February 28, 2014

VIA E-MAIL & U.S. MAIL

Jonathan Bishop, Chief Deputy Director
State Water Resources Control Board
1001 I Street
P.O. Box 2815
Sacramento, CA 95812-2815
jsbishop@waterboards.ca.gov

RE: Report On Reduced Cooling Water Intake Flows At San Onofre Nuclear Generating Station (SONGS)

Dear Mr. Bishop,

Southern California Edison Company (SCE) is responding to your January 8, 2014 letter seeking additional information to support SCE's request for further review of the Large Organism Exclusion Device (LOED) requirement and an exemption from the special studies requirement of the Statewide Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling (Policy). SCE's request was made as a result of the cessation of normal operations at SONGS.

Pursuant to Water Code section 13383, the State Water Resources Control Board (SWRCB) requested that SCE provide (1) further analysis and supporting documentation for the basis of the 96 percent reduction in intake flows and the 0.1 feet per second (fps) though-screen intake velocity and (2) additional information on the spent fuel pool island alternative, including projected milestones and completion dates for any studies planned or underway. In addition to the requested information, SCE is providing an update on its continued monitoring of marine mammal and turtle entrainment since significantly reducing intake flows.

Reduction Of Intake Flows And Through-Screen Intake Velocity at SONGS

In response to the SWRCB's request to demonstrate the approximate 96 percent reduction in intake flows, SCE is providing, as Attachment A, copies of Discharge Monitoring Reports (DMRs) that were submitted to the San Diego Regional Water Quality Control Board for the period September to December 2013. These DMRs are required for compliance with SONGS' existing National Pollution Discharge Elimination System (NPDES) permits.

Additionally, SCE is submitting Attachment B, an engineering analysis titled "Explanation and Development of Data for Ocean Water Use and Flow Rate Graph" to demonstrate the approximate 0.1 fps through-screen intake velocity at SONGS. The analysis provides the assumptions and methodology for SCE's calculation of the through-screen intake velocity.

Together, these Attachments provide the substantiation requested by the SWRCB to permit an exemption from the Policy requirement to complete special studies, as set forth in Policy section 3.D. Therefore, SCE respectfully requests that the SWRCB formalize SCE's exemption from Policy section 3.D.

Information On The Spent Fuel Pool Island Alternative

On January 31, 2014, SCE and the other SONGS co-owners announced core principles for SONGS' decommissioning (please visit http://www.songscommunity.com for more details). SCE is determined to complete the safe decommissioning of SONGS as expeditiously and cost efficiently as possible. SCE's immediate goal is to safely move the plant's spent fuel, now cooling in pools, into dry cask storage as quickly and carefully as possible until the federal government creates the long-term storage option that it has committed to implement. As part of SCE's efforts to study options to move spent fuel into dry cask storage, SCE has been investigating a spent fuel pool island alternative.

To date, SCE has issued a request for information (RFI) on spent fuel pool islanding for information and planning purposes. The decision regarding whether to install an "island" is still under review and is being balanced against other options for expediting the removal of nuclear fuel from the spent fuel pools to dry cask storage. By mid-2014, SCE expects to have gathered sufficient information to make a determination of whether or not spent fuel islanding may become part of the decommissioning process.

Irrespective of whether the spent fuel pool island alternative is implemented, SONGS will continue to require ocean water for dilution pursuant to SONGS' NPDES permit requirements. Therefore, to support SCE's request for a LOED exemption, SCE requests to continue the evaluation of the effects of the reduced intake flows and through-screen intake velocities on marine mammal and turtle entrainment at SONGS as discussed below.

Continued Monitoring Of Marine Mammal And Turtle Entrainment At SONGS

SCE requests the SWRCB to extend the current suspension of the LOED requirement in light of the reduced intake flows and through-screen intake velocity at SONGS. This suspension will allow SCE to continue to monitor the intake of marine mammals and turtles. Continued monitoring will provide valuable data that will demonstrate the combined effect of reduced intake flow rates and through-screen intake velocity on the entrainment of large marine organisms over the course of a year. In December 2014, SCE proposes to submit a Marine Mammal and Turtle Entrainment Report to the SWRCB documenting the results of SCE's monitoring activities. Based on the results of that report, SCE requests the SWRCB make a final determination regarding SCE's LOED requirement for SONGS.

To support our proposal, SCE continues to perform daily observations of the forebays to look for marine mammals and turtles that may have been entrained by SONGS Unit 2 and Unit 3 intake conduits. Previously, reports were only generated when a marine mammal or turtle was present in the forebays, however, SONGS is now recording the results of all daily inspections. These daily marine mammal inspection logs are included as Attachment C.

As of the date of this letter, no large organisms have been observed in the plant since SONGS shut down the main circulation pumps in October 2013. This information is substantiated in letter reports to the National Marine Fisheries Service, which is included as Attachment D.

We appreciate your review of the enclosed information and consideration of our request. If you have any questions regarding this submittal, please do not hesitate to contact me at (626) 302-9732 or Brandon Blevins at (626) 302-9465.

Sincerely,

R. David Asti
Principal, Corporate Environmental Policy

Attachment A: SONGS Discharge Monitoring Reports as submitted to the San Diego Regional Water Quality Control Board

Attachment B: Explanation and Development of Data for the Ocean Water Use and Flow Rate Graph

Attachment C: Daily Marine Mammal Inspection Logs at SONGS

Attachment D: Marine Mammal Stranding Letters to the National Marine Fisheries Service Oct 2013 – Feb 2014

cc (electronic): Marleigh Wood, SWRCB Senior Staff Counsel
David Barker, San Diego Regional Water Quality Control Board
Shuka Rastegarpour, SWRCB Environmental Scientist
Caroline Choi, SCE Vice President Integrated Planning & Environmental Affairs
Dawn Wilson, SCE Director of Environmental Affairs
Brandon Blevins, SCE Environmental Affairs Senior Analyst
Colin Lennard, SCE Director and Managing Attorney
Linda Anabtawi, SCE Senior Attorney
Kim Anthony, SCE Environmental Project Manager
Tom Palmisano, SCE, Vice President of Nuclear Engineering
Robert Sholler, SCE, Director of Shutdown Plant Manager
Ed Avella, SCE, Director of Decommissioning Initial Activities

Attachment A

SONGS Discharge Monitoring Reports as submitted to the San Diego Regional Water Quality Control Board

SOUTHERN CALIFORNIA
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February 26, 2013

Mr. David Gibson
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Ct. Suite 100
San Diego, California 92123
IC: 13-0086.01

SUBJECT: NPDES January 2013 Discharge Monitoring Report
San Onofre Nuclear Generating Station, Unit 2

Dear Mr. Gibson:

SCE submits the subject report in accordance with the requirements of Order No. R9-2005-0005 (NPDES Permit No. CA0108073). All sampled water sources were found to be within permit limits. The attached discharge monitoring reports are in the format you requested in your January 7, 2008 letter.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Mary Jane Johnson
Manager, Site Support Services

Enclosure(s)

cc: State Water Resources Control Board

P.O. BOX 128
SAN CLEMENTE, CA 92672

Southern California Edison Monthly Report

Facility : Songs Unit 2
Order No : R9-2005-0005
Report Freq : Monthly
Report For : January 2013
Report Due : Mar 01, 2013
Waste Stream : Combined Discharge Low Volume Waste

Exact Sample Point : Points of Discharge
Collected By : Songs Envir Grp
Analyzed By : Songs Envir Grp
Signed :
Title : Environmental Engineer

Parameter : Flow Rate
Units : Million Gallons per Day (MGD)

Date	Combined Discharge	Circ Water Intake	Total Low Volume Waste	Total Sewage Treatment	In Plant Waste
1	888.863	888.739	0.120	0.004	0.124
2	819.012	818.878	0.120	0.014	0.134
3	609.426	609.293	0.120	0.013	0.133
4	609.428	609.293	0.120	0.015	0.135
5	842.347	842.165	0.175	0.007	0.182
6	888.864	888.739	0.120	0.005	0.125
7	884.676	884.539	0.120	0.017	0.137
8	863.678	863.539	0.120	0.019	0.139
9	863.676	863.539	0.120	0.017	0.137
10	863.673	863.539	0.120	0.014	0.134
11	882.610	882.439	0.155	0.016	0.171
12	888.867	888.739	0.120	0.008	0.128
13	888.863	888.739	0.120	0.004	0.124
14	884.670	884.539	0.120	0.011	0.131
15	914.193	913.939	0.239	0.015	0.254
16	914.078	913.939	0.120	0.019	0.139
17	914.075	913.939	0.120	0.016	0.136
18	876.276	876.139	0.120	0.017	0.137
19	863.780	863.539	0.233	0.008	0.241
20	863.711	863.539	0.167	0.005	0.172
21	872.071	871.939	0.120	0.012	0.132
22	679.311	679.154	0.140	0.017	0.157
23	888.871	888.739	0.120	0.012	0.132
24	889.001	888.739	0.248	0.014	0.262
25	888.876	888.739	0.120	0.017	0.137
26	888.918	888.739	0.169	0.010	0.179
27	888.869	888.739	0.120	0.010	0.130
28	888.874	888.739	0.120	0.015	0.135
29	888.888	888.739	0.120	0.029	0.149
30	888.882	888.739	0.120	0.023	0.143
31	889.066	888.739	0.311	0.016	0.327
Avg	857.303	857.145	0.144	0.014	0.158
Reqt	1286.900		11.610	0.145	

SOUTHERN CALIFORNIA
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March 22, 2013

Mr. David Gibson
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Ct. Suite 100
San Diego, California 92123
IC: 13-0086.01

SUBJECT: NPDES February 2013 Discharge Monitoring Report
San Onofre Nuclear Generating Station, Unit 2

Dear Mr. Gibson:

SCE submits the subject report in accordance with the requirements of Order No. R9-2005-0005 (NPDES Permit No. CA0108073). All sampled water sources were found to be within permit limits. The attached discharge monitoring reports are in the format you requested in your January 7, 2008 letter.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Mary Jane Johnson
Manager, Site Support Services

Enclosure(s)

cc: State Water Resources Control Board

P.O. BOX 128
SAN CLEMENTE, CA 92672

Southern California Edison Monthly Report

Facility: SONGS Unit 2 — **Exact Sample Point:** Point of Discharge
Order No: R9-2005-0005
Report Freq: Monthly — **Collected By:** SONGS Environmental Group
Report For: February 2013 — **Analyzed By:** SONGS EPG/Sierra Analytical
Report Due: April 1, 2013
Waste Stream: Combined Discharge (Low Volume Waste) — **Title:** Environmental Engineer

Parameter: Flow Rate
Units: Millions Gallons per Day (MGD)

Date	Combined Discharge	Cir Water Intake	Total Low Volume Waste	Total Sewage Treatment	In Plant Waste
1	888.874	888.739	0.123	0.012	0.135
2	888.982	888.739	0.236	0.007	0.243
3	890.979	890.839	0.133	0.007	0.140
4	888.882	888.739	0.133	0.010	0.143
5	891.214	891.068	0.133	0.013	0.146
6	888.883	888.739	0.133	0.011	0.144
7	888.934	888.739	0.182	0.013	0.195
8	888.884	888.739	0.133	0.012	0.145
9	888.880	888.739	0.133	0.008	0.141
10	889.113	888.739	0.370	0.004	0.374
11	888.883	888.739	0.133	0.011	0.144
12	888.985	888.739	0.228	0.018	0.246
13	888.920	888.739	0.158	0.023	0.181
14	888.944	888.739	0.191	0.014	0.205
15	888.897	888.739	0.133	0.025	0.158
16	888.878	888.739	0.133	0.006	0.139
17	888.908	888.739	0.162	0.007	0.169
18	888.916	888.739	0.133	0.044	0.177
19	891.249	891.068	0.133	0.048	0.181
20	888.978	888.739	0.190	0.049	0.239
21	888.897	888.739	0.133	0.025	0.158
22	888.986	888.739	0.233	0.014	0.247
23	888.970	888.739	0.225	0.006	0.231
24	888.953	888.739	0.209	0.005	0.214
25	889.410	888.739	0.661	0.010	0.671
26	889.672	888.739	0.921	0.012	0.933
27	889.153	888.739	0.402	0.012	0.414
28	889.156	888.739	0.406	0.011	0.417
Avg	889.228	888.981	0.232	0.016	0.248
Reqt	1286.900		11.610	0.145	

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April 29, 2013

Mr. David Gibson
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Ct. Suite 100
San Diego, California 92123
IC: 13-0086.01

SUBJECT: NPDES March 2013 Discharge Monitoring Report
San Onofre Nuclear Generating Station, Unit 2

Dear Mr. Gibson:

SCE submits the subject report in accordance with the requirements of Order No. R9-2005-0005 (NPDES Permit No. CA0108073). All sampled water sources were found to be within permit limits. The attached discharge monitoring reports are in the format you requested in your January 7, 2008 letter.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Mary Jane Johnson
Manager, Site Support Services

Enclosure(s)

cc: State Water Resources Control Board

P.O. Box 128
San Clemente, CA 92672

Southern California Edison Monthly Report

Facility: SONGS Unit 2
Exact Sample Point: Point of Discharge
Order No: R9-2005-0005
Report Freq: Monthly
Collected By: SONGS Environmental Group
Report For: March 2013
Analyzed By: SONGS EPG/Sierra Analytical
Report Due: May 1, 2013
Waste Stream: Combined Discharge (Low Volume Waste)
Title: Environmental Engineer

Parameter: **Flow Rate**
Units: **Millions Gallons per Day (MGD)**

Date	Combined Discharge	Cir Water Intake	Total Low Volume Waste	Total Sewage Treatment	In Plant Waste
1	888.952	888.739	0.205	0.008	0.213
2	888.954	888.739	0.213	0.002	0.215
3	889.113	890.839	0.370	0.004	0.374
4	888.956	888.739	0.205	0.012	0.217
5	888.962	888.739	0.213	0.010	0.223
6	888.955	888.739	0.206	0.010	0.216
7	888.830	888.739	0.078	0.013	0.091
8	876.230	876.139	0.078	0.013	0.091
9	886.744	886.639	0.099	0.006	0.105
10	888.825	888.739	0.084	0.002	0.086
11	888.831	888.739	0.084	0.008	0.092
12	888.827	888.739	0.084	0.004	0.088
13	888.836	888.739	0.084	0.013	0.097
14	888.835	888.739	0.084	0.012	0.096
15	888.832	888.739	0.084	0.009	0.093
16	889.022	888.739	0.280	0.003	0.283
17	888.826	888.739	0.084	0.003	0.087
18	888.819	888.739	0.077	0.003	0.080
19	97.044	96.974	0.070	0.000	0.070
20	50.470	50.400	0.070	0.000	0.070
21	120.332	120.262	0.070	0.000	0.070
22	888.809	888.739	0.070	0.000	0.070
23	888.809	888.739	0.070	0.000	0.070
24	888.809	888.739	0.070	0.000	0.070
25	888.809	888.739	0.070	0.000	0.070
26	888.809	888.739	0.070	0.000	0.070
27	888.809	888.739	0.070	0.000	0.070
28	888.814	888.739	0.075	0.000	0.075
29	888.859	888.739	0.120	0.000	0.120
30	888.875	888.739	0.136	0.000	0.136
31	873.109	872.989	0.12	0.000	0.12
Avg	810.507	888.981	0.118	0.005	0.123
Reqt	1286.900		11.610	0.145	

