – has water heater timer No – has no water heater timer	2. Front loader 2 Transmit of the APNO-Bothles Wast	

Water-saving Devices

33.	Are your showers fitted with low-flow
	showerheads or shower flow restrictors?

- 1. Yes All showers have low-flow showerheads
- 2. Some Some showers have low-flow showerheads
- 3. No No showers or low-flow showerheads
- _ **34.** Are your sinks equipped with water flow restrictors or faucet aerators?
 - 1. Yes
- 2. No

HELP (33)

A low-flow showerhead or shower flow restrictor will limit the flow of water to no more than two and one half (2.5) gallons per minute at full pressure. If in doubt, run the water into a bucket at full pressure for 15 seconds, measure the amount collected, and multiply by four to get gallons per minute.



35.	Do you have 'water dams' or space occupiers to limit the use of water in your toilet tanks, or do you have low-water use toilets? 1. Yes 2. No	HELP (35) Water-saving devices used for toilets, such as toilet dams or plastic jugs filled with water, reduce the amount of water that fills the toilet
Autom	atic Dishwasher	tank.

36. How many LOADS PER WEEK do you run in your automatic dishwasher? (Enter a zero "0" if you have no dishwasher and skip to question 40.) 37. Do you use the energy-saver cycle on your automatic dishwasher? 1. Yes 2. No 3. No energy-saver cycle 4. Don't know/No automatic dishwasher 38. Do you use the water heating temperature booster on your automatic dishwasher? 1. Yes 2. No 3. No temperature booster 4. Don't know/No automatic dishwasher 39. Do you use your dishwasher ON A REGULAR BASIS between the hours of 10 a.m. and 6 p.m. during the weekday? 1. Yes – Often use dishwasher between 10 a.m. and 6 p.m. during weekdays 2. No – Do not often use dishwasher between 10 a.m. and 6 p.m. during the weekdays 3. No automatic dishwasher

Clothes Washers and Clothes Dryers

		15.16.200 15.16.W.2013 10. DHUTEZ			
40.	How many loads of laundry do you wash PER WEEK? (Enter a zero "0" if you do not have a clothes washer and go to question 43.)				
41.	What type of clothes washer do you have?				
	His Verial is the beneath and the series	3. Horizontal axis machine 4. No clothes washer			
42.	Do you wash clothes ON A REGU the weekdays?	LAR BASIS between the hou	urs of 10 a.m. and 6 p.m. during		
	 Yes – Often wash clothes between 2. No – Do not regularly wash clothes. No clothes washer 				
43.	How many loads of laundry do you dry PER WEEK? (Enter a zero "0" if you do not have a clothes dryer, and go to question 46.)				
44.	What type of energy does your clo	othes dryer use?			
wer flowr	Electric 2. Natural gas	3. Propane/Butane	4. No clothes dryer		
45.	45. Do you dry clothes ON A REGULAR BASIS between the hours of 10 a.m. and 6 p.m. of the weekdays?				
	 Yes – Often dry clothes betwee No – Do not regularly dry cloth No clothes dryer 		-		



Refrigerators and Microwave Ovens

46.	How many PLUGG do you have? If you	ED IN electric refrigerators (in a do not have an electric refri	cluding combined refrigerato gerator, please go to questior	r/freezer units) n 52.
Please answe	No 1912 to 14 71-	tions for EACH of your refrige	C. As a college on boost from a fil	Sincale
-	or identical day (a	watsi bilat iigi iqi issoon ibo (10 11-16-16-19 18 18 18 18 18 18 18 18 18 18 18 18 18	ease answer the follo
Refrigerato	or #1 – (Primary Use	Unit—usually in kitchen)		
47.1	When was it manu	factured?		
	1. Before 1980	2. Between 1980-1987	3. Between 1988-1991	4. 1992 or later
48.1	Type of defrost.			
ecumelo strephili	Manual defrost	2. Partial defrost	3. Frost-free (automatic)	
49.1	What style of refrig	erator is this?		
on the top, a	1. Single door	3. Top freezer	HELP (50.1)	
	2. Side-by-side	4. Bottom freezer	Check your owner's r	
50.1	Size of your refriger	rator?	nameplate in the refr the capacity of your	
		16 cubic feet [cu. ft.])	can also determine t	
	2. Medium (16–20		tape measure to mul	tiply the interior len
	3. Large (over 20 c		times width times he	ight.
51.1	Where is this refrig		n during weekdays	
	Kitchen Basement	3. Garage/Elsewhere		
	Z. Beserverie	F3		
Defrigerat	or #7 Uf you do r	not have a second refrigerato	r igo to guestion 52 l	
THE STATE OF THE S	When was it manu		Office and a Constant of the	
47.2	1. Before 1980		3. Between 1988-1991	4. 1992 or later
40 7	2 Type of defrost.	ethans for EACH of your wa	nerbeds 120190	
40.2	Manual defrost	2. Partial defrost	3. Frost-free (automatic)	
40	What style of refrig		ght—auto derrost	
47.2	1. Single door	2. Side-by-side	3. Top freezer	4. Bottom freeze
F0 :	Ass. Trees and acceptable factor	H 1	il fless than 16 cubic feet [cu.	
50.2	2 Size of your refrige	16 cubic feet [cu. ft.])		2. Med
	2. Medium (16–20			
	3. Large (over 20			
	2 Where is this refrig	nerator located?	ren , 2. Basement 3.	

