

November 23, 2010

SBK-L-10185 Docket No. 50-443

U.S. Nuclear Regulatory Commission Attention: Document Control Desk One White Flint North 11555 Rockville Pike Rockville, MD 20852

# Seabrook Station Response to Request for Additional Information <u>NextEra Energy Seabrook License Renewal Environmental Report</u>

#### References:

- 1. NextEra Energy Seabrook, LLC letter SBK-L-10077, "Seabrook Station Application for Renewed Operating License," May 25, 2010. (Accession Number ML101590099)
- NRC Letter "Request for Additional Information for the Review of the Seabrook Station License Renewal Application Environmental Review (TAC NO. ME3959)" October 29, 2010 (Accession Number ML102861217)

In Reference 1, NextEra Energy Seabrook, LLC (NextEra) submitted a application for a renewed facility operating license for Seabrook Station for Seabrook Station Unit 1 in accordance with the Code of Federal Regulations, Title 10, Parts 50, 51, and 54.

In Reference 2, the NRC requested additional information in order to complete its review of the License Renewal Application Environmental Report. The Enclosure contains the NextEra Energy Seabrook response to the NRC request for additional information dated October 29, 2010. No new or revised commitments are made in this submittal.

If there are any questions or additional information is needed, please contact Mr. Richard R.Cliche, License Renewal Project Manager, at (603) 773-7003.

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If you have any questions regarding this correspondence, please contact Mr. Michael O'Keefe, Licensing Manager, at (603) 773-7745.

Sincerely,

NextEra Energy Seabrook, LLC.

TE.T. Mehatt Paul Freeman

Site Vice President

Enclosure

cc:

W.M. Dean	NRC Region I Administrator
G. E. Miller,	NRC Project Manager, Project Directorate I-2
W. J. Raymond,	NRC Resident Inspector
R. A. Plasse Jr.,	NRC Project Manager, License
M. Wentzel,	NRC Project Manager, License Renewal

Mr. Christopher M. Pope

Director Homeland Security and Emergency Management New Hampshire Department of Safety Division of Homeland Security and Emergency Management Bureau of Emergency Management 33 Hazen Drive Concord, NH 03305

John Giarrusso, Jr. Nuclear Preparedness Manager The Commonwealth of Massachusetts Emergency Management Agency 400 Worcester Road Framingham, MA 01702-5399 United States Nuclear Regulatory Commission SBK-L-10185



I, Edward T. Metcalf, Plant General Manager of NextEra Energy Seabrook, LLC hereby affirm that the information and statements contained within are based on facts and circumstances which are true and accurate to the best of my knowledge and belief.

Sworn and Subscribed

Before me this

2312 day of November , 2010

Edward T. Metcalf

Plant General Manager

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Notary Public



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# Enclosure

#### Request for Additional Information (RAI): Meteorology and Air Quality

Please provide the annual air emission reports for Title V permitted sources (TV-OP-017 and GSP-EG-225), including fuel consumption per year, for the five most recent years.

# NextEra Energy Seabrook Response:

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1.a The annual air emission reports for Title V permitted source TV-OP-017 including fuel consumption per year, are provided on NH DES Air Resources Division Emissions Inventory Form INV-E1 for nine significant emissions sources (EU01 – EU09) for the five most recent years in Attachment 1 as follows.

•	2009:	SBK-L-10059,	April 8, 2010
	2008:	SBK-L-09062,	April 15, 2009
•	2007:	SBK-L-08040,	March 31, 2008
	2006:	SBK-L-07076,	April 17, 2007
	2005:	SBK-L-06075,	April 13, 2006

1.b The Title V permitted source GSP-EG-225 was commissioned on December 28, 2006 and therefore only three full years of data is available for this permitted source. The emissions from this source are estimated not to exceed one ton per year. Fuel Consumption was estimated in the initial 2006/2007 report and provided on NH DES Air Resources Division Emissions Inventory Form INV-E1 for 2008 and 2009. The reports are contained in Attachment 1 as follows.

•	2006/2007	SBK-L-08071,	April 23, 2008
	2008	SBK-L-09120,	May 22, 2009
	2009	SBK-L-10058,	April 13, 2010

## **Request for Additional Information (RAI): Aquatic Ecology**

In the "Seabrook 2009 Environmental Monitoring in the Hampton–Seabrook Area: A Characterization of Environmental Conditions" (NAI 2010), Table 4-1 "Species Composition, Annual Totals, and Nine-Year Total of Finfish, and American Lobster Impinged at Seabrook Station from 1994 to 2009," provides impingement estimates from 1994 through 2009. Subnote "a" states that impingement data prior to October 1994 were underestimated. Please provide a brief explanation why these data were underestimated.