SOUTHERN CALIFORNIA
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May 24, 2013

Mr. David Gibson
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Ct. Suite 100
San Diego, California 92123
IC: 13-0086.01

SUBJECT: NPDES April 2013 Discharge Monitoring Report
San Onofre Nuclear Generating Station, Unit 2

Dear Mr. Gibson:

SCE submits the subject report in accordance with the requirements of Order No. R9-2005-0005 (NPDES Permit No. CA0108073). All sampled water sources were found to be within permit limits. The attached discharge monitoring reports are in the format you requested in your January 7, 2008 letter.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Mary Jane Johnson
Manager, Site Support Services

Enclosure(s)

cc: State Water Resources Control Board

P.O. Box 128
San Clemente, CA 92672

Southern California Edison Monthly Report

Facility:	SONGS Unit 2	Exact Sample Point:	Point of Discharge
Order No:	R9-2005-0005		
Report Freq:	Monthly	Collected By:	SONGS Environmental Group
Report For:	April 2013	Analyzed By:	SONGS EPG/Sierra Analytical
Report Due:	June 1, 2013		
Waste Stream:	Combined Discharge (Low Volume Waste)	Title:	Environmental Engineer

Parameter: Flow Rate
Units: Millions Gallons per Day (MGD)

Date	Combined Discharge	Cir Water Intake	Total Low Volume Waste	Total Sewage Treatment	In Plant Waste
1	880.409	880.339	0.070		
2	888.809	888.739	0.070		
3	846.809	846.739	0.070		
4	838.409	838.339	0.070		
5	838.409	838.339	0.070		
6	857.419	857.239	0.180		
7	888.827	888.739	0.088		
8	872.009	871.939	0.070		
9	888.809	888.739	0.070		
10	874.109	874.039	0.070		
11	863.609	863.539	0.070		
12	863.609	863.539	0.070		
13	863.668	863.539	0.129		
14	863.642	863.539	0.103		
15	863.609	863.539	0.070		
16	838.409	838.339	0.070		
17	55.959	55.889	0.070		
18	0.070	0	0.070		
19	61.344	61.274	0.070		
20	592.563	592.493	0.070		
21	609.472	609.293	0.149	0.018	0.012
22	609.480	609.293	0.140	0.035	0.012
23	609.446	609.293	0.120	0.021	0.012
24	609.571	609.293	0.238	0.028	0.012
25	609.570	609.293	0.232	0.033	0.012
26	609.571	609.293	0.233	0.033	0.012
27	609.443	609.293	0.120	0.018	0.012
28	609.439	609.293	0.120	0.015	0.011
29	609.490	609.293	0.152	0.034	0.011
30	609.450	609.293	0.120	0.037	0.000
Avg	687.848	687.727	0.108	0.027	0.011
Reqt	1286.900		11.610	0.145	

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

July 26, 2013

Mr. David Gibson
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Ct. Suite 100
San Diego, California 92123
IC: 13-0086.01

SUBJECT: NPDES May 2013 Discharge Monitoring Report
San Onofre Nuclear Generating Station, Unit 2

Dear Mr. Gibson:

SCE submits the subject report in accordance with the requirements of Order No. R9-2005-0005 (NPDES Permit No. CA0108073). All sampled water sources were found to be within permit limits. The attached discharge monitoring reports are in the format you requested in your January 7, 2008 letter.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Mary Jane Johnson
Manager, Site Support Services

Enclosure(s)

cc: State Water Resources Control Board

P. O. Box 128
San Clemente, CA 92674-0128

Southern California Edison Monthly Report

Facility:	SONGS Unit 2	Exact Sample Point:	Point of Discharge
Order No:	R9-2005-0005		
Report Freq:	Monthly	Collected By:	SONGS Environmental Group
Report For:	May 2013	Analyzed By:	SONGS EPG/Sierra Analytical
Report Due:	July 1, 2013		
Waste Stream:	Combined Discharge (Low Volume Waste)	Title:	Environmental Engineer

Parameter: Flow Rate
Units: Millions Gallons per Day (MGD)

Date	Combined Discharge	Cir Water Intake	Total Low Volume Waste	Total Sewage Treatment	In Plant Waste
1	607.313	607.193	0.120	0.000	0.000
2	609.413	609.293	0.120	0.000	0.000
3	539.609	539.431	0.178	0.000	0.000
4	12.670	12.600	0.070	0.000	0.000
5	0.070	0.000	0.070	0.000	0.000
6	0.070	0.000	0.070	0.000	0.000
7	0.070	0.000	0.070	0.000	0.000
8	0.070	0.000	0.070	0.000	0.000
9	0.070	0.000	0.070	0.000	0.000
10	0.070	0.000	0.070	0.000	0.000
11	0.070	0.000	0.070	0.000	0.000
12	0.070	0.000	0.070	0.000	0.000
13	0.070	0.000	0.070	0.000	0.000
14	0.070	0.000	0.070	0.000	0.000
15	0.070	0.000	0.070	0.000	0.000
16	0.070	0.000	0.070	0.000	0.000
17	0.070	0.000	0.070	0.000	0.000
18	0.070	0.000	0.070	0.000	0.000
19	0.070	0.000	0.070	0.000	0.000
20	42.070	42.000	0.070	0.000	0.000
21	655.937	655.867	0.070	0.000	0.000
22	656.129	655.867	0.250	0.012	0.000
23	609.440	609.293	0.120	0.014	0.013
24	609.569	609.293	0.250	0.013	0.013
25	609.432	609.293	0.120	0.006	0.013
26	609.433	609.293	0.120	0.007	0.013
27	632.718	632.58	0.120	0.005	0.013
28	702.588	702.442	0.120	0.013	0.013
29	795.735	795.590	0.120	0.012	0.013
30	810.628	810.478	0.120	0.017	0.013
31	865.896	865.639	0.228	0.016	0.013
Avg	302.246	302.134	0.105	0.004	0.004
Reqt	1287.000		11.610	0.145	

SOUTHERN CALIFORNIA
EDISON
An EDISON INTERNATIONAL Company

July 25, 2013

Mr. David Gibson
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Ct. Suite 100
San Diego, California 92123
IC: 13-0086.01

SUBJECT: NPDES June 2013 Discharge Monitoring Report
San Onofre Nuclear Generating Station, Unit 2

Dear Mr. Gibson:

SCE submits the subject report in accordance with the requirements of Order No. R9-2005-0005 (NPDES Permit No. CA0108073). All sampled water sources were found to be within permit limits. The attached discharge monitoring reports are in the format you requested in your January 7, 2008 letter.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Brian D. Metz
Manager, Environmental

Enclosure(s)

cc: State Water Resources Control Board

P. O. Box 128
San Clemente, CA 92674-0128

Southern California Edison Monthly Report

Facility: SONGS Unit 2 — Exact Sample Point: Point of Discharge
Order No: R9-2005-0005
Report Freq: Monthly — Collected By: SONGS Environmental Group
Report For: June 2013 — Analyzed By: SONGS EPG/Sierra Analytical
Report Due: August 1, 2013
Waste Stream: Combined Discharge (Low Volume Waste) — Title: Environmental Engineer

Parameter: Flow Rate
Units: Millions Gallons per Day (MGD)

Date	Combined Discharge	Cir Water Intake	Total Low Volume Waste	Total Sewage Treatment	In Plant Waste
1	889.057	888.739	0.295	0.010	0.013
2	888.880	888.739	0.120	0.008	0.013
3	888.888	888.739	0.120	0.016	0.013
4	888.887	888.739	0.120	0.015	0.013
5	888.887	888.739	0.120	0.015	0.013
6	888.889	888.739	0.120	0.017	0.013
7	888.878	888.739	0.120	0.006	0.013
8	876.279	876.139	0.120	0.007	0.013
9	863.680	863.539	0.120	0.008	0.013
10	876.283	876.139	0.120	0.011	0.013
11	863.689	863.539	0.120	0.017	0.013
12	863.684	863.539	0.120	0.012	0.013
13	865.746	865.639	0.078	0.016	0.013
14	880.434	880.339	0.070	0.012	0.013
15	492.935	492.857	0.070	0.003	0.005
16	213.480	213.41	0.070		
17	69.370	69.300	0.070		
18	44.170	44.100	0.070		
19	33.670	33.600	0.070		
20	25.270	25.200	0.070		
21	25.270	25.200	0.070		
22	215.801	215.698	0.103		
23	609.363	609.293	0.070		
24	609.377	609.293	0.070	0.004	0.010
25	609.440	609.293	0.120	0.015	0.012
26	609.390	609.293	0.070	0.015	0.012
27	609.478	609.293	0.160	0.013	0.012
28	609.471	609.293	0.151	0.015	0.012
29	609.398	609.293	0.091	0.007	0.007
30	609.470	609.293	0.170	0.007	0.000
Avg	610.250	610.125	0.109	0.011	0.011
Reqt	1287.000		11.610	0.145	

SOUTHERN CALIFORNIA
EDISON
An EDISON INTERNATIONAL Company

August 20, 2013

Mr. David Gibson
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Ct. Suite 100
San Diego, California 92123
IC: 13-0086.01

SUBJECT: NPDES July 2013 Discharge Monitoring Report
San Onofre Nuclear Generating Station, Unit 2

Dear Mr. Gibson:

SCE submits the subject report in accordance with the requirements of Order No. R9-2005-0005 (NPDES Permit No. CA0108073). All sampled water sources were found to be within permit limits. The attached discharge monitoring reports are in the format you requested in your January 7, 2008 letter.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Brian D. Metz
Manager, Environmental

Enclosure(s)

cc: State Water Resources Control Board

P.O. Box 128
San Clemente, CA 92674-0128

Southern California Edison Monthly Report

Facility: SONGS Unit 2 Exact Sample Point: Point of Discharge
Order No: R9-2005-0005
Report Freq: Monthly Collected By: SONGS Environmental Group
Report For: July 2013 Analyzed By: SONGS EPG/Sierra Analytical
Report Due: September 1, 2013
Waste Stream: Combined Discharge (Low Volume Waste) Title: Environmental Engineer

Parameter: Flow Rate
Units: Millions Gallons per Day (MGD)

Date	Combined Discharge	Cir Water Intake	Total Low Volume Waste	Total Sewage Treatment	In Plant Waste
1	609.533	609.293	0.214	0.014	0.012
2	609.441	609.293	0.120	0.016	0.012
3	609.488	609.293	0.167	0.016	0.012
4	609.523	609.293	0.209	0.009	0.012
5	609.434	609.293	0.120	0.009	0.012
6	609.434	609.293	0.120	0.009	0.012
7	609.611	609.293	0.297	0.006	0.013
8	609.434	609.293	0.120	0.008	0.013
9	609.533	609.293	0.218	0.009	0.013
10	609.435	609.293	0.120	0.009	0.013
11	609.434	609.293	0.120	0.008	0.013
12	609.452	609.293	0.140	0.006	0.013
13	609.431	609.293	0.120	0.005	0.013
14	609.431	609.293	0.120	0.005	0.013
15	609.678	609.293	0.362	0.010	0.013
16	609.481	609.293	0.165	0.010	0.013
17	609.435	609.293	0.120	0.009	0.013
18	609.521	609.293	0.204	0.011	0.013
19	609.510	609.293	0.212	0.005	0
20	609.419	609.293	0.120	0.006	0
21	609.420	609.293	0.120	0.007	0
22	609.443	609.293	0.120	0.022	0.008
23	609.453	609.293	0.138	0.009	0.013
24	607.336	607.193	0.120	0.010	0.013
25	609.436	609.293	0.120	0.010	0.013
26	609.508	609.293	0.196	0.006	0.013
27	609.432	609.293	0.120	0.006	0.013
28	609.431	609.293	0.120	0.005	0.013
29	609.434	609.293	0.120	0.008	0.013
30	609.454	609.293	0.139	0.009	0.013
31	609.436	609.293	0.120	0.01	0.013
Avg	609.401	609.225	0.156	0.009	0.011
Reqt	1287.000		11.610	0.100	

November 1, 2013

Mr. David Gibson
California Regional Water Quality Control Board
San Diego Region
2375 Northside Drive Suite 100
San Diego, California 92108-2700
IC: 13-0086.01

Subject: NPDES August 2013 Discharge Monitoring Report
San Onofre Nuclear Generating Station, Unit 2

Dear Mr. Gibson:

SCE submits the subject report in accordance with the requirements of Order No. R9-2005-0005 (NPDES Permit No. CA0108073). All sampled water sources were found to be within permit limits. The attached discharge monitoring reports are in the format you requested in your January 7, 2008 letter.