3. Garage/Elsewhere



1. Kitchen

2. Basement

Freezers

52.	How many PLUGGED IN full-size electric freezers (NOT including combination refrigerator/
	freezer units) do you have? (Enter a zero "0" and skip to question 57 if you do not have an
	electric freezer.)

Please answer the following questions for EACH of your freezers.

Freezer #1	- (Primary Use Unit)	construction Matanagement of Security of The
53.1	When was it manufactured?	A Server 1980 2 2 Browen 198
	1. Before 1980 2. Between 1980–1987	3. Between 1988–1991 4. 1992 or later
54.1	Type of defrost	trough months automatic partmanner (1997)
39 arti to do at the	Chest—manual defrost Upright—manual defrost Upright—auto defrost	HELP (54.1) A chest type freezer opens from the top; a upright model opens from the front (i.e.,
55.1	Size of this freezer?	a typical refrigerator).
or/freezer. Yo ity by using a	1. Small (less than 16 cubic feet [cu. ft.]) 2. Medium (16–20 cu. ft.)	I. Small fless than 16 cubic feet [cu f
	3. Large (over 20 cu. ft.)	3. Large lover 20 cu. ft.) relices end?
56.1	Where is this freezer located?	
	1. Kitchen 2. Basement 3. Garage/Els	sewhere

53.2	When was it man	ufactured?				
	1. Before 1980	2. Between 1	980–1987	3. Between 19	988-1991	4. 1992 or later
54.2	Type of defrost					s8 1
	Chest—manual Upright—manual Upright—auto	ual defrost defrost				
55.2	Size of this freezer		ou dry nos wy			
	 Small (less than Medium (16–2) Large (over 20) 	0 cu. ft.)				
56.7	Where is this freez	er located?				



Ranges, Ovens and Microwave Ovens

57.	What type of energy does your RANGE (STOVE TOP) use?			
pnistation	 Electric Natural gas (without a pilot light) Natural gas (with a pilot light) 	4. Propane (without a pilot light)5. Propane (with a pilot light)6. No range (stove top)		
58.	Approximately how many MINUTES PER DAY do you use the burners on your RANGE? (Provide the COMBINED total MINUTES PER BURNER PER DAY that the burners are on.)	HELP (58) The best way to determine this answer is to asking the person in your household who does most of the cooking. It will be		
59.	What type of energy does your OVEN use?	acceptable to ESTIMATE this answer.		
ys.	 Electric Natural gas (without a pilot light) Natural gas (with a pilot light) 	4. Propane (without a pilot light)5. Propane (with a pilot light)6. No oven		
60.	Approximately how many HOURS PER WEEK do y	you use your oven (baking and broiling)?		
61.	Approximately how many MINUTES PER DAY do you use your microwave oven? (Enter a zero "0" if you do not have a microwave oven.)			
62.	Do you cook ON A REGULAR BASIS between the hours of 10 a.m. and 6 p.m. during the weekdays?			
PIOVIDE	 Yes – Often cook between 10 a.m. and 6 p.m. No – Do not regularly cook between 10 a.m. a 			
Waterb	eds and complete of the series of	O 21 YACI REPUBBLICH OF THE WAR AND A STATE OF THE LOCAL PROPERTY		
63.	How many HEATED waterbeds do you have? (Endo not have any HEATED waterbeds.)	nter a zero "0" and skip to question 66 if you		
Please answe	er the following questions for EACH of your waterb	peds.		
Waterbed	#1 e of the pump. Enter the number as a decim	125		
64.1	Size of waterbed #1	MELIZOPINANDA MININA		
	1. King or Queen 2. Full or Twin	AND THE PROPERTY OF THE PROPER		
65.1	Is this waterbed normally covered with a bedspre- used?	ad, blanket or comforter when not being		
11-1	1. Yes 2. No	horsesses who is		