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In NAI 2010, Table 4-6 "Annual estimated numbers of fish eggs and larvae entrained (in millions) by the cooling water system at Seabrook Station from June 1990 through December 2009." provides entrainment estimates for several species of fish eggs and larvae. For egg entrainment estimates, several categories combine two or more species (e.g. Atlantic cod/haddock, cunner/yellowtail, hake spp., hake spp./fourbeard rocking) due to the similar appearance of the eggs and spawning seasons. Provide any supporting information available to estimate the percentage of eggs that belong to each species.

In NAI 2010, NextEra sampled in two main areas, the nearfield and farfield sites. The nearfield site is located near the intake and discharge structures, and the farfield site is located approximately 2-3 nautical miles from these structures. NextEra compares data from the two sites to determine whether plant operations have an impact on aquatic resources. Discuss the justification why the farfield site was selected. Describe any studies that were conducted to select the farfield site as a control site.

4. Please describe the cleaning and maintenance procedures for the intake and discharge structures, including the frequency of dredging, physical cleaning, and other maintenance procedures.

5. Please specify the flow rate at the intake structures.

6. Please provide any recent correspondence from Federal or State agencies regarding NAI 2010 or "Seabrook Station, 2010 Environmental Monitoring Program Mid-Year Report" and NextEra's responses to those comments.

7. The Environmental Report states that NextEra stopped monitoring pelagic fish using gill nets because the sampling methods had detrimental impacts on aquatic resources. Please provide documentation from National Marine Fisheries Service (NMFS) or other Federal or State agencies that suggested NextEra discontinue this monitoring program.

#### NextEra Energy Seabrook Response:

In October 1994, Seabrook Station identified the fact that it had not accurately counted the number of small fish impinged on Seabrook Station's travelling screens prior to the fourth quarter of 1994. Small fish, concealed in screen wash debris had been overlooked by plant personnel responsible for separating fish from debris. Therefore, impingement data prior to the fourth quarter of 1994 cannot be considered to be as reliable as data after this time frame. The impingement monitoring program was enhanced in the fourth quarter of 1994 to separate all readily visible fish from debris and beginning in 1995, biologists began to conduct the weekly impingement evaluations. The magnitude of the underestimate prior to October 1994 is unknown.

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2. It is necessary to group some egg taxa at certain times of the year due to morphological similarities and overlap of spawning seasons. At other times of year, spawning seasons do not overlap or the embryo within the egg capsule has developed to the point where a species determination can be made. However, it is possible to estimate the percentage of eggs that belong to each species in a species group. Assuming each egg species in a group has the same probability of hatching, the ratio of larval species can be applied to egg species groups to estimate the species composition of egg groups. This method was used to estimate the species in the egg groups were added to the eggs that were identified to the species level to derive total estimates of the number of Atlantic cod, haddock, witch flounder, cunner, yellowtail flounder, hake, and fourbeard rockling eggs entrained (Table 1).

						•						-		-						•
. <i></i>	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	 2006	2007	2008	2009
Atlantic cod	20.84	74.50	31.96	50.30	0.20	37.00	22.37	6.38	84.28	48.61	30.72	32.10	77.84	15.48	9.28	16.03	15.69	15.12	48.02	15.43
Haddock	<sup>,</sup> 0.00	0.00	7.54	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73	0.00	0.00	0.00	· 0.00
Witch flounder	8.26	0.00	0.00	0.00	0.12	0.70	34.43	6.52	1.82	4.39	32.98	0.00	3.16	4.02	8.92	1.55	4.44	· 5.26	0.70	3.16
Cunner	489.25	147.17	0.00	58.40	0.00	18.19	93.87	221.54	63.56	220.30	1206.70	239.55	1395.69	143.90	518.10	251.21	489.43	295.03	444.47	1451.22
Yellowtail flounder	_1.15	569.23	198.60	, 0.00	0.00	0.61	17.93	0.46	1.94	33.80	2.80	8.35	3.91	0.00	0.10	4.99	1.13	、7.77	0.00	4.10
Hake	50.14	2.60	0.00	1.62	0.60	29.28	213.21	71.77	7.52	6.22	295.23	4.40	79.70	5.20	5.74	2.80	8.12	15.61	21.72	92.07
Fourbeard rockling	108.76	39.50	51.40	32.68	0.20	27.52	38.69	46.63	33.88	27.38	63.57	47.10	61.43	44.10	38.16	68.80	· 36.59	78.15	61.67	123.82

Table 1.Estimated number of selected fish eggs entrained at Seabrook Station 1990-2009<br/>based on apportioned egg groups and eggs identified to species.