SCE understands the significance of this report and acknowledges that this report is late. This does not meet our expectations regarding reporting to the California Regional Water Quality Control Board; San Diego Region. On June 7, 2013 SCE made a decision to retire both Units 2 and 3 at the San Onofre Nuclear Generating Station. This decision resulted in a significant reduction in force and the realignment of duties at the station; this is not an excuse but an explanation for the reason this report is late.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Paul Elliott Jr
Environmental Specialist

cc: State Water Resources Control Board
Richard St Onge
Paul Elliott Jr

Southern California Edison Monthly Report

Facility: SONGS Unit 2 — **Exact Sample Point:** Point of Discharge
Order No: R9-2005-0005
Report Freq: Monthly — **Collected By:** SONGS Environmental Group
Report For: August 2013 — **Analyzed By:** SONGS EPG/Sierra Analytical
Report Due: October 1, 2013
Waste Stream: Combined Discharge (Low Volume Waste) — **Title:** Environmental Engineer

Parameter: Flow Rate
Units: Millions Gallons per Day (MGD)

Date	Combined Discharge	Cir Water Intake	Total Low Volume Waste	Total Sewage Treatment	In Plant Waste
1	609.553	609.293	0.120	0.01	0.13
2	609.545	609.293	0.120	0.006	0.126
3	609.545	609.293	0.120	0.006	0.126
4	609.543	609.293	0.120	0.005	0.125
5	596.963	596.693	0.129	0.006	0.135
6	595.011	594.593	0.205	0.004	0.209
7	584.339	584.093	0.120	0.003	0.123
8	584.341	584.093	0.120	0.004	0.124
9	584.339	584.093	0.120	0.003	0.123
10	584.343	584.093	0.120	0.005	0.125
11	609.543	609.293	0.120	0.005	0.125
12	609.899	609.293	0.293	0.01	0.303
13	584.385	584.093	0.135	0.011	0.146
14	584.357	584.093	0.120	0.012	0.132
15	586.453	586.193	0.120	0.010	0.13
16	586.625	586.193	0.204	0.012	0.216
17	592.955	592.493	0.225	0.006	0.231
18	584.345	584.093	0.120	0.006	0.126
19	584.383	584.093	0.133	0.012	0.145
20	584.355	584.093	0.120	0.011	0.131
21	584.353	584.093	0.120	0.01	0.13
22	588.553	588.293	0.120	0.010	0.13
23	584.517	584.093	0.205	0.007	0.212
24	584.517	584.093	0.206	0.006	0.212
25	584.387	584.093	0.141	0.006	0.147
26	586.479	586.193	0.133	0.01	0.143
27	584.355	584.093	0.120	0.011	0.131
28	584.555	584.093	0.222	0.009	0.231
29	584.351	584.093	0.120	0.009	0.129
30	584.345	584.093	0.120	0.006	0.126
31	584.643	584.093	0.268	0.007	0.275
Avg	590.641	590.325	0.150	0.008	0.158
Reqt	1287.000		11.610	0.100	

November 1, 2013

Mr. David Gibson
California Regional Water Quality Control Board
San Diego Region
2375 Northside Drive Suite 100
San Diego, California 92108-2700
IC: 13-0086.01

Subject: NPDES September 2013 Discharge Monitoring Report
San Onofre Nuclear Generating Station, Unit 2

Dear Mr. Gibson:

SCE submits the subject report in accordance with the requirements of Order No. R9-2005-0005 (NPDES Permit No. CA0108073). All sampled water sources were found to be within permit limits. The attached discharge monitoring reports are in the format you requested in your January 7, 2008 letter.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Paul Elliott Jr
Environmental Specialist

cc: State Water Resources Control Board
Richard St Onge
Paul Elliott Jr
K. Anthony
IDB - NPDES
CDM

Southern California Edison Monthly Report

Facility: SONGS Unit 2 — **Exact Sample Point:** Point of Discharge
Order No: R9-2005-0005
Report Freq: Monthly — **Collected By:** SONGS Environmental Group
Report For: September 2013 — **Analyzed By:** SONGS EPG/Sierra Analytical
Report Due: November 1, 2013
Waste Stream: Combined Discharge (Low Volume Waste) — **Title:** Environmental Engineer

Parameter: Flow Rate
Units: Millions Gallons per Day (MGD)

Date	Combined Discharge	Cir Water Intake	Total Low Volume Waste	Total Sewage Treatment	In Plant Waste
1	584.343	584.093	0.120	0.005	0.125
2	585.053	584.093	0.474	0.006	0.48
3	584.353	584.093	0.120	0.01	0.13
4	584.613	584.093	0.250	0.01	0.26
5	584.501	584.093	0.196	0.008	0.204
6	584.571	584.093	0.233	0.006	0.239
7	584.343	584.093	0.120	0.005	0.125
8	584.521	584.093	0.210	0.004	0.214
9	584.893	584.093	0.391	0.009	0.4
10	588.555	588.293	0.120	0.011	0.131
11	584.511	584.093	0.197	0.012	0.209
12	584.357	584.093	0.120	0.012	0.132
13	584.349	584.093	0.120	0.008	0.128
14	584.347	584.093	0.120	0.007	0.127
15	584.463	584.093	0.178	0.007	0.185
16	584.779	584.093	0.332	0.011	0.343
17	584.353	584.093	0.120	0.01	0.13
18	584.359	584.093	0.120	0.013	0.133
19	584.357	584.093	0.120	0.012	0.132
20	584.405	584.093	0.140	0.016	0.156
21	584.357	584.093	0.120	0.012	0.132
22	584.359	584.093	0.120	0.013	0.133
23	584.771	584.093	0.326	0.013	0.339
24	588.557	588.293	0.120	0.012	0.132
25	609.581	609.293	0.135	0.009	0.144
26	607.457	607.193	0.120	0.012	0.132
27	609.555	609.293	0.120	0.011	0.131
28	609.551	609.293	0.120	0.009	0.129
29	609.593	609.293	0.140	0.01	0.15
30	597.031	596.693	0.155	0.014	0.169
Avg	589.295	588.923	0.176	0.010	0.186
Reqt	1287.000		11.610	0.100	

December 1, 2013

Mr. David Gibson
California Regional Water Quality Control Board
San Diego Region
2375 Northside Drive Suite 100
San Diego, California 92108-2700
IC: 13-0086.01

Subject: NPDES October 2013 Discharge Monitoring Report
San Onofre Nuclear Generating Station, Unit 2

Dear Mr. Gibson:

SCE submits the subject report in accordance with the requirements of Order No. R9-2005-0005 (NPDES Permit No. CA0108073). All sampled water sources were found to be within permit limits. The attached discharge monitoring reports are in the format you requested in your January 7, 2008 letter.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions please contact myself at (949) 368-6375

Sincerely,

Paul Elliott Jr
Environmental Specialist

cc: State Water Resources Control Board
Andrew Martinez
Paul Elliott Jr
K. Anthony
IDB - NPDES
CDM

Southern California Edison Monthly Report

Facility: SONGS Unit 2 **Exact Sample Point:** Point of Discharge
Order No: R9-2005-0005
Report Freq: Monthly **Collected By:** SONGS Environmental Group
Report For: October 2013 **Analyzed By:** SONGS EPG/Sierra Analytical
Report Due: December 1, 2013
Waste Stream: Combined Discharge (Low Volume Waste) **Title:** Environmental Engineer

Parameter: Flow Rate
Units: Millions Gallons per Day (MGD)

Date	Combined Discharge	Cir Water Intake	Total Low Volume Waste	Total Sewage Treatment	In Plant Waste
1	25.512	25.200	0.120	0.014	0.178
2	25.514	25.200	0.120	0.013	0.181
3	25.546	25.200	0.136	0.01	0.2
4	25.515	25.270	0.120	0.005	0.12
5	25.723	25.480	0.120	0.003	0.12
6	25.443	25.200	0.120	0.003	0.12
7	26.501	25.200	0.619	0.008	0.674
8	25.513	25.200	0.120	0.006	0.187
9	50.866	50.540	0.120	0.006	0.2
10	25.531	25.235	0.120	0.006	0.17
11	25.522	25.200	0.120	0.008	0.194
12	25.478	25.200	0.120	0.003	0.155
13	25.853	25.340	0.120	0.003	0.39
14	27.314	25.340	0.968	0.004	1.002
15	25.535	25.200	0.120	0.006	0.209
16	25.483	25.200	0.120	0.005	0.158
17	25.517	25.200	0.120	0.005	0.192
18	25.474	25.200	0.120	0.005	0.149
19	25.475	25.200	0.120	0.004	0.151
20	25.508	25.200	0.120	0.002	0.186
21	26.752	25.200	0.758	0.005	0.789
22	25.512	25.200	0.120	0.006	0.186
23	25.477	25.200	0.120	0.006	0.151
24	25.516	25.200	0.120	0.011	0.185
25	25.471	25.200	0.120	0.003	0.148
26	25.468	25.200	0.120	0.002	0.146
27	25.468	25.200	0.120	0.003	0.145
28	27.964	25.200	1.360	0.006	1.398
29	25.484	25.200	0.120	0.009	0.155
30	25.524	25.200	0.120	0.01	0.194
31	25.478	25.200	0.120	0.007	0.151
Avg	26.546	26.039	0.225	0.006	0.277
Reqt	1287.000		11.610	0.100	

February 1, 2014

Mr. David Gibson
California Regional Water Quality Control Board
San Diego Region
2375 Northside Drive Suite 100
San Diego, California 92108-2700
IC: 13-0086.01

Subject: NPDES November 2013 Discharge Monitoring Report
San Onofre Nuclear Generating Station, Unit 2

Dear Mr. Gibson:

SCE submits the subject report in accordance with the requirements of Order No. R9-2005-0005 (NPDES Permit No. CA0108073). All sampled water sources were found to be within permit limits. The attached discharge monitoring reports are in the format you requested in your January 7, 2008 letter.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions please contact myself at (949) 368-6375

Sincerely,

Paul Elliott Jr
Environmental Specialist

cc: State Water Resources Control Board
Chris Ahola
Paul Elliott Jr
K. Anthony
IDB - NPDES
CDM

Southern California Edison Monthly Report

Facility: SONGS Unit 2 **Exact Sample Point:** Point of Discharge
Order No: R9-2005-0005
Report Freq: Monthly **Collected By:** SONGS Environmental Group
Report For: November 2013 **Analyzed By:** SONGS EPG/Sierra Analytical
Report Due: January 1, 2014
Waste Stream: Combined Discharge (Low Volume Waste) **Title:** Environmental Engineer

Parameter: Flow Rate
Units: Millions Gallons per Day (MGD)

Date	Combined Discharge	Cir Water Intake	Total Low Volume Waste	Total Sewage Treatment	In Plant Waste
1	25.452	25.200	0.120	0.006	0.126
2	25.450	25.200	0.120	0.005	0.125
3	33.850	33.600	0.120	0.005	0.125
4	27.411	25.200	1.102	0.005	1.104
5	25.446	25.200	0.120	0.003	0.123
6	25.446	25.200	0.120	0.003	0.123
7	25.446	25.200	0.120	0.003	0.123
8	25.444	25.200	0.120	0.002	0.122
9	25.442	25.200	0.120	0.001	0.121
10	31.744	31.500	0.120	0.002	0.122
11	25.520	25.200	0.158	0.002	0.16
12	25.444	25.200	0.120	0.002	0.122
13	25.442	25.200	0.120	0.001	0.121
14	33.884	33.600	0.141	0.001	0.142
15	33.842	33.600	0.120	0.001	0.121
16	25.446	25.200	0.120	0.003	0.123
17	25.442	25.200	0.120	0.001	0.121
18	25.952	25.200	0.371	0.005	0.376
19	25.444	25.200	0.120	0.002	0.122
20	25.450	25.200	0.120	0.005	0.125
21	25.444	25.200	0.120	0.002	0.122
22	25.442	25.200	0.120	0.001	0.121
23	25.442	25.200	0.120	0.001	0.121
24	25.444	25.200	0.120	0.002	0.122
25	26.266	25.200	0.531	0.002	0.533
26	25.444	25.200	0.120	0.002	0.122
27	25.442	25.200	0.120	0.001	0.121
28	25.444	25.200	0.120	0.002	0.122
29	25.444	25.200	0.120	0.002	0.122
30	25.440	25.200	0.120	0	0.12
Avg	26.608	26.250	0.177	0.002	0.179
Reqt	1287.000		11.610	0.100	

February 1, 2014

Mr. David Gibson
California Regional Water Quality Control Board
San Diego Region
2375 Northside Drive Suite 100
San Diego, California 92108-2700
IC: 13-0086.01

Subject: NPDES December 2013 Discharge Monitoring Report
San Onofre Nuclear Generating Station, Unit 2

Dear Mr. Gibson:

SCE submits the subject report in accordance with the requirements of Order No. R9-2005-0005 (NPDES Permit No. CA0108073). All sampled water sources were found to be within permit limits. The attached discharge monitoring reports are in the format you requested in your January 7, 2008 letter.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions please contact myself at (949) 368-6375

Sincerely,

Paul Elliott Jr
Environmental Specialist

cc: State Water Resources Control Board
Chris Ahola
Paul Elliott Jr
K. Anthony
IDB - NPDES
CDM

Southern California Edison Monthly Report

Facility: SONGS Unit 2 — **Exact Sample Point:** Point of Discharge
Order No: R9-2005-0005
Report Freq: Monthly — **Collected By:** SONGS Environmental Group
Report For: December 2013 — **Analyzed By:** SONGS EPG/Sierra Analytical
Report Due: February 1, 2014
Waste Stream: Combined Discharge (Low Volume Waste) — **Title:** Environmental Engineer

Parameter: Flow Rate
Units: Millions Gallons per Day (MGD)

Date	Combined Discharge	Cir Water Intake	Total Low Volume Waste	Total Sewage Treatment	In Plant Waste
1	25.450	25.200	0.120	0.005	0.125
2	26.008	25.200	0.399	0.005	0.404
3	33.852	33.600	0.120	0.006	0.126
4	25.450	25.200	0.120	0.005	0.125
5	25.448	25.200	0.120	0.004	0.124
6	25.448	25.200	0.120	0.004	0.124
7	25.444	25.200	0.120	0.002	0.122
8	25.446	25.200	0.120	0.003	0.123
9	25.452	25.200	0.120	0.006	0.126
10	31.748	31.500	0.120	0.004	0.124
11	25.448	25.200	0.120	0.004	0.124
12	25.448	25.200	0.120	0.004	0.124
13	25.458	25.200	0.120	0.009	0.129
14	33.850	33.600	0.120	0.005	0.125
15	33.844	33.600	0.120	0.002	0.122
16	26.046	25.200	0.419	0.004	0.423
17	25.448	25.200	0.120	0.004	0.124
18	25.448	25.200	0.120	0.004	0.124
19	25.448	25.200	0.120	0.004	0.124
20	25.446	25.200	0.120	0.003	0.123
21	25.446	25.200	0.120	0.003	0.123
22	25.442	25.200	0.120	0.001	0.121
23	25.878	25.200	0.336	0.003	0.339
24	25.444	25.200	0.120	0.002	0.122
25	25.443	25.200	0.120	0.001	0.122
26	25.443	25.200	0.120	0.002	0.121
27	25.443	25.200	0.120	0.001	0.122
28	25.445	25.200	0.120	0.002	0.123
29	25.690	25.200	0.120	0.003	0.367
30	25.689	25.200	0.365	0.002	0.122
31	25.334	25.200	0.120	0.002	0.0122
Avg	26.527	26.216	0.154	0.004	0.154
Reqt	1287.000		11.610	0.100	

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

February 26, 2013

Mr. David Gibson
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Ct. Suite 100
San Diego, California 92123
IC: 13-0086.01

SUBJECT: NPDES January 2013 Discharge Monitoring Report
San Onofre Nuclear Generating Station, Unit 3

Dear Mr. Gibson:

SCE submits the subject report in accordance with the requirements of Order No. R9-2005-0006 (NPDES Permit No. CA0108181). All sampled water sources were found to be within permit limits. The attached discharge monitoring reports are in the format requested in your January 7, 2008 letter.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Mary Jane Johnson
Manager, Site Support Services