If you use an appliance

Waterbed	2 Size of waterbed #2				
	1. King or Queen	2. Full or T	win		
65.2	Is this waterbed normally oused?	covered with	a bedspread, blanket or o	comforter wi	hen not being
	1. Yes (82) 9 (31)	2. No	how many MINUTES PER I	proximately	QA 82
Vaterbed	#3 – If you do not have a t	third HEATED) waterbed, go to guestion	2.66	you
	3 Size of waterbed #3	veen 1980-1	987 3. Between 1981	8-1991	
	1. King or Queen	2. Full or To	win		
65.3	Is this waterbed normally cused?			omforter wh	nen not being
	1. Yes	2. No			
Enter a zero	o "0" if you do not have that How many HOURS PER DA the combined total HOURS	specific election	n (including video games)	on in your h	nome? (Provide
	How many HOURS PER DA	specific election	ronic device.)	on in your h	nome? (Provide elevisions are on.)
	How many HOURS PER DA the combined total HOURS How many HOURS PER DAY	specific election AY is television S PER DAY that Y is big screen	ronic device.) n (including video games) at all of your color and bla television (including video	on in your hick & white t	elevisions are on.)
66.	How many HOURS PER DA the combined total HOURS How many HOURS PER DAY (Provide the combined total	specific election AY is television S PER DAY that Y is big screen I HOURS PER I	ronic device.) In (including video games) Int all of your color and blace It television (including video DAY that all of your big scre	on in your hick & white to games) on in	elevisions are on.)
66. 67. 68.	How many HOURS PER DA the combined total HOURS How many HOURS PER DAY (Provide the combined total How many HOURS PER DA	specific elections specific electrons specific electrons of the specif	ronic device.) In (including video games) In at all of your color and bla I television (including video DAY that all of your big scree I your video cassette recor	on in your hick & white to games) on in een television rder (VCR)?	n your home? s are on.)
66. 67.	How many HOURS PER DA the combined total HOURS How many HOURS PER DAY (Provide the combined total	specific electrons specific electrons per DAY that is big screen HOURS PER INTO MAY do you use any do you use a	ronic device.) In (including video games) In at all of your color and blace In television (including video DAY that all of your big screen In your video cassette recorn In your stereo, tape player,	on in your hick & white to games) on in gen television order (VCR)?	n your home? s are on.) HELP (66)
66. 67. 68.	How many HOURS PER DAY the combined total HOURS How many HOURS PER DAY (Provide the combined total How many HOURS PER DAY How many HOURS PER DAY	specific electrons specific electrons per DAY that is big screen HOURS PER DAY do you use not include be	ronic device.) In (including video games) In at all of your color and blace It television (including video DAY that all of your big scree It your video cassette record It your stereo, tape player, Intery operated appliances	on in your hick & white to games) on in gen television order (VCR)?	HELP (66) If three televisions are each on 2 hours pe
66. 67. 68. 69.	How many HOURS PER DAY the combined total HOURS How many HOURS PER DAY (Provide the combined total How many HOURS PER DAY tompact disc player? (Do n	specific electrons specific electrons per DAY that is big screen HOURS PER DAY do you use not include be	ronic device.) In (including video games) In at all of your color and blace It television (including video DAY that all of your big scree It your video cassette record It your stereo, tape player, Intery operated appliances	on in your hick & white to games) on in gen television order (VCR)?	HELP (66) If three televisions are ach on 2 hours peday, the combined
66. 67. 68. 69. 70.	How many HOURS PER DAY the combined total HOURS How many HOURS PER DAY (Provide the combined total How many HOURS PER DAY How many HOURS PER DAY compact disc player? (Do no How many HOURS PER DAY	specific electrons specific electrons per DAY that is big screen HOURS PER DAY do you use not include be	ronic device.) In (including video games) In at all of your color and blace It television (including video DAY that all of your big scree It your video cassette record It your stereo, tape player, Intery operated appliances	on in your hick & white to games) on in gen television order (VCR)?	HELP (66) If three televisions are each on 2 hours pe