The reference (farfield) sites for water quality, zooplankton and ichthyoplankton, benthos, lobster larvae, and epibenthic crustaceans are between 3 and 4 nautical miles north of the midpoint between the intake and discharge structures. An otter trawl reference station is located about 2 nautical miles north of the midpoint between the structures with a second reference station located about 3 nautical miles south of the midpoint. In 1981, staff scientists at Normandeau recommended to PSNH that reference areas be added to the Environmental Monitoring program. This addition would allow Seabrook Station monitoring to follow the BACI (Before-After-Control-Impact) sampling design that was recommended for impact evaluation, particularly at power plants. The use of the BACI design strengthens the ability to separate potential plant-related impacts from natural variability. Normandeau and PSNH staff collaborated to select farfield sampling sites that were similar in terms of depth, substrate, wave energy and species composition, but outside of plant influences. The zone of discharge influence was based on modeling conducted by Alden Research Laboratories and presented in the 1977 Summary Document. As the predominant currents are north to south, a northern farfield location was deemed a better choice than southern.

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Rye Ledge was selected as the location of the farfield station cluster, as it offered similar intertidal and subtidal substrate and algae composition to that near Seabrook Station's discharge. Specific locations were chosen after an intensive site search. An intertidal station was selected that had similar wave exposure, elevation, substrate (horizontal ledge), and algae species composition to the nearfield station. Divers reviewed potential subtidal sites with similar depth to nearfield areas, focusing on substrate composition, elevation, wave energy, and algae species composition, especially the presence of kelps. Sites that best paralleled nearfield sampling design. PSNH approved the sample locations, but no formal report was prepared to document the site search and final station selection. The 1982 Baseline report was the first report to include those stations.

Cleaning of the three intake structures and inspection of the eleven bifurcated discharge diffuser nozzles is periodically performed by two contractors; Normandeau Associates (also responsible for conduct of the environmental monitoring program and certain REMP marine sample collections) and Underwater Construction Company (also responsible for in plant forebay diving for sediment removal, underwater equipment inspections and the 1999 installation of the seal barrier system). The intake structures are cleaned twice per year and the discharge diffuser nozzles are inspected each refueling outage as described below by these contractors.

#### Normandeau Associates (Limited Intake Structure Cleaning)

Normandeau Associates conducts an exterior and limited interior cleaning of the offshore intake structures twice a year (June and November) during non-outage years. During outage years Normandeau will perform one cleaning, either Spring or Fall, while the plant is operating. The Normandeau intake structure cleaning is performed while the station is operating thus diver entry into the intake structures is not permitted due to the higher intake water velocity internal to the structures and in the vertical intake shafts. The Normandeau cleaning of the exterior and limited interior surfaces is performed using hand tools and rakes deployed from outside the intakes. The cleaning involves the removal of all bio - fouling from all of the surfaces of each of the three velocity caps including the top, the circular vertical face above and below the seal barrier bars, the barrier bars and the interior surfaces of each of the 12 bays, which includes the vertical support vanes, the ceiling and the floor going in as far as the vertical riser shaft opening. Each cleaning evolution begins with the dive team attending an initial pre-job briefing with a representative from Seabrook Station. The pre-job briefing serves to review the job expectations including individual responsibilities; discuss safety requirements including identification of potential hazards and review of applicable operating experiences; discuss control room, security and other notification requirements; and review communications and emergency procedures.

Cleaning begins with the top of the velocity cap. The top and exterior vertical faces and leading edges of the vanes are covered with a copper-nickel cladding, from which bio-fouling is easily removed compared to concrete surfaces. This area is mostly cleaned using gloved hands and a stiff brush. The barrier bars are also constructed of copper-nickel alloy and are cleaned by running a gloved hand up and down each bar. The fastening hardware for the seal

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barriers are cleaned and checked for any sign of loosening and the spacing between the bars is inspected. Any abnormal findings are reported to Seabrook Station and action is taken only after approval from Seabrook Station. Bio-fouling removed from these surfaces is dropped to the sea floor.