Enclosure(s)

cc: State Water Resources Control Board

P.O. BOX 128
SAN CLEMENTE, CA 92672

Southern California Edison Monthly Report

Point of Discharge

Facility:	SONGS Unit 3
Order No:	R9-2005-0006
Report Freq:	Monthly
Report For:	January 2013
Report Due:	March 1, 2013
Waste Stream:	Combined Discharge (Low Volume Waste)

Collected By: SONGS Environmental Group
Analyzed By: SONGS EPG

Environmental Engineer

Parameter: Flow Rate
Units: Millions Gallons per Day (MGD)

Date	Combined Discharge	Cir Water Intake	Total Low Volume Waste	Total Sewage Treatment	In Plant Waste
1	888.822	888.739	0.083	0.000	0.083
2	888.822	888.739	0.083	0.000	0.083
3	888.822	888.739	0.083	0.000	0.083
4	888.822	888.739	0.083	0.000	0.083
5	912.164	912.026	0.138	0.000	0.138
6	888.822	888.739	0.083	0.000	0.083
7	888.822	888.739	0.083	0.000	0.083
8	888.822	888.739	0.083	0.000	0.083
9	888.822	888.739	0.083	0.000	0.083
10	888.822	888.739	0.083	0.000	0.083
11	888.857	888.739	0.118	0.000	0.118
12	888.822	888.739	0.083	0.000	0.083
13	888.822	888.739	0.083	0.000	0.083
14	888.822	888.739	0.083	0.000	0.083
15	888.822	888.739	0.083	0.000	0.083
16	888.822	888.739	0.083	0.000	0.083
17	888.822	888.739	0.083	0.000	0.083
18	888.822	888.739	0.083	0.000	0.083
19	888.935	888.739	0.196	0.000	0.196
20	912.156	912.026	0.130	0.000	0.130
21	882.522	882.439	0.083	0.000	0.083
22	888.842	888.739	0.103	0.000	0.103
23	882.522	882.439	0.083	0.000	0.083
24	888.822	888.739	0.083	0.000	0.083
25	888.822	888.739	0.083	0.000	0.083
26	874.171	874.039	0.132	0.000	0.132
27	865.722	865.639	0.083	0.000	0.083
28	816.848	816.778	0.070	0.000	0.070
29	50.470	50.400	0.070	0.000	0.070
30	50.470	50.400	0.070	0.000	0.070
31	50.470	50.400	0.070	0.000	0.070
Avg	805.256	805.165	0.092	0.000	0.092
Reqt	1286.900		11.610	0.145	

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

March 22, 2013

Mr. David Gibson
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Ct. Suite 100
San Diego, California 92123
IC: 13-0086.01

SUBJECT: NPDES February 2013 Discharge Monitoring Report
San Onofre Nuclear Generating Station, Unit 3

Dear Mr. Gibson:

SCE submits the subject report in accordance with the requirements of Order No. R9-2005-0006 (NPDES Permit No. CA0108181). All sampled water sources were found to be within permit limits. The attached discharge monitoring reports are in the format requested in your January 7, 2008 letter.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Mary Jane Johnson
Manager, Site Support Services

Enclosure(s)

cc: State Water Resources Control Board

P.O. BOX 128
SAN CLEMENTE, CA 92672

Southern California Edison Monthly Report

Facility : Songs Unit 3
Order No : R9-2005-0006
Report Freq : Monthly
Report For : February 2013
Report Due : Apr 01, 2013
Waste Stream : Combined Discharge Low Volume Waste

Exact Sample Point : Points of Discharge
Collected By : Songs Envir Grp
Analyzed By : Songs Envir Grp
Signed :
Title : Environmental Engineer

Parameter : Flow Rate
Units : Million Gallons per Day (MGD)

Date	Combined Discharge	Circ Water Intake	Total Low Volume Waste	Total Sewage Treatment	In Plant Waste
1	542.035	541.965	0.070	0.000	0.070
2	886.822	886.639	0.183	0.000	0.183
3	882.509	882.439	0.070	0.000	0.070
4	863.609	863.539	0.070	0.000	0.070
5	863.609	863.539	0.070	0.000	0.070
6	872.009	871.939	0.070	0.000	0.070
7	888.903	888.739	0.164	0.000	0.164
8	884.609	884.539	0.070	0.000	0.070
9	886.709	886.639	0.070	0.000	0.070
10	888.915	888.739	0.176	0.000	0.176
11	888.809	888.739	0.070	0.000	0.070
12	886.709	886.639	0.070	0.000	0.070
13	884.744	884.539	0.205	0.000	0.205
14	888.867	888.739	0.128	0.000	0.128
15	888.809	888.739	0.070	0.000	0.070
16	888.809	888.739	0.070	0.000	0.070
17	888.809	888.739	0.070	0.000	0.070
18	888.809	888.739	0.070	0.000	0.070
19	888.809	888.739	0.070	0.000	0.070
20	888.866	888.739	0.127	0.000	0.127
21	869.909	869.839	0.070	0.000	0.070
22	870.009	869.839	0.170	0.000	0.170
23	886.801	886.639	0.162	0.000	0.162
24	888.885	888.739	0.146	0.000	0.146
25	888.866	888.739	0.127	0.000	0.127
26	888.859	888.739	0.120	0.000	0.120
27	889.043	888.739	0.304	0.000	0.304
28	888.916	888.739	0.177	0.000	0.177
Avg	871.895	871.779	0.116	0.000	0.116
Reqt	1286.900		11.610	0.145	

Sewage Treatment Discharged To Unit 1 Outfall

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

April, 29, 2013

Mr. David Gibson
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Ct. Suite 100
San Diego, California 92123
IC: 13-0086.01

SUBJECT: NPDES March 2013 Discharge Monitoring Report
San Onofre Nuclear Generating Station, Unit 3

Dear Mr. Gibson:

SCE submits the subject report in accordance with the requirements of Order No. R9-2005-0006 (NPDES Permit No. CA0108181). All sampled water sources were found to be within permit limits. The attached discharge monitoring reports are in the format requested in your January 7, 2008 letter.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Mary Jane Johnson
Manager, Site Support Services

Enclosure(s)

cc: State Water Resources Control Board

P.O. Box 128
San Clemente, CA 92672

Southern California Edison Monthly Report

Facility: SONGS Unit 3
Exact Sample Point: Point of Discharge
Order No: R9-2005-0006
Report Freq: Monthly
Collected By: SONGS Environmental Group
Report For: March 2013
Analyzed By: SONGS EPG/Sierra Analytical
Report Due: May 1, 2013
Waste Stream: Combined Discharge (Low Volume Waste)
Title: Environmental Engineer

Parameter: Flow Rate
Units: Millions Gallons per Day (MGD)

Date	Combined Discharge	Cir Water Intake	Total Low Volume Waste	Total Sewage Treatment	In Plant Waste
1	888.859	888.739	0.120	0.000	0.120
2	884.741	884.539	0.202	0.000	0.202
3	888.896	888.739	0.157	0.000	0.157
4	888.859	888.739	0.120	0.000	0.120
5	888.859	888.739	0.120	0.000	0.120
6	888.907	888.739	0.168	0.000	0.168
7	888.859	888.739	0.120	0.000	0.120
8	876.259	876.139	0.120	0.000	0.120
9	888.880	888.739	0.141	0.000	0.141
10	865.759	865.639	0.120	0.000	0.120
11	882.559	882.439	0.120	0.000	0.120
12	865.572	865.452	0.120	0.000	0.120
13	605.213	605.093	0.120	0.000	0.120
14	655.987	655.867	0.120	0.000	0.120
15	888.859	888.739	0.120	0.000	0.120
16	886.824	886.639	0.185	0.000	0.185
17	859.272	859.152	0.120	0.000	0.120
18	888.909	888.739	0.167	0.003	0.170
19	889.062	888.739	0.317	0.006	0.323
20	889.073	888.739	0.327	0.007	0.334
21	888.878	888.739	0.134	0.005	0.139
22	819.018	818.878	0.134	0.006	0.140
23	884.675	884.539	0.134	0.002	0.136
24	888.875	888.739	0.134	0.002	0.136
25	882.574	882.439	0.134	0.001	0.135
26	914.074	913.939	0.134	0.001	0.135
27	914.196	913.939	0.257	0.000	0.257
28	914.075	913.939	0.129	0.007	0.136
29	842.632	842.539	0.084	0.009	0.093
30	838.440	838.339	0.100	0.001	0.101
31	838.424	838.339	0.084	0.001	0.085
Avg	864.067	863.918	0.153	0.002	0.149
Reqt	1286.900		11.610	0.145	

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

May 24, 2013

Mr. David Gibson
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Ct. Suite 100
San Diego, California 92123
IC: 13-0086.01

SUBJECT: NPDES April 2013 Discharge Monitoring Report
San Onofre Nuclear Generating Station, Unit 3

Dear Mr. Gibson:

SCE submits the subject report in accordance with the requirements of Order No. R9-2005-0006 (NPDES Permit No. CA0108181). All sampled water sources were found to be within permit limits. The attached discharge monitoring reports are in the format requested in your January 7, 2008 letter.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Mary Jane Johnson
Manager, Site Support Services

Enclosure(s)

cc: State Water Resources Control Board

P.O. Box 128
San Clemente, CA 92672

Southern California Edison Monthly Report

Facility:	SONGS Unit 3	Exact Sample Point:	Point of Discharge
Order No:	R9-2005-0006		
Report Freq:	Monthly	Collected By:	SONGS Environmental Group
Report For:	April 2013	Analyzed By:	SONGS/EPG/Sierra Analytical
Report Due:	June 1, 2013		
Waste Stream:	Combined Discharge (Low Volume Waste)	Title:	Environmental Engineer

Parameter: Flow Rate
Units: Millions Gallons per Day (MGD)

Date	Combined Discharge	Cir Water Intake	Total Low Volume Waste	Total Sewage Treatment	In Plant Waste
1	838.479	838.339	0.120	0.008	0.012
2	878.396	878.239	0.120	0.025	0.012
3	888.897	888.739	0.120	0.026	0.012
4	884.702	884.539	0.120	0.031	0.012
5	884.696	884.539	0.120	0.025	0.012
6	888.882	888.739	0.120	0.011	0.012
7	888.881	888.739	0.120	0.008	0.014
8	603.143	602.993	0.120	0.016	0.014
9	880.491	880.339	0.120	0.018	0.014
10	888.893	888.739	0.120	0.020	0.014
11	888.895	888.739	0.120	0.022	0.014
12	888.900	888.739	0.120	0.027	0.014
13	888.940	888.739	0.179	0.008	0.014
14	870.005	869.839	0.153	0.002	0.011
15	848.986	848.839	0.120	0.016	0.011
16	888.887	888.739	0.120	0.017	0.011
17	838.479	838.339	0.120	0.009	0.011
18	838.485	838.339	0.120	0.015	0.011
19	838.489	838.339	0.120	0.019	0.011
20	861.578	861.439	0.120	0.008	0.011
21	670.824	670.754	0.070		
22	609.363	609.293	0.070		
23	609.363	609.293	0.070		
24	609.363	609.293	0.070		
25	399.778	399.708	0.070		
26	50.470	50.40	0.070		
27	46.270	46.20	0.070		
28	50.470	50.40	0.070		
29	50.470	50.40	0.070		
30	372.291	372.221	0.070		
Avg	688.192	688.0665	0.106	0.017	0.012
Reqt	1286.900		11.610	0.145	

SOUTHERN CALIFORNIA
EDISON
An EDISON INTERNATIONAL Company

July 26, 2013

Mr. David Gibson
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Ct. Suite 100
San Diego, California 92123
IC: 13-0086.01

SUBJECT: NPDES May 2013 Discharge Monitoring Report
San Onofre Nuclear Generating Station, Unit 3

Dear Mr. Gibson:

SCE submits the subject report in accordance with the requirements of Order No. R9-2005-0006 (NPDES Permit No. CA0108181). All sampled water sources were found to be within permit limits. The attached discharge monitoring reports are in the format requested in your January 7, 2008 letter.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Mary Jane Johnson
Manager, Site Support Services

Enclosure(s)

cc: State Water Resources Control Board

P. O. Box 128
San Clemente, CA 92674-0128

Southern California Edison Monthly Report

Facility: SONGS Unit 3
Exact Sample Point: Point of Discharge
Order No: R9-2005-0006
Report Freq: Monthly
Collected By: SONGS Environmental Group
Report For: May 2013
Analyzed By: SONGS EPG/Sierra Analytical
Report Due: July 1, 2013
Waste Stream: Combined Discharge (Low Volume Waste)
Title: Environmental Engineer

Parameter: Flow Rate
Units: Millions Gallons per Day (MGD)

Date	Combined Discharge	Cir Water Intake	Total Low Volume Waste	Total Sewage Treatment	In Plant Waste
1	607.360	607.193	0.120	0.047	0.000
2	609.454	609.293	0.120	0.041	0.000
3	609.614	609.293	0.288	0.023	0.0095
4	889.075	888.739	0.298	0.028	0.0095
5	872.120	871.939	0.120	0.048	0.013
6	888.925	888.739	0.120	0.053	0.013
7	888.915	888.739	0.120	0.043	0.013
8	888.903	888.739	0.120	0.031	0.013
9	888.902	888.739	0.141	0.009	0.013
10	888.884	888.739	0.120	0.012	0.013
11	888.879	888.739	0.120	0.007	0.013
12	888.878	888.739	0.120	0.006	0.013
13	888.889	888.739	0.120	0.017	0.013
14	888.888	888.739	0.120	0.016	0.013
15	888.884	888.739	0.120	0.012	0.013
16	888.884	888.739	0.120	0.012	0.013
17	888.885	888.739	0.120	0.013	0.013
18	888.881	888.739	0.120	0.009	0.013
19	888.880	888.739	0.120	0.008	0.013
20	888.884	888.739	0.120	0.012	0.013
21	888.886	888.739	0.120	0.014	0.013
22	886.709	886.639	0.070	0.000	0.000
23	120.332	120.262	0.070	0.000	0.000
24	50.470	50.400	0.070	0.000	0.000
25	50.470	50.400	0.070	0.000	0.000
26	50.470	50.400	0.070	0.000	0.000
27	50.470	50.400	0.070	0.000	0.000
28	18.970	18.900	0.070	0.000	0.000
29	207.742	207.672	0.070	0.000	0.000
30	719.376	719.285	0.091	0.000	0.000
31	813.317	813.139	0.178	0.000	0.000
Avg	670.264	670.122	0.118	0.015	0.008
Reqt	1286.900		11.610	0.145	

SOUTHERN CALIFORNIA
EDISON
An EDISON INTERNATIONAL Company

July 25, 2013

Mr. David Gibson
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Ct. Suite 100
San Diego, California 92123
IC: 13-0086.01