66. 67. 68. 69. 70.	How many HOURS PER DAY the combined total HOURS How many HOURS PER DAY (Provide the combined total How many HOURS PER DAY compact disc player? (Do not how many HOURS PER DAY town many HOURS PER DAY Ppliances	specific electrons specific electrons represented the specific electrons of the specific electrons represented the specif	ronic device.) In (including video games) In at all of your color and blace at all of your color and blace at all of your big screen your video cassette record your stereo, tape player, attery operated appliances be your home computer?	on in your hick & white to games) on in gen television order (VCR)? and	HELP (66) If three televisions are ach on 2 hours per day, the combined HOURS PER DAY is
66. 67. 68. 70.	How many HOURS PER DAY the combined total HOURS How many HOURS PER DAY (Provide the combined total How many HOURS PER DAY compact disc player? (Do not how many HOURS PER DAY town many HOURS PER DAY	specific electrons specific electrons represented the specific electrons of the specific electrons represented the specif	ronic device.) In (including video games) In at all of your color and blace at all of your color and blace at all of your big screen your video cassette record your stereo, tape player, attery operated appliances be your home computer?	on in your hick & white to games) on in gen television order (VCR)? and	HELP (66) If three televisions are ach on 2 hours per day, the combined HOURS PER DAY is
66. 67. 68. 70.	How many HOURS PER DAY the combined total HOURS How many HOURS PER DAY (Provide the combined total How many HOURS PER DAY compact disc player? (Do n How many HOURS PER DAY compact disc player? PER DAY Ppliances Do you use any of these ap	specific electrons specific electrons represented the specific electrons of the specific electrons represented the specif	ronic device.) In (including video games) In at all of your color and blace at all of your color and blace at all of your big screen your video cassette record your stereo, tape player, attery operated appliances be your home computer?	on in your hick & white to games) on in your hick & white to games) on in gen television order (VCR)? and i.)	HELP (66) If three televisions are ach on 2 hours peday, the combined HOURS PER DAY is hours.
66. 67. 68. 70.	How many HOURS PER DAY the combined total HOURS How many HOURS PER DAY (Provide the combined total How many HOURS PER DAY compact disc player? (Do n How many HOURS PER DAY compact disc player? (Do n Do you use any of these ap 1. Yes 2. No	specific electrons specific electrons represented the specific electrons of the specific electrons represented the specif	ronic device.) In (including video games) In at all of your color and blace at all of your color and blace be devision (including video DAY that all of your big scree your video cassette record your stereo, tape player, attery operated appliances be your home computer?	on in your hick & white to games) on in your hick & white to games) on in gen television order (VCR)? and i.)	HELP (66) If three televisions are ach on 2 hours per day, the combined HOURS PER DAY is hours.
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66. 67. 68. 70.	How many HOURS PER DAY the combined total HOURS How many HOURS PER DAY (Provide the combined total How many HOURS PER DAY compact disc player? (Do note) How many HOURS PER DAY compact disc player? (Do note) Do you use any of these ap 1. Yes 2. No 1. Blow dryer 2. Radio	specific electrons specific elec	ronic device.) In (including video games) In at all of your color and blace at all of your color and blace at all of your big screen your video cassette record and stereous target appliances at your stereo, tape player, attery operated appliances a your home computer? Our home ON A DAILY BACE. 6. Slow cooker (Crown of the player) 7. Coffeemaker	on in your hick & white to games) on in your hick & white to games) on in gen television order (VCR)? and i.)	HELP (66) If three televisions a each on 2 hours peday, the combined HOURS PER DAY is hours. HELP (71) If you use an applia



Lighting

72. What wattage are most of your light bulbs?

1. Less than 100 watts

2. 100 watts or more

73. Do you use lighting more than 6 hours per day?

1. Yes

2. No

74. Is fluorescent lighting (including compact fluorescent light bulbs) used throughout most of your house?

1. Yes

2. No

- 75. If you have landscape or outdoor security lighting, how many bulbs does your system use? (Enter a zero "0" if you do not have outdoor lighting.)
- _ 76. What is the average bulb wattage for your outdoor security lighting system? (If you have no security or landscape lighting system, enter six "6" and go to the next question.)