These interior surfaces of the support vanes and the ceiling are concrete, to which mussels, barnacles and other organisms attach very strongly. For these surfaces a telescoping scraper is used for efficient cleaning from outside the barrier bars. The floor of the interior is covered with copper-nickel cladding similar to the top with numerous bolt heads protruding. For this area a technique that keeps the scraper head of the tool gliding just above the bolt heads is used allowing for the removal of the clusters of mussels that attach to the bolt heads. All tools are tethered to the diver's harness with a nylon/polyester cord in accordance with Seabrook Station's Foreign Material Exclusion policies to prevent their accidental loss into the intake system.

# Underwater Construction Company (Intake Structure Cleaning and Discharge Diffuser Nozzle Inspection)

Underwater Construction Company conducts an external and interior cleaning of the offshore intake structures during refueling outage years during the alternating spring or fall refueling outages. The cleaning during refueling outages permits diver entry into the intake structure through removal of a seal barrier panel on each intake structure. The intake structure cleaning includes all of the exterior and interior surfaces as detailed above by Normandeau. The intake structure cleaning by Underwater Construction also includes the circumference of the vertical riser shaft down to the chlorine injection header ring as well as the header and injection nozzles. The chlorine header is approximately six feet down into the riser shaft. The intake structure cleaning also incorporates a check of the seal barrier mounting hardware condition and tightness. During refueling outages Underwater Construction also performs inspections of the discharge diffuser nozzles for damage and entangled lobster trap buoy lines, fishing gear etc.

5. As documented in NUREG -0895 "*Final Environmental Statement Related to the Operation* of. Seabrook Station, Units 1 and 2" Appendix H and NPDES Permit NH0020338 Part I A.2.b., NextEra Energy Seabrook operates such that; "The velocity of water as it enters the cooling water intake structures shall at no time exceed 1.0 foot per second."

Enclosed in Attachment 3 is New Hampshire Fish and Game Department letter dated August 10, 2010; regarding Seabrook Station 2010 Environmental Monitoring Program Mid-Year Report and NextEra Energy Seabrook, LLC letter SBK-L-10175; "Response to Comments on 2010 Environmental Monitoring Program Mid-Year Report, October 15, 2010.

Enclosed in Attachment 3 is Seabrook Station memo NYE-97010 dated March 20, 1996, documenting the suspension the Seabrook Station Gill Net Monitoring Program on March 19, 1997 as discussed with F. Gay, Environmental Protection Agency and J. Hart, Seabrook Station, on March 18, 1997.

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#### **Request for Additional Information (RAI): Human Health**

- 1. The Environmental Report (ER), Section 3.1.3.3, Solid Radioactive Waste System, discusses how low-level radioactive waste is expected to be handled during the period of license renewal. However, as discussed in the ER, Seabrook Station cannot dispose of Class B and C low-level radioactive waste at the Barnwell, SC facility, as New Hampshire is not a part of the Atlantic Interstate Low-Level Radioactive Waste Management Compact. The ER states that Seabrook Station has sufficient capacity within the waste processing building for approximately seven years of storage for Class B and C waste. In addition to the storage capability, the ER discussed the use of a contractor to process and take title of the Class B and C waste for its disposal. However, based on the information contained in the ER, the staff is unable to reach a conclusion regarding Seabrook Station's capacity to store and dispose of low-level radioactive waste over the term of license renewal. Please provide additional information about Seabrook Station's typical yearly low-level waste generation rates, processing methods, storage capability, and disposal options during the period of license renewal.
- 2. The ER, Section 3.1.3.4, Mixed Waste, discusses an outage event where a large volume (40 tons) of mixed waste was generated during a steam generator chemical cleaning process and that similar large volumes may be generated in the future. Is it reasonably foreseeable that there will be additional steam generator chemical cleanings that will require the disposal of similar large volumes of mixed waste during the term of license renewal? Also, the discussion on the generation of "small volumes of mixed waste" does not contain sufficient information for the staff to make an assessment of the mixed waste storage and disposal capabilities at the Seabrook Station. Please provide additional information about Seabrook's typical yearly mixed waste generation rates, processing methods, applicable permits, storage capacity, and disposal options during the period of license renewal.