SUBJECT: NPDES June 2013 Discharge Monitoring Report
San Onofre Nuclear Generating Station, Unit 3

Dear Mr. Gibson:

SCE submits the subject report in accordance with the requirements of Order No. R9-2005-0006 (NPDES Permit No. CA0108181). All sampled water sources were found to be within permit limits. The attached discharge monitoring reports are in the format you requested in your January 7, 2008 letter.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Brian D. Metz
Manager, Environmental

Enclosure(s)

cc: State Water Resources Control Board

P. O. Box 128
San Clemente, CA 92674-0128

Southern California Edison Monthly Report

Facility: SONGS Unit 3
Exact Sample Point: Point of Discharge
Order No: R9-2005-0006
Report Freq: Monthly
Collected By: SONGS Environmental Group
Report For: June 2013
Analyzed By: SONGS EPG/Sierra Analytical
Report Due: August 1 ,2013
Waste Stream: Combined Discharge (Low Volume Waste)
Title: Environmental Engineer

Parameter: Flow Rate
Units: Millions Gallons per Day (MGD)

Date	Combined Discharge	Cir Water Intake	Total Low Volume Waste	Total Sewage Treatment	In Plant Waste
1	706.957	706.829	0.128		
2	609.363	609.293	0.070		
3	617.763	617.693	0.070		
4	634.563	634.493	0.070		
5	634.563	634.493	0.070		
6	634.563	634.493	0.070		
7	634.693	634.493	0.200		
8	723.512	723.442	0.070		
9	584.163	584.093	0.070		
10	584.163	584.093	0.070		
11	607.450	607.380	0.070		
12	761.873	761.803	0.070		
13	607.305	607.193	0.112		
14	609.413	609.293	0.120		
15	609.425	609.293	0.120	0.004	0.008
16	607.330	607.193	0.120	0.004	0.013
17	609.444	609.293	0.120	0.018	0.013
18	609.439	609.293	0.120	0.013	0.013
19	609.438	609.293	0.120	0.012	0.013
20	656.015	655.867	0.120	0.015	0.013
21	609.438	609.293	0.120	0.012	0.013
22	609.466	609.293	0.153	0.007	0.013
23	609.432	609.293	0.120	0.006	0.013
24	609.425	609.293	0.120	0.010	0.002
25	607.313	607.193	0.120		
26	609.413	609.293	0.120		
27	609.413	609.293	0.120		
28	607.394	607.193	0.201		
29	609.392	609.293	0.099		
30	609.583	609.293	0.290		
Avg	624.723	624.601	0.115	0.010	0.011
Reqt	1287.000		11.610	0.145	

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

August 20, 2013

Mr. David Gibson
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Ct. Suite 100
San Diego, California 92123
IC: 13-0086.01

SUBJECT: NPDES July 2013 Discharge Monitoring Report
San Onofre Nuclear Generating Station, Unit 3

Dear Mr. Gibson:

SCE submits the subject report in accordance with the requirements of Order No. R9-2005-0006 (NPDES Permit No. CA0108181). All sampled water sources were found to be within permit limits. The attached discharge monitoring reports are in the format requested in your January 7, 2008 letter.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Brian D. Metz
Manager, Environmental

Enclosure(s)

cc: State Water Resources Control Board

P.O. Box 128
San Clemente, CA 92672

Southern California Edison Monthly Report

Facility: SONGS Unit 3
Exact Sample Point: Point of Discharge
Order No: R9-2005-0006
Report Freq: Monthly
Collected By: SONGS Environmental Group
Report For: July 2013
Analyzed By: SONGS EP&/Sierra Analytical
Report Due: September 1 ,2013
Waste Stream: Combined Discharge (Low Volume Waste)
Title: Environmental Engineer

Parameter: Flow Rate
Units: Millions Gallons per Day (MGD)

Date	Combined Discharge	Cir Water Intake	Total Low Volume Waste	Total Sewage Treatment	In Plant Waste
1	605.414	605.093	0.321	0.000	
2	609.411	609.293	0.118	0.000	
3	609.410	609.293	0.117	0.000	
4	609.468	609.293	0.175	0.000	
5	609.363	609.293	0.070	0.000	
6	609.493	609.293	0.200	0.000	
7	609.543	609.293	0.250	0.000	
8	609.363	609.293	0.070	0.000	
9	609.461	609.293	0.168	0.000	
10	609.363	609.293	0.070	0.000	
11	423.153	422.995	0.158	0.000	
12	50.470	50.400	0.070	0.000	
13	48.370	48.300	0.070	0.000	
14	48.370	48.300	0.070	0.000	
15	50.470	50.400	0.070	0.000	
16	50.470	50.400	0.070	0.000	
17	50.470	50.400	0.070	0.000	
18	50.470	50.400	0.070	0.000	
19	48.370	48.300	0.070	0.000	
20	50.470	50.400	0.070	0.000	
21	50.470	50.400	0.070	0.000	
22	56.770	56.700	0.070	0.000	
23	25.270	25.200	0.070	0.000	
24	25.270	25.200	0.070	0.000	
25	25.270	25.200	0.070	0.000	
26	29.470	29.400	0.070	0.000	
27	25.270	25.200	0.070	0.000	
28	25.270	25.200	0.070	0.000	
29	50.470	50.400	0.070	0.000	
30	42.070	42.000	0.070	0.000	
31	25.270	25.200	0.070	0.000	
Avg	236.847	236.746	0.101	0.000	
Reqt	1287.000		11.610	0.100	

SOUTHERN CALIFORNIA
EDISON®

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February 19, 2014

Ms. Kristen Schwall, P.E.
Water Resources Control Engineer
San Diego Regional Water Quality Control Board
2375 Northside Drive, Suite 100
San Diego, CA 92108

SUBJECT: SONGS Unit 3, NPDES No. CA0108181, Order No. R9-2005-0006

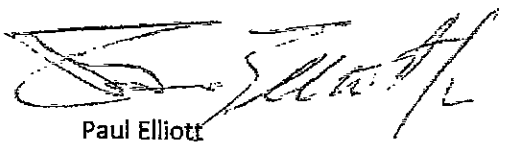
Dear Ms. Schwall,

Southern California Edison Company (SCE) recently became aware of data errors contained in page 5 of the monthly reports for the August and September 2013 reporting periods. The incorrect data was contained in the "Cir Water Intake" reporting element. The corrected data will show that substantially less volume than originally reported was measured at this monitoring location. The corrected reports are included as an attachment to this letter for your reference.

We are continually working to improve our QA/QC process to ensure the utmost accuracy in our reporting procedures. Part of our QA/QC includes rechecking reports and monitoring trends throughout the year, resulting in the discovery of this inadvertent error.

Thank you in advance for your prompt attention to this request for assistance. If you require any additional information or have any questions, please don't hesitate to call my office at (949) 368-6375 or my mobile phone at (949) 683-5042.

Sincerely,



Paul Elliott
Environmental Specialist
San Onofre Nuclear Generating Station

Attachments:

August 2013 Original Report
August 2013 Corrected Report
September 2013 Original Report
September 2013 Corrected Report

August 2013 Original Report

Southern California Edison Monthly Report

Facility: SONGS Unit 3
Exact Sample Point: Point of Discharge
Order No: R9-2005-0006
Report Freq: Monthly
Collected By: SONGS Environmental Group
Report For: August 2013
Analyzed By: SONGS EPG/Sierra Analytical
Report Due: October 1 ,2013
Waste Stream: Combined Discharge (Low Volume Waste)
Title: Environmental Engineer

Parameter: Flow Rate
Units: Millions Gallons per Day (MGD)

Date	Combined Discharge	Cir Water Intake	Total Low Volume Waste	Total Sewage Treatment	In Plant Waste
1	584.283	584.093	0.070	0.000	0.120
2	588.483	588.293	0.070	0.000	0.120
3	584.283	584.093	0.070	0.000	0.120
4	584.283	584.093	0.070	0.000	0.120
5	584.283	584.093	0.070	0.000	0.120
6	584.283	584.093	0.070	0.000	0.120
7	584.283	584.093	0.070	0.000	0.120
8	584.283	584.093	0.070	0.000	0.120
9	592.683	592.493	0.070	0.000	0.120
10	609.483	609.293	0.070	0.000	0.120
11	609.483	609.293	0.070	0.000	0.120
12	609.483	609.293	0.070	0.000	0.120
13	609.483	609.293	0.070	0.000	0.120
14	609.483	609.293	0.070	0.000	0.120
15	609.483	609.293	0.070	0.000	0.120
16	609.483	609.293	0.070	0.000	0.120
17	609.483	609.293	0.070	0.000	0.120
18	609.483	609.293	0.070	0.000	0.120
19	609.483	609.293	0.070	0.000	0.120
20	609.483	609.293	0.070	0.000	0.120
21	609.483	609.293	0.070	0.000	0.120
22	609.483	609.293	0.070	0.000	0.120
23	609.483	609.293	0.070	0.000	0.120
24	609.483	609.293	0.070	0.000	0.120
25	609.483	609.293	0.070	0.000	0.120
26	609.483	609.293	0.070	0.000	0.120
27	609.483	609.293	0.070	0.000	0.120
28	609.483	609.293	0.070	0.000	0.120
29	609.483	609.293	0.070	0.000	0.120
30	609.483	609.293	0.070	0.000	0.120
31	609.483	609.293	0.070	0.000	0.120
Avg	602.573	602.383	0.070	0.000	
Reqt	1287.000		11.610	0.100	

August 2013 Corrected Report

Southern California Edison Monthly Report

Facility: SONGS Unit 3
Order No: R9-2005-0006
Report Freq: Monthly
Report For: August 2013
Report Due: October 1 ,2013
Waste Stream: Combined Discharge (Low Volume Waste)

Exact Sample Point: Point of Discharge
Collected By: SONGS Environmental Group
Analyzed By: SONGS EPG/Sierra Analytical
Title: Environmental Engineer

Parameter: Flow Rate
Units: Millions Gallons per Day (MGD)

Date	Combined Discharge	Cir Water Intake	Total Low Volume Waste	Total Sewage Treatment	In Plant Waste
1	25.440	25.200	0.120	0.000	0.120
2	29.640	29.400	0.120	0.000	0.120
3	25.440	25.200	0.120	0.000	0.120
4	25.440	25.200	0.120	0.000	0.120
5	25.484	25.200	0.142	0.000	0.142
6	25.440	25.200	0.120	0.000	0.120
7	25.440	25.200	0.120	0.000	0.120
8	25.440	25.200	0.120	0.000	0.120
9	33.840	33.600	0.120	0.000	0.120
10	50.640	50.400	0.120	0.000	0.120
11	44.340	44.100	0.120	0.000	0.120
12	50.646	50.400	0.123	0.000	0.123
13	50.640	50.400	0.120	0.000	0.120
14	50.640	50.400	0.120	0.000	0.120
15	50.640	50.400	0.120	0.000	0.120
16	50.640	50.400	0.120	0.000	0.120
17	50.640	50.400	0.120	0.000	0.120
18	50.640	50.400	0.120	0.000	0.120
19	50.648	50.400	0.124	0.000	0.124
20	50.640	50.400	0.120	0.000	0.120
21	50.640	50.400	0.120	0.000	0.120
22	50.640	50.400	0.120	0.000	0.120
23	50.640	50.400	0.120	0.000	0.120
24	50.640	50.400	0.120	0.000	0.120
25	50.640	50.400	0.120	0.000	0.120
26	50.646	50.400	0.123	0.000	0.123
27	50.640	50.400	0.120	0.000	0.120
28	50.640	50.400	0.120	0.000	0.120
29	50.640	50.400	0.120	0.000	0.120
30	50.640	50.400	0.120	0.000	0.120
31	50.640	50.400	0.120	0.000	0.120
Avg	43.529	43.287	0.121	0.000	
Reqt	1287.000		11.610	0.100	

September 2013 Original Report

Southern California Edison Monthly Report

Facility: SONGS Unit 3
Exact Sample Point: Point of Discharge
Order No: R9-2005-0006
Report Freq: Monthly
Collected By: SONGS Environmental Group
Report For: September 2013
Analyzed By: SONGS EPG/Sierra Analytical
Report Due: November 1 ,2013
Waste Stream: Combined Discharge (Low Volume Waste)
Title: Environmental Engineer

Parameter: Flow Rate
Units: Millions Gallons per Day (MGD)

Date	Combined Discharge	Cir Water Intake	Total Low Volume Waste	Total Sewage Treatment	In Plant Waste
1	609.533	609.293	0.120	0.000	0.120
2	610.539	609.293	0.123	0.000	1.123
3	609.533	609.293	0.120	0.000	0.120
4	609.533	609.293	0.120	0.000	0.120
5	626.333	626.093	0.120	0.000	0.120
6	609.533	609.293	0.120	0.000	0.120
7	609.533	609.293	0.120	0.000	0.120
8	609.533	609.293	0.120	0.000	0.120
9	609.643	609.293	0.175	0.000	0.175
10	609.533	609.293	0.120	0.000	0.120
11	609.533	609.293	0.120	0.000	0.120
12	609.533	609.293	0.120	0.000	0.120
13	609.533	609.293	0.120	0.000	0.120
14	609.533	609.293	0.120	0.000	0.120
15	609.533	609.293	0.120	0.000	0.120
16	628.439	628.193	0.123	0.000	0.123
17	634.733	634.493	0.120	0.000	0.120
18	588.533	588.293	0.120	0.000	0.120
19	584.333	584.093	0.120	0.000	0.120
20	584.333	584.093	0.120	0.000	0.120
21	586.433	586.193	0.120	0.000	0.120
22	584.333	584.093	0.120	0.000	0.120
23	605.341	605.093	0.124	0.000	0.124
24	601.133	600.893	0.120	0.000	0.120
25	584.333	584.093	0.120	0.000	0.120
26	584.333	584.093	0.120	0.000	0.120
27	584.333	584.093	0.120	0.000	0.120
28	596.933	596.693	0.120	0.000	0.120
29	588.533	588.293	0.120	0.000	0.120
30	584.337	584.093	0.122	0.000	0.122
Avg	602.711	602.433	0.122	0.000	
Reqt	1287.000		11.610	0.100	

September 2013 Corrected Report

Southern California Edison Monthly Report

Facility: SONGS Unit 3
Exact Sample Point: Point of Discharge
Order No: R9-2005-0006
Report Freq: Monthly
Collected By: SONGS Environmental Group
Report For: September 2013
Analyzed By: SONGS-EPG/Sierra Analytical
Report Due: November 1 ,2013
Waste Stream: Combined Discharge (Low Volume Waste)
Title: Environmental Engineer