1. Less than 50 watt

4. 150 watt

2. 50 watt

5. 200 watt

3. 100 watt

6. None

HELP (72)

Check the wattages of the light bulbs in your home. If most of them are less than 100 watts, choose response #1. If most are 100 watts or more, choose response #2. Remember that a light bulb which is turned on will be hot to the touch, so we recommend you turn the light off and record the wattage without touching the lamp.

HELP (73)

If indoor lighting is regularly used more than 6 hours per day, choose response #1. If lighting is usually on less than 6 hours per day, choose response #2.

HELP (74)

If fluorescent lighting is used only in your kitchen and bathroom(s), choose response #2. If fluorescent is also used in your family and/or living room, choose response #1.

Pools, Spas and Hot Tubs

77. If your home has a swimming pool, what is the horsepower rating of the filter pump? (Enter a zero "0" if you do not have a pool or you share a community pool, and skip to question 83.) The horsepower [HP] number is found on the name-plate of the pump. Enter the number as a decimal. For example, three-quarter horsepower would be entered as .75, and one-and-a-half horsepower would be entered as 1.5.

HELP (75)

Security lighting is outdoor lighting which stays on EVERY NIGHT for most of the nighttime hours. Enter a zero "0" if you use outdoor lighting for only a few hours a night, or the lighting is controlled by movement (motion sensing).

HELP (77)

Average size pools use a 1 horsepower filter pump motor. If the pool at your household is much larger than the average pool, the motor horsepower will be larger (i.e., 1.5 or 2 horsepower).



78.	How many HOURS PER DAY do you run your pool filter?	HELP (78) The recommended running time for pool filter motors is 8 to 10 HOURS PER DAY. An easy way to get this answer is by checking the timer which turns the pool filter motor on and		
79.	How many HOURS PER DAY do you run your pool sweep? (Enter a zero "0" if your pool does not have a pool sweep.)			
80.	If you heat your swimming pool, what type of fuel do you use to heat it?	off. grungs/skeudy ed nelsteng		
Waterbed i	 Natural gas Solar with natural gas backup Electric Solar with electric backup Not heated/No pool 	24. Is fluorescent lighting findly fluorescent light builbs] used most of your houselve or o		
81.	If you heat your pool, do you heat it 7 days a week or just on weekends?	7.5. If you have landscape or or		
	 7 Days a week Weekends only 3. Not heated/No pool	nov seet volled vnem worl		
82.	Do you cover your swimming pool when not in use?	HELP (83)		
	1. Yes 2. No 3. No pool	A spa can also be called a "Jacuzzi" or "hot tub." DO NOT INCLUDE the use of whirlpool		
83. Vilmsi tuoy ni (Entel à 900)	If your home has a spa (hot tub), how many HOURS PER WEEK do you use it? (Enter a zero "0" if you do not have a spa or if your spa and pool use the same filter pump and skip to question 90.)	bath tub systems. The average spa filter motor should run 2 to 3 hours per day. An easy way to check this is by observing the run time setting on the spa filter timer and counting the		
84. tw prijugit no em to trom to	Indicate the SEASONS OF THE YEAR when you run your spa. (Enter a one "1" by the season in which you run your spa MOST OF THE TIME and a two "2" by the season when you rarely or never run your spa	number of hours between the time it turns the filter on and the time it turns it off.		
	 Yes – spa is used during this season No – spa is not used during this season 	HELP (85)		
70.	Spring (March through May) Summer (June through August) Fall (September through November) Winter (December through February)	you or the members of your household use the spa.		
85.	How many HOURS PER WEEK do you use your spa or hot tub?	HELP (86) Count the number of DAYS PER WEEK your		
.68 repower and the repower are file. 1.5 or	How many DAYS PER WEEK is your spa heated for use? (Enter "7" if it is heated continuously; enter a zero "0" if you do not have a spa or if you don't heat it.)	spa heater thermostat is turned up to the temperature you normally use. For example, if you turn the thermostat up twice a week to use the spa, enter a "2."		
87.	How many HOURS PER DAY is your spa heated? (Enter "24" if it is heated all the time, or zero "0" if you do not have a spa or if you have a spa but don't heat it.)	HELP (87) On those days that you heat your spa, how		
	5 Topque 10 Rice	many hours is your heater thermostat turned up to the temperature you normally use?		