Parameter: Flow Rate
Units: Millions Gallons per Day (MGD)

Date	Combined Discharge	Cir Water Intake	Total Low Volume Waste	Total Sewage Treatment	In Plant Waste
1	50.640	50.400	0.120	0.000	0.120
2	51.646	50.400	0.123	0.000	1.123
3	50.640	50.400	0.120	0.000	0.120
4	50.640	50.400	0.120	0.000	0.120
5	67.440	67.200	0.120	0.000	0.120
6	50.640	50.400	0.120	0.000	0.120
7	50.640	50.400	0.120	0.000	0.120
8	50.640	50.400	0.120	0.000	0.120
9	50.750	50.400	0.175	0.000	0.175
10	50.640	50.400	0.120	0.000	0.120
11	50.640	50.400	0.120	0.000	0.120
12	50.640	50.400	0.120	0.000	0.120
13	50.640	50.400	0.120	0.000	0.120
14	50.640	50.400	0.120	0.000	0.120
15	50.640	50.400	0.120	0.000	0.120
16	69.546	69.300	0.123	0.000	0.123
17	75.840	75.600	0.120	0.000	0.120
18	29.640	29.400	0.120	0.000	0.120
19	25.440	25.200	0.120	0.000	0.120
20	25.440	25.200	0.120	0.000	0.120
21	27.540	27.300	0.120	0.000	0.120
22	25.440	25.200	0.120	0.000	0.120
23	46.448	46.200	0.124	0.000	0.124
24	42.240	42.000	0.120	0.000	0.120
25	25.440	25.200	0.120	0.000	0.120
26	25.440	25.200	0.120	0.000	0.120
27	25.440	25.200	0.120	0.000	0.120
28	38.040	37.800	0.120	0.000	0.120
29	29.640	29.400	0.120	0.000	0.120
30	25.444	25.200	0.122	0.000	0.122
Avg	43.818	43.540	0.122	0.000	
Reqt	1287.000		11.610	0.100	

December 1, 2013

Mr. David Gibson
California Regional Water Quality Control Board
San Diego Region
2375 Northside Drive Suite 100
San Diego, California 92108-2700
IC: 13-0086.01

Subject: NPDES October 2013 Discharge Monitoring Report
San Onofre Nuclear Generating Station, Unit 3

Dear Mr. Gibson:

SCE submits the subject report in accordance with the requirements of Order No. R9-2005-0006 (NPDES Permit No. CA0108181). All sampled water sources were found to be within permit limits. The attached discharge monitoring reports are in the format you requested in your January 7, 2008 letter.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions please contact myself at (949) 368-6375

Sincerely,

Paul Elliott Jr
Environmental Specialist

cc: State Water Resources Control Board
Andrew Martinez
Paul Elliott Jr
K. Anthony
IDB - NPDES
CDM

Southern California Edison Monthly Report

Facility: SONGS Unit 3 **Exact Sample Point:** Point of Discharge
Order No: R9-2005-0006
Report Freq: Monthly **Collected By:** SONGS Environmental Group
Report For: October 2013 **Analyzed By:** SONGS EPG/Sierra Analytical
Report Due: December 1, 2013
Waste Stream: Combined Discharge (Low Volume Waste) **Title:** Environmental Engineer

Parameter: Flow Rate
Units: Millions Gallons per Day (MGD)

Date	Combined Discharge	Cir Water Intake	Total Low Volume Waste	Total Sewage Treatment	In Plant Waste
1	25.440	25.200	0.120	0.000	0.120
2	25.440	25.200	0.120	0.000	0.120
3	25.440	25.200	0.120	0.000	0.120
4	25.685	25.445	0.120	0.000	0.120
5	25.685	25.445	0.120	0.000	0.120
6	25.685	25.445	0.120	0.000	0.120
7	25.570	25.200	0.185	0.000	0.185
8	25.510	25.270	0.120	0.000	0.120
9	25.615	25.375	0.120	0.000	0.120
10	25.440	25.200	0.120	0.000	0.120
11	25.440	25.200	0.120	0.000	0.120
12	25.440	25.200	0.120	0.000	0.120
13	25.440	25.200	0.120	0.000	0.120
14	25.768	25.200	0.284	0.000	0.284
15	25.440	25.200	0.120	0.000	0.120
16	25.440	25.200	0.120	0.000	0.120
17	25.440	25.200	0.120	0.000	0.120
18	25.440	25.200	0.120	0.000	0.120
19	25.440	25.200	0.120	0.000	0.120
20	25.440	25.200	0.120	0.000	0.120
21	25.650	25.200	0.225	0.000	0.225
22	25.440	25.200	0.120	0.000	0.120
23	25.440	25.200	0.120	0.000	0.120
24	25.440	25.200	0.120	0.000	0.120
25	25.440	25.200	0.120	0.000	0.120
26	25.440	25.200	0.120	0.000	0.120
27	25.440	25.200	0.120	0.000	0.120
28	25.854	25.200	0.327	0.000	0.327
29	25.440	25.200	0.120	0.000	0.120
30	25.440	25.200	0.120	0.000	0.120
Avg	25.509	25.233	0.138	0.000	
Reqt	1287.000		11.610	0.100	

February 1, 2014

Mr. David Gibson
California Regional Water Quality Control Board
San Diego Region
2375 Northside Drive Suite 100
San Diego, California 92108-2700
IC: 13-0086.01

Subject: NPDES November 2013 Discharge Monitoring Report
San Onofre Nuclear Generating Station, Unit 3

Dear Mr. Gibson:

SCE submits the subject report in accordance with the requirements of Order No. R9-2005-0006 (NPDES Permit No. CA0108181). All sampled water sources were found to be within permit limits. The attached discharge monitoring reports are in the format you requested in your January 7, 2008 letter.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions please contact myself at (949) 368-6375

Sincerely,

Paul Elliott Jr
Environmental Specialist

cc: State Water Resources Control Board
Andrew Martinez
Paul Elliott Jr
K. Anthony
IDB - NPDES
CDM

Southern California Edison Monthly Report

Facility: SONGS Unit 3 — **Exact Sample Point:** Point of Discharge
Order No: R9-2005-0006
Report Freq: Monthly — **Collected By:** SONGS Environmental Group
Report For: November 2013 — **Analyzed By:** SONGS EPG/Sierra Analytical
Report Due: January 1, 2014
Waste Stream: Combined Discharge (Low Volume Waste) — **Title:** Environmental Engineer

Parameter: Flow Rate
Units: Millions Gallons per Day (MGD)

Date	Combined Discharge	Cir Water Intake	Total Low Volume Waste	Total Sewage Treatment	In Plant Waste
1	25.200	25.200	0.000	0.000	0.000
2	25.200	25.200	0.000	0.000	0.000
3	27.300	27.300	0.000	0.000	0.000
4	25.200	25.200	0.000	0.000	0.000
5	25.200	25.200	0.000	0.000	0.000
6	25.200	25.200	0.000	0.000	0.000
7	25.200	25.200	0.000	0.000	0.000
8	25.200	25.200	0.000	0.000	0.000
9	25.200	25.200	0.000	0.000	0.000
10	25.200	25.200	0.000	0.000	0.000
11	25.200	25.200	0.000	0.000	0.000
12	25.200	25.200	0.000	0.000	0.000
13	25.200	25.200	0.000	0.000	0.000
14	25.200	25.200	0.000	0.000	0.000
15	25.200	25.200	0.000	0.000	0.000
16	25.200	25.200	0.000	0.000	0.000
17	25.200	25.200	0.000	0.000	0.000
18	25.200	25.200	0.000	0.000	0.000
19	25.200	25.200	0.000	0.000	0.000
20	25.200	25.200	0.000	0.000	0.000
21	25.200	25.200	0.000	0.000	0.000
22	25.200	25.200	0.000	0.000	0.000
23	25.200	25.200	0.000	0.000	0.000
24	25.200	25.200	0.000	0.000	0.000
25	25.200	25.200	0.000	0.000	0.000
26	25.200	25.200	0.000	0.000	0.000
27	25.200	25.200	0.000	0.000	0.000
28	25.200	25.200	0.000	0.000	0.000
29	25.200	25.200	0.000	0.000	0.000
30	25.200	25.200	0.000	0.000	0.000
Avg	25.270	25.270	0.000	0.000	
Reqt	1287.000		11.610	0.100	

February 1, 2014

Mr. David Gibson
California Regional Water Quality Control Board
San Diego Region
2375 Northside Drive Suite 100
San Diego, California 92108-2700
IC: 13-0086.01

Subject: NPDES December 2013 Discharge Monitoring Report
San Onofre Nuclear Generating Station, Unit 3

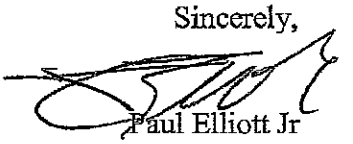
Dear Mr. Gibson:

SCE submits the subject report in accordance with the requirements of Order No. R9-2005-0006 (NPDES Permit No. CA0108181). All sampled water sources were found to be within permit limits. The attached discharge monitoring reports are in the format you requested in your January 7, 2008 letter.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions please contact myself at (949) 368-6375

Sincerely,



Paul Elliott Jr
Environmental Specialist

cc: State Water Resources Control Board
Andrew Martinez
Paul Elliott Jr
K. Anthony
IDB - NPDES
CDM

Southern California Edison Monthly Report

Facility: SONGS Unit 3
Exact Sample Point: Point of Discharge
Order No: R9-2005-0006
Report Freq: Monthly
Collected By: SONGS Environmental Group
Report For: December 2013
Analyzed By: SONGS-EPG/Sierra Analytical
Report Due: February 1, 2014
Waste Stream: Combined Discharge (Low Volume Waste)
Title: Environmental Engineer

Parameter: Flow Rate
Units: Millions Gallons per Day (MGD)

Date	Combined Discharge	Cir Water Intake	Total Low Volume Waste	Total Sewage Treatment	In Plant Waste
1	25.440	25.200	0.120	0.000	0.120
2	25.440	25.200	0.120	0.000	0.120
3	27.540	27.300	0.120	0.000	0.120
4	25.440	25.200	0.120	0.000	0.120
5	25.440	25.200	0.120	0.000	0.120
6	25.440	25.200	0.120	0.000	0.120
7	25.440	25.200	0.120	0.000	0.120
8	25.440	25.200	0.120	0.000	0.120
9	25.442	25.200	0.121	0.000	0.121
10	25.440	25.200	0.120	0.000	0.120
11	25.440	25.200	0.120	0.000	0.120
12	25.440	25.200	0.120	0.000	0.120
13	25.440	25.200	0.120	0.000	0.120
14	25.440	25.200	0.120	0.000	0.120
15	25.440	25.200	0.120	0.000	0.120
16	25.446	25.200	0.123	0.000	0.123
17	25.440	25.200	0.120	0.000	0.120
18	25.440	25.200	0.120	0.000	0.120
19	25.440	25.200	0.120	0.000	0.120
20	25.440	25.200	0.120	0.000	0.120
21	25.440	25.200	0.120	0.000	0.120
22	25.440	25.200	0.120	0.000	0.120
23	25.458	25.200	0.129	0.000	0.129
24	25.440	25.200	0.120	0.000	0.120
25	25.440	25.200	0.120	0.000	0.120
26	25.440	25.200	0.120	0.000	0.120
27	25.440	25.200	0.120	0.000	0.120
28	25.440	25.200	0.120	0.000	0.120
29	25.440	25.200	0.120	0.000	0.120
30	25.440	25.200	0.120	0.000	0.120
31	25.452	25.200	0.126	0.000	0.126
Avg	25.509	25.268	0.121	0.000	
Reqt	1287.000		11.610	0.100	

Attachment B

Explanation and Development of Data for the Ocean Water Use and Flow Rate Graph

Explanation and Development of Data for the Ocean Water Use and Flow Rate Graph

Rev. 0 Initial Issue.

Prepared by A. Hinojosa, Nov. 21, 2013

Reviewed by R. Yale, Nov. 21, 2013

Rev.1 Editorial Comments incorporated.

Prepared by A. Hinojosa, Feb. 26, 2014

Reviewed by R. Yale, Feb. 26, 2014

Preparer Signature _____ Date 2/26/2014

Reviewer Signature R. A. Yale Date 2/26/2014

The following explains the methodology used and the citations used in the development of the data used in the figure presented by Julie Holt.

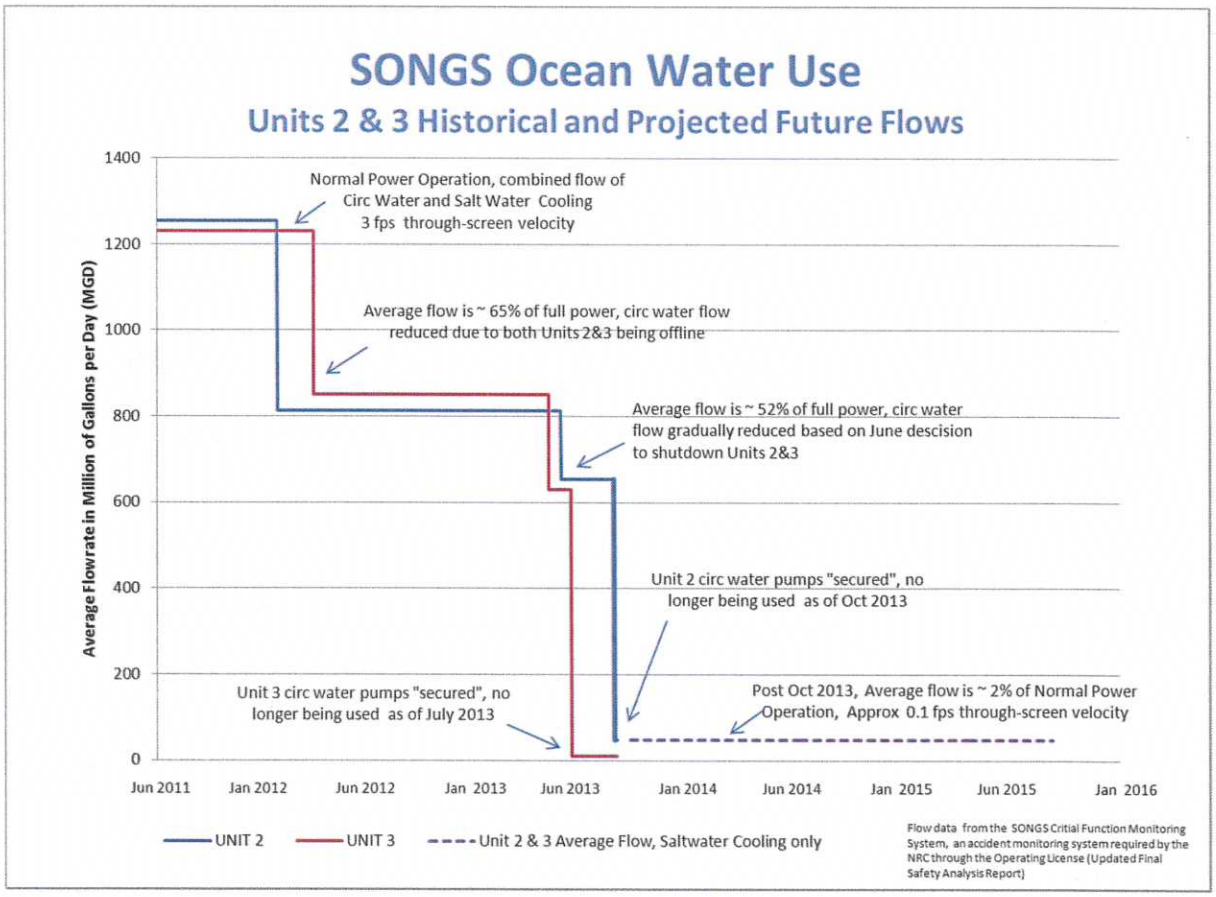


Figure 1: Figure provided to Julie Holt

Figure 1 Discussion

This figure depicts the average ocean water usage since June of 2011 of both Units 2 and 3 (e.g. full power operation to SONGS decision to shutdown permanently). The data was averaged as operational changes occurred to emphasize step changes in ocean water usage. The ocean water usage above includes only the major usage contributors, which are the Circulating (CIRC) Water Pumps (207,500 GPM per pump; 8 pumps; 4 per unit; references 4, 7, and 8) and the Saltwater Cooling (SWC) Pumps (17,000 GPM per pump; 8 pumps; 4 per unit; references 9 and 10); both take suction from the Intake Structure; reference 14 and 15). The three step changes depicted above occur as SONGS enters a refueling outage and reduces to 3 CIRC pumps to maintain other plant activities (i.e. HVAC, effluent discharge, etc.) and maintain an intake velocity to prevent submerged stainless steel structures from corroding (316SS will pit at velocities less than 3 fps; see reference 12). As it became evident that SONGS was to be in a long-term refueling outage, stoplogs (large gates) were installed [required stoplogs were not available at the beginning of the refueling outage; reference 13] in the Unit 3 intake structure to block off screenwells and maintain a reasonable intake velocity with only two CIRC pump operation. As the SONGS shutdown decision was announced, preserving the 316SS structures was no longer a priority, and Unit 3 CIRC pumps were permanently secured (turned off) as they are no longer required. Two of Unit 2 CIRC pumps

were maintained for effluent discharge until the ODCM was revised to allow discharge with SWC pumps; reference 11. Going forward, SONGS typically will operate one SWC pump on each Unit until the radiated fuel is moved onto dry cask storage or an alternative SFP cooling means is established (reference 16); with the exception of running two SWC pumps on the Unit aligned to discharge effluents; if discharging (reference 11).

Flowrate Data Development of Figure 1

SONGS has existing data acquisitioning infrastructure, namely Plant Monitoring System (PMS) and the Critical Functions Monitoring System (CFMS), used to monitor and record plant data, such as flowrates, pressure, temperatures, etc; same data that would feed the control room (reference 17).

In the development of the data used in the Figure 1 above, historical data from the PMS and CFMS server were used; reference 2, 3, and 17. The Graphic User Interfaced (GUI) used was a SONGS program called ET and EZTrend (shown in Figure 2 and 3 below). The Saltwater Cooling (SWC) flowdata is directly obtained from the PMS server (server SVA and SVB; reference 2, 3, and 17). A range is specified (see Figure 3) and the data appears in the form of a chart (See Figure 4), then the data is exported to Excel where it can be reduced to obtain different charts; such as Figure 1. However, since two of the Unit 3 SWC pumps are in the Unit 2 intake (and vice versa); reference 14 and 15, data from CFMS was used to determine if the outlet valve was opened or closed; reference 3. Having valve data (open/closed) from CFMS determines which SWC pumps were operating (i.e. Unit 3 SWC pumps in the Unit 2 Intake or vice versa). From the historical valve data and the SWC flow data, SWC ocean water usage can then be determined. The data was averaged to daily usage.

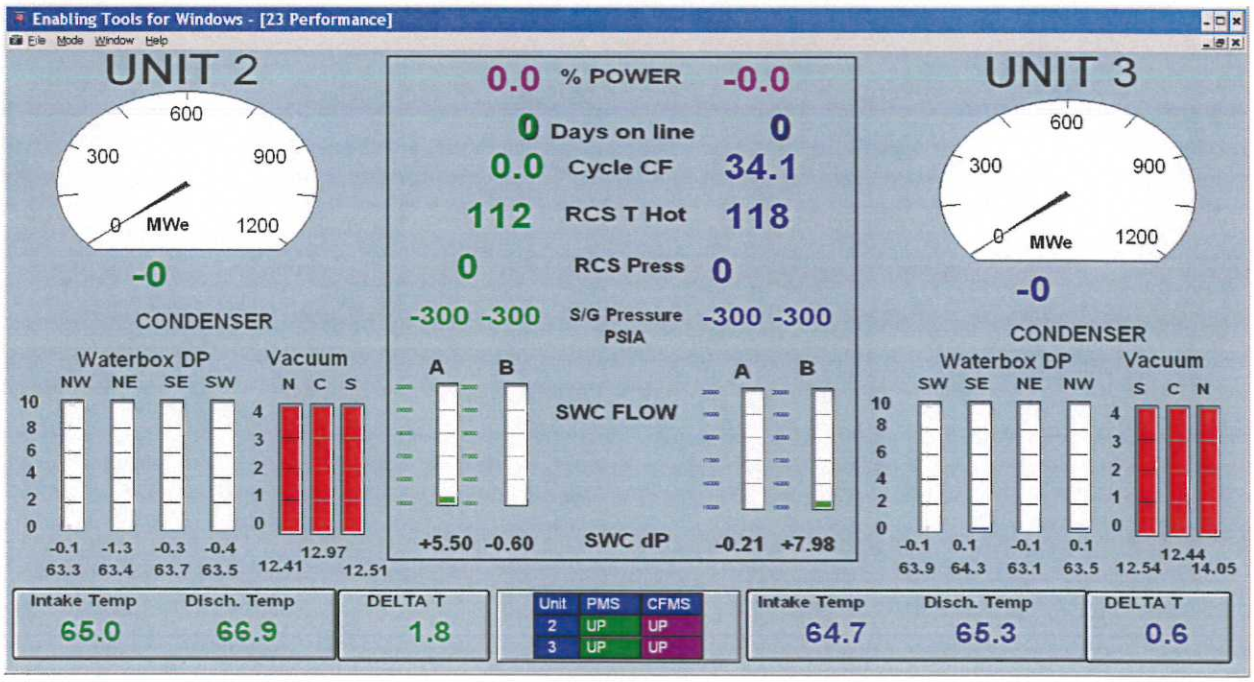


Figure 2: User Interface for ET; more specifically a user built GUI called "circh2o.etv"

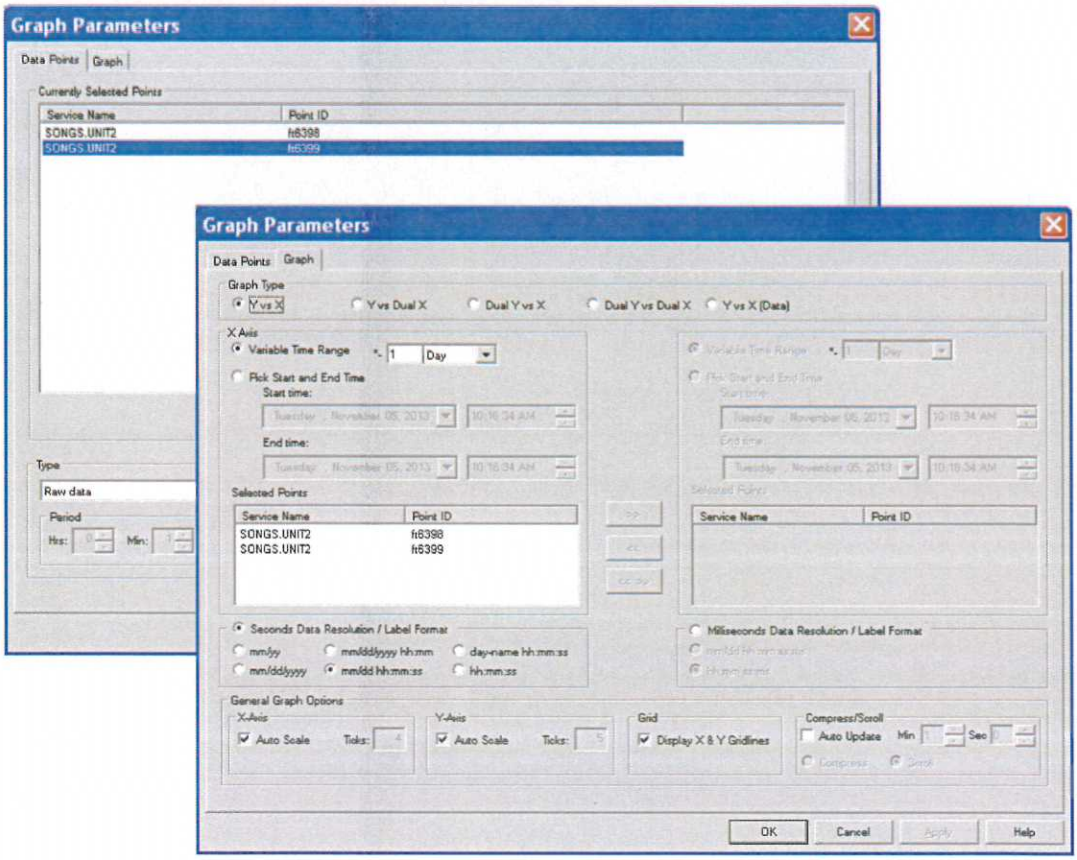


Figure 3: Sample Range Specified (this is EZTrend interface)

Figure 4: Sample Chart from EZTrend

Unfortunately, SONGS does not record flowrate data for the CIRC pumps as they are not an essential parameter. Only waterbox differential pressure dP is stored. However, the differential pressure data can

be used to conservatively estimate a bounding CIRC flowrate (i.e. if dP exist then the pump was running). At approximately 4-5 psid across the waterbox (clean waterbox), the CIRC pump is flowing at approximately 207,500 gpm (reference 4 and 8), however, the average waterbox dP throughout the timeframe depicted in Figure 1 was greater than 7 psid, which would mean the CIRC pumps were running at less than 207,500 gpm (reference 7) through the timeframe depicted in Figure 1. Since the accuracy of flowrate was not important for the purposes of Figure 1, then 207,500 gpm was used as the bounding value for a CIRC pump flowrate, regardless of waterbox dP. From the historical valve data and the CIRC dP data, CIRC ocean water usage can then be determined. The data was averaged to daily usage.

Entrance Velocity

Entrance velocity at different intake flowrates is not readily available in formal calculations. However, the data required to calculate the entrance velocity is available from multiple sources (not all cited herein). Entrance velocity is typically reported on the SONGS Annual Marine Environmental Analysis and Interpretation Reports for an online Unit. **During normal power operation, with an intake flow of 830,000 gpm (i.e. 4 CIRC pumps; reference 8), the entrance velocity is reported as 1.7 fps (see Table 1-4 of reference 6).** In addition to the entrance velocity, the entrance cap dimensions are also reported (see Table 1-4 of reference). Independent check of the entrance velocity is performed by using the area of reference 5 (Area (A) = Circumference of Velocity Cap x Opening Height and Velocity (V) = Q/A; reference 1). These are necessary and sufficient conditions required to calculate the entrance velocity as we vary the flowrate (Q). **Using 34,000 GPM (two SWC pumps; reference 9 and 10), the entrance velocity is approximately 0.1 fps.**

Through-Screen Velocity

Through-Screen velocity at different intake flowrates is not readily available in formal calculations. However, the data required to calculate the through-screen velocity is available from multiple sources (not all cited herein). Through-screen velocity is typically reported on the SONGS Annual Marine Environmental Analysis and Interpretation Reports for an online Unit. During normal power operation, with an intake flow of 830,000 gpm (i.e. 4 CIRC pumps; reference 8), the through-screen velocity is reported as 3.0 fps (see Table 1-4 of reference 6). Flowrate per traveling screen and screen velocity is obtained from reference 19 at low tide (highest velocity). The effective flow area can be calculated from reference 19. These are necessary and sufficient conditions required to calculate the through-screen velocity as we vary the flowrate (Q). **Using 34,000 GPM (two SWC pumps; reference 9 and 10), the through-screen velocity is approximately 0.1 fps.**

It should be noted that the through-screen velocity stated above is for seven opened wells. The current long-term configuration of Unit 2 and Unit 3 only has six opened wells (one screen was permanently removed).

Site Flowrate Reduction

With the permanent reduction of water usage (i.e. CIRCs secured), SONGS has reduced its water usage to 98% of that while operating. **This assumes one SWC pump at the nominal 17,000 gpm is operating per Unit.**

References:

1. Mechanical Engineering Reference Manual, 12th Edition
2. Unit 2 and Unit 3 Plant Monitoring System (PMS); SOPDNA3, SONGS.UNIT2 and SONGS.UNIT3
3. Unit 2 and Unit 3 Critical Functions Monitoring System (CFMS); SOPDNA3, SONGS.U2CFMS and SONGS.U3CFMS
4. SO23-405-1-81, Circulating Water Pump Nameplate
5. 5104306 Offshore Intake Structure Velocity CAP
6. SONGS 2010 and 2011 Annual Marine Environment Analysis and Interpretation
7. M-0067-003, "Circulating Water System Start-up" (typical CIRC pump curve included)
8. M-0066-001, "Circulating Water Pump Capacity"
9. M-0027-001, "Saltwater Cooling System Pump Sizing"
10. SO23-405-33-M148, Typical SWC Pump Curve
11. ODCM REV 7
12. Material Selection for Saltwater Pumps, by S. Morrow.
13. PO 4500547285 AND 4500556685 – PO to Goodwest for Repair two Stoplog
14. SD-SO23-410, "Saltwater Cooling System Description"
15. SD-SO23-280, "Circulating Water System Description"
16. LCS 3.7.106
17. SD-SO23-820, "Plant Computer System Description"
18. C-255-02.02, "Intake Structure Hydraulic Model Study"
19. SO23-210-1-33, "Traveling Screen"

Entrance Velocity Calculations:

V = Q/A

V – Velocity (fps)
Q – Flowrate (cu.ft/sec)
A – Flow Area (sq.ft)

A = C*H

C –Velocity Cap Circumference
H – Velocity Cap Opening Height

C - 2πR

R – Velocity Cap Radius
R – 49-ft/2 = 24.5-ft (reference 5)
H – 7 ft (reference 5)
A = 2*π*28.5*7 = 1077.6 sq.ft
Q = 34000 gal/min * 1min/60sec * 1 cuft/7.481gal = 74.75 cuft/sec
V = 74.75/1077.6 = 0.07 fps

APPROXIMATELY 0.1 FPS

Through-Screen Velocity Calculation:

Inputs / Assumptions:

Input 1 - Flow through the seven screens is approximately 121,430 gpm per screen or 2.63 fps at low tide (18-ft); reference 19
Input 2 - Using 830,000 GPM and 3.0 fps (reported flowrate and through-screen velocity); reference 6
Assumption 1 - One Traveling Screen permanently removed from Unit 2; reference 13
Assumption 2 - One Traveling Screens permanently removed from Unit 3; reference 13
Assumption 3 - Through-screen velocities are for two SWC pumps in operation. During liquid radwaste discharge, we would have three pumps operating (two of one Unit's SWC pumps and one of the opposite Units; may or may not all be in the same intake).