_ 88.	Where is your spa located?		Vehicle #Gull-distrant generally
	 Outside ABOVE the ground Outside IN the ground Indoor ON the floor 	Indoor IN the floor No spa	9 6. 1 NUMBER Hills Briver
89.	Does your spa use an insulated	cover when not in use?	98.1 Average number of r
yeli	1. Yes 2. No	3. No spa	99.1 Type of fuel used
90.	What type of fuel is used to hea	at your spa?	1. Gasoline 2. C
	Natural gas Electricity Propane	4. Solar w/gas backup5. Solar w/electric backup6. Spa not heated/No spa	Vehicle #2 - If you do not have
er A	Appliances		97.2 Average number of r
91.	If you use any of the following	pieces of equipment on a REGU R WEEK that they are used. Enter	LAR BASIS, please indicate the razero "0" if you do not use a
	Electric blankets Aquarium/Terrarium Humidifier Outdoor gas lighting	Electric welder Portable/ceiling fan Whole house/Attic fan Electric kiln	HELP (91) The key word in this question is "regular." If an appliance is used only now and then, do not
	Power saw Drill press	Portable electric space heater Kerosene space heater Gas fireplace	include it here.
92.	Does your home use a water v	A wate	(92) r well pump is normally used to pur from a well on your property. If you
ıdsc	aping	have a	water well pump that is on a separate meter, enter two "2."
93.	your home?	ees provide shading for the west	
	Yes 2. No Do you use a drip irrigation sy	rstem, automatic controls, low w refficient methods in your yard's	ater use trees, shrubs and landscape?
94.	ground covers, or other water		The state of the s
94.			SVSC - SV
			HELP (95) Enter the number of vehicles y household uses ON A REGULA BASIS throughout the year.



Vehicle #1	moral filter?				
96.1	Average miles driven per day HELP (97.1)	200 r			
97.1	Average number of miles per gallon (mpg) If this is an electric, natural of	gas, o			
98.1	98.1 Average number of riders per trip (include driver as 1 rider) propane-powered veh				
99.1	Type of fuel used "0" for miles per gallon (mpg).				
	1. Gasoline 2. Diesel 3. Electric 4. Natural gas 5. Propane				
Vehicle #2	2 – If you do not have a second vehicle, go to question 100.				
96.2	2 Average miles driven per day				
97.2	2 Average number of miles per gallon (mpg)				
98.2	2 Average number of riders per trip (include driver as 1 rider)				
99.2	2 Type of fuel used AUDEM is no mamplupe to repell provide the second with second visit second v				
. 6 Studios	1. Gasoline 2. Diesel 3. Electric 4. Natural gas 5. Propane				
	Z. NO 3. NO pool proposition and an analysis of the sound				
	3 – If you do not have a third vehicle, go to question 100.				
	Average miles driven per day				
	Average number of miles per gallon (mpg)				
98.3	Average number of riders per trip (include driver as 1 rider)				
99.3	Type of fuel used				
g of besu vill	1. Gasoline 2. Diesel 3. Electric 4. Natural gas 5. Propane				
Vehicle #4	4 – If you do not have a fourth vehicle, go to question 100.				
96.4	4 Average miles driven per day				
97.4	4 Average number of miles per gallon (mpg)				
98.4	Average number of riders per trip (include driver as 1 rider)				
99.4	4 Type of fuel used				
	1. Gasoline 2. Diesel 3. Electric 4. Natural gas 5. Propane				
.86	 How Many DAIS PERSYMERKS VALUE SET SET SET STATE TO THE MANY SET STATE SET STATES TO THE SET OF THE SET STATES SET SET SET SET SET SET SET SET SET	p to			
Vehicle #5	5 – If you do not have a fifth vehicle, go to question 100.				
96.5	5 Average miles driven per day				
97.5	5 Average number of miles per gallon (mpg)				
98.5	5 Average number of riders per trip (include driver as 1 rider)				
99.5	5 Type of fuel used and any analysis of process of the process of the second se				
	1. Gasoline 2. Diesel 3. Electric 4. Natural gas 5. Propane				



Does your household regularly use "ridesharing" or other energy-saving methods (such as bicycling, walking or public transportation) when commuting to work or to school?
 Yes
 No

Recycling

101.	Does your family regularly recycle glass?				
	1. Yes	2. No	3. Don't use glass		
102.	Does your far	mily regularly re	cycle paper?		
	1. Yes	2. No	3. Don't use paper		
103.	Does your far	Does your family regularly recycle aluminum cans?			
	1. Yes	2. No	3. Don't use aluminum cans		
104.	Does your fai	mily regularly re	ecycle plastic?		
	1. Yes	2. No	3. Don't use plastic		
105.	Does your family regularly recycle steel ("tin") cans?				
	1. Yes	2. No .	3. Don't use steel cans		
106.	Does your fa antifreeze?	mily regularly re	ecycle vehicle fluids such as motor oil, transmission fluid and		
	1. Yes	2. No	3. Don't use		
107.	Does your household regularly recycle (compost) yard waste?				
	1. Yes	2. No	3. No yard		
108.	Does your household regularly purchase products made from recycled materials?				
	1. Yes	2. No			

Printing Your Report

109.	In which language would you like your report printed?		
	1. English	2. Spanish	



SUMMARY TABLE FOR COMPLETED LOAD IMPACT STUDY

3/23/95

SOUTHERN CALIFORNIA EDISON

- 1993 In Concert with the Environment Program Impact Evaluation Study. Measurement & Evaluation Study #508(B)
- 2. In Concert with the Environment Program (ICWE) 1993. Edison's ICWE Program is designed to educate high school students and their households about energy efficiency, resource management and the positive environmental results from efficient energy use. The participant students complete an energy use survey at home and process the collected data through a bill disaggregation software program. The students get back the bill disaggregation results in a report called the EcoWatt Benefit report which has household specific energy efficiency recommendations. In this way the level of involvement of the household in the energy audit process is significant.
- 3. All end uses combined.
- 4. Impact (A) Study type.
- 5. Estimation of net energy savings is based on a variant of Conditional Demand Analysis that uses a 12-month change formulation. The regression analysis yields what is classified as difference of differences approach results as defined in Table 5 of the California Measurement and Evaluation Protocols.
- 6. Participants are defined to be all participating students' households in the 1993 ICWE program year.
- 7. Results are based on 1,253 participants and 1,369 non-participants. The participant group comes from a 2,772 students program database that was merged with SCE's billing records to produce good matches for the billing analysis. The non-participant sample comes from a Measurement and Evaluation study on the Residential Mail Audit Program.
- 8. Billing data was used along with weather data and demographic information for both participant and non-participant groups.
- 9. The results of the study indicate that participation in the program led to 334 kWh savings/year, with \pm 1 standard deviation confidence band to be between 431 kWh and 246 kWh per year.
- Results of this study will be used as Edison's new estimate of the per savings of the ICWE Program participant.

STUDY DOCUMENTATION

Southern California Edison, Study 508 (B)

1993 In Concert with Environment Impact

Evaluation Study

A. DATABASE MANAGEMENT:

The study used a program database provided by Eco Group, Inc. for the 1993 program year. The machine readable text data was matched with the Company's billing records to get the billing histories. The match was based on students' last name, street address, city, zip code and, where available, service account numbers. Each premise was assigned a weather station based on zip codes to extract weather data from the Company's weather database. The program database was used to get information on demographics and appliance stock for the participants. The appliance stock information in SCE's customer database was matched with program data information for validation purposes.

B. DATA SCREENING AND ANALYSIS CRITERIA

Only unique premise numbers were selected which had a sufficient billing history. This process produced 1253 unique premise numbers with 36 months billing histories starting from January 1992 to December 1994. The analysis was based on first computing differences in average monthly energy consumption by participants and non-participants and then comparing the change in consumption between 1992 and 1994 between the participant and non-participant groups.

C. DATA INTERPRETATION:

The net energy savings estimate was computed after accounting for changes in consumption due to changes in factors such as cooling and heating degree days, square footage, and the number of occupants in the house. In addition, the analysis controlled for differences in weather zones to which the participant and non-participant household belong and also for ownership status of the house. After controlling for these differences a net estimate of 334 kWh is obtained.