Computation 1:

Flowrate Area at low tide A=Q/V = (121,430 gal/min * 1min/60sec * 1cuft/7.481galt) / (2.63 ft/sec) = 102.9 sqft

New velocity using two SWC pumps and seven opened screen wells:
V=Q/A=(34,000 gal/min * 1min/60sec * 1cuft/7.481gal) / (102.9 sqft)/(7 screens) = 0.105 fps or less than 0.15 fps

Through-screen calc may also be performed by proportional methods:
Q2/v2=Q1/v1 => v2 = (34,000)(2.63)/850,000) = 0.105 fps

However, Unit 2 has one traveling screen permanently removed and flow area blocked off. Unit 3 has two screens removed:

V=Q/A=(34,000 gal/min * 1min/60sec * 1cuft/7.481gal) / (102.9 sqft)/(6 screens) = 0.123 fps
Or, applying a correction factor (similar to above)
Correction factor for 6 screens = 7/6 => v2 = 0.123 fps.

APPROXIMATELY 0.1 FPS

Computation 2:

Using data to be consistent with previous reports (i.e. different significant figures or velocity and 830k gpm):
Q2/v2=Q1/v1 => v2 = (34,000)(3.0)/830,000) = 0.123 fps

Applying Correction Factor for removed screens:
Correction factor for 6 screens = 7/6 => v2 = 0.143 fps.

APPROXIMATELY 0.1 FPS

Attachment C

Daily Marine Mammal Inspection Logs at SONGS

Log Entries Report

Entry Date/Time	Entry / SE Type	Entry Text
1/14/2014 14:10:28		Intake inspection completed SAT for both units. No marine mammals present. [HOUSER, GARY T - Certified Operator Rounds - Operations Common - Day]
1/15/2014 07:10:00		Intake inspection completed SAT for both units. No marine mammals present. [HENRICH, GREGORY W - Certified Operator Rounds - Operations Common - Day]
1/16/2014 07:00:00		Intake Inspection completed SAT for both Units and no mammals present. [TOWNSEND, CHARLES B - Certified Operator Rounds - Operations Common - Day]
1/17/2014 13:30:00	**Equipment Status**	Inspected both circwater intake fish elevators for evidence of marine mammals. None were found. [JUNGNITSCH, PAUL L - Certified Operator Rounds - Operations Common - Day]
1/18/2014 07:15:00		Fish elevator inspection completed SAT for both Units, no large marine mammals present. McGreal [MCGREAL, JOHN B - Certified Operator Rounds - Operations Common - Day]
1/19/2014 07:11:00	**Equipment Status**	Inspected both units intake fish elevator areas for evidence of marine mammals. None were found. [JUNGNITSCH, PAUL L - Certified Operator Rounds - Operations Common - Day]
1/25/2014 06:49:30		LATE ENTRY: 1/24/2014 @ 07:35 - Completed the Daily Inspection of Both Unit Fish Elevator Areas for the presence of marine mammals/turtles. No mammals/turtles were observed. : [ETTERS, MICHAEL T - Certified Operator 4 - Operations Common - Day]
1/25/2014 06:52:11		Completed Marine mammal inspection on both units Sat, no mammals sighted. [STEEG, SHAWN W - Certified Operator 2 - Operations Common - Day]
1/26/2014 06:55:00		No mammals were observed in either unit's fish elevator area. : [ETTERS, MICHAEL T - Certified Operator 4 - Operations Common - Day]
1/27/2014 07:10:00	**On Shift Ops** Fish Elevator Inspection	Completed inspection of Unit 2 and Unit 3 Fish handling system. No mammals were observed in either unit's fish elevator area. [GARDNER, MICHAEL B - Certified Operator Rounds - Operations Common - Day]
1/27/2014 20:35:00	**Equipment Status**	Inspected both units circwater intakes for evidence of marine mammals. None were found. [JUNGNITSCH, PAUL L - Certified Operator Rounds - Operations Common - Night]
1/28/2014 09:01:42	**On Shift Ops** Fish Elevator Inspection	Completed inspection of Unit 2 and Unit 3 Fish handling system. No mammals were observed in either unit's fish elevator area. : [ETTERS, MICHAEL T - Certified Operator Rounds - Operations Common - Day]
1/29/2014 07:10:00	**On Shift Ops** Fish Elevator Inspection	Completed inspection of Unit 2 and Unit 3 Fish handling system. No mammals were observed in either unit's fish elevator area. [GARDNER, MICHAEL B - Certified Operator Rounds - Operations Common - Day]
1/30/2014 08:00:00		Inspected both units circwater intakes for evidence of marine mammals. None were found. [TOWNSEND, CHARLES B - Certified Operator Rounds - Operations Common - Day]
1/31/2014 07:50:00		Inspected both Units 2 and 3 circulating water intakes for evidence of marine mammals. None were found. [POORE, MARK A - Certified Operator Rounds - Operations Common - Day]
2/1/2014 08:05:17		Units 2 and 3 circulating water intakes Inspected for evidence of marine mammals. None were found. [HOUSER, GARY T - Certified Operator Rounds - Operations Common - Day]
2/2/2014 11:44:55		Inspected both Units 2 and 3 circulating water intakes for evidence of marine mammals / reptiles. None were found. [AKAHOSHI, DEAN Y - Certified Operator Rounds - Operations Common - Day]
2/3/2014 17:36:28		Verified the absence of any large mammals in either Unit 2 or Unit 3 intake area. [DAVISON, DAVID B - Certified Operator Rounds - Operations Common - Day]
2/4/2014 07:15:00		Intake inspection for large mammals performed for both Unit 2 & Unit 3 Circ Water Intakes. No mammals present. Johnson [JOHNSON, MICHAEL A - Certified Operator Rounds - Operations Common - Day]
2/5/2014 07:10:00		Intake inspection for large mammals performed for both Unit 2 & Unit 3 Circ Water Intakes. No mammals present. [HENRICH, GREGORY W - Certified Operator Rounds - Operations Common - Day]
2/6/2014 13:00:00		Verified there are no large mammals in either Unit 2 or Unit 3 intake. [DAVISON, DAVID B - Certified Operator Rounds - Operations Common - Day]
2/7/2014 08:14:00		Completed fish elevator area inspection for both Units, no large marine mammals or turtles present. McGreal [MCGREAL, JOHN B - Certified Operator Rounds - Operations Common - Day]
2/8/2014 14:29:00		Verified there are no large mammals in either Unit 2 or Unit 3 intake. [DIMENTO, CHRISTOPHER T - Certified Operator Rounds - Operations Common - Day]

Log Entries Report

Entry Date/Time	Entry / SE Type	Entry Text
2/9/2014 18:25:34		Verified there are no large mammals in either Unit 2 or Unit 3 intake. MILLER [HOWARD, ROBERT P - Certified Operator 4 - Operations Common - Day]
2/10/2014 07:00:00	**On Shift Ops** Fish Elevator Inspection	Completed inspection of Unit 2 and Unit 3 Fish handling system. No mammals were observed in either unit's fish elevator area. [GARDNER, MICHAEL B - Certified Operator Rounds - Operations Common - Day]
2/11/2014 09:50:00	**On Shift Ops** Fish Elevator Inspection	Completed inspection of Unit 2 and Unit 3 Fish handling system. No mammals were observed in either unit's fish elevator area. : [ETTERS, MICHAEL T - Certified Operator Rounds - Operations Common - Day]
2/12/2014 14:18:57		Inspected both Units 2 and 3 circulating water intakes for evidence of large marine mammals. None were found. [AKAHOSHI, DEAN Y - Certified Operator Rounds - Operations Common - Day]
2/13/2014 08:00:00		Unit 2 and Unit 3 Fish Handling System inspection completed SAT with no mammals observed in either units elevator area. [TOWNSEND, CHARLES B - Certified Operator Rounds - Operations Common - Day]
2/14/2014 07:50:32		Unit 2 and Unit3 Fish Handling System inspection completed SAT with no mammals observed in either units elevator area. [LILLIE, MARK A - Certified Operator 5 - Operations Common - Day]
2/15/2014 07:49:00		Unit 2 and Unit3 Fish Handling System inspection completed SAT with no mammals observed in either units elevator area. LILLIE [HOWARD, ROBERT P - Certified Operator 4 - Operations Common - Day]
2/16/2014 07:03:00		Unit 2 and Unit 3 Fish Handling System inspection completed SAT with no mammals observed in either units elevator area. [MARTIN, LEE D - Certified Operator Rounds - Operations Common - Day]
2/17/2014 08:15:00		Unit 2 and Unit 3 Fish Handling System Inspection completed SAT with no mammals observed in either unit's fish elevator area. [POORE, MARK A - Certified Operator Rounds - Operations Common - Day]
2/18/2014 07:19:29		Unit 2 and Unit 3 Fish Handling System Inspection completed SAT with no mammals observed in either unit's fish elevator area. [LILLIE, MARK A - Certified Operator Rounds - Operations Common - Day]
2/19/2014 12:05:00		Unit 2 and Unit 3 Fish Handling System Inspection completed SAT with no mammals observed in either unit's fish elevator area. [SHAW, EDWARD J - Certified Operator Rounds - Operations Common - Day]
2/20/2014 07:05:00		Unit 2 and Unit 3 Fish Handling System Daily Inspection completed SAT with no mammals observed in either unit's fish elevator area. [POORE, MARK A - Certified Operator Rounds - Operations Common - Day]
2/21/2014 07:12:00	**Equipment Status**	Inspected both units circwater intake fish elevator areas for marine mammals and reptiles. None were evident. [JUNGNITSCH, PAUL L - Certified Operator Rounds - Operations Common - Day]
2/22/2014 07:46:00		Completed fish elevator area inspection for both Units, no large marine mammals or turtles present. McGreal [MCGREAL, JOHN B - Certified Operator Rounds - Operations Common - Day]
2/23/2014 07:00:00		Verified by local observation the absence of marine mammals/reptiles in either unit fish elevator area. [DAVISON, DAVID B - Certified Operator Rounds - Operations Common - Day]
2/23/2014 21:46:03	**On Shift Ops** Fish Elevator Inspection	Completed inspection of Unit 2 and Unit 3 Fish handling system. No mammals were observed in either unit's fish elevator area. [MARTIN, LEE D - Certified Operator Rounds - Operations Common - Night]
2/24/2014 07:51:49		Observed by local inspection the absence of marine mammals in Unit 2 and Unit 3 fish elevator areas. Cotton [COTTON, BREWSTER W - Certified Operator Rounds - Operations Common - Day]
2/25/2014 14:36:00		Observed by local inspection the absence of marine mammals in Unit 2 and Unit 3 fish elevator areas. HOWARD [HOWARD, ROBERT P - Certified Operator Rounds - Operations Common - Day]

Attachment D

Marine Mammal Stranding Letters to the National Marine Fisheries Service Oct 2013–Feb 2014

SOUTHERN CALIFORNIA
EDISON®
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November 21, 2013

Sarah Wilkin
National Marine Fisheries Service
501 West Ocean Blvd. Suite 4200
Long Beach, CA 90802-4213

Subject: Marine Mammal Stranding Report-October; 2013

Dear Ms. Wilkin:

There were no pinipeds stranded at the San Onofre Nuclear Generating Station during the month of October, 2013.

If you have any questions, please contact myself at (949) 368-6375

Sincerely,

Paul Elliott Jr.
Environmental Specialist
San Onofre Nuclear Generating Station

CC: K. Anthony
CDM
Attachments

P.O. Box 128
San Clemente, CA 92674-0128

SOUTHERN CALIFORNIA
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December 12, 2013

Sarah Wilkin
National Marine Fisheries Service
501 West Ocean Blvd. Suite 4200
Long Beach, CA 90802-4213

Subject: Marine Mammal Stranding Report-November; 2013

Dear Ms. Wilkin:

There were no pinnipeds stranded at the San Onofre Nuclear Generating Station during the month of November, 2013.

If you have any questions, please contact myself at (949) 368-6375

Sincerely,

Paul Elliott Jr.
Environmental Specialist
San Onofre Nuclear Generating Station

CC: K. Anthony
CDM
Attachments

P.O. Box 128
San Clemente, CA 92674-0128

SOUTHERN CALIFORNIA
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An *EDISON INTERNATIONAL*® Company

January 7, 2014

Sarah Wilkin
National Marine Fisheries Service
501 West Ocean Blvd. Suite 4200
Long Beach, CA 90802-4213

Subject: Marine Mammal Stranding Report-December; 2013

Dear Ms. Wilkin:

There were no pinnipeds stranded at the San Onofre Nuclear Generating Station during the month of December, 2013.

If you have any questions, please contact myself at (949) 368-6375

Sincerely,

Paul Elliott Jr.
Environmental Specialist
San Onofre Nuclear Generating Station

CC: K. Anthony
CDM
Attachments

P.O. Box 128
San Clemente, CA 92674-0128

SOUTHERN CALIFORNIA
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February 19, 2014

Sarah Wilkin
National Marine Fisheries Service
501 West Ocean Blvd. Suite 4200
Long Beach, CA 90802-4213

Subject: Marine Mammal Stranding Report-January; 2014

Dear Ms. Wilkin:

There were no pinnipeds stranded at the San Onofre Nuclear Generating Station during the month of January, 2014.

If you have any questions, please contact myself at (949) 368-6375

Sincerely,

Paul Elliott Jr.
Environmental Specialist
San Onofre Nuclear Generating Station

CC: K. Anthony
CDM
Attachments

P.O. Box 128
San Clemente, CA 92674-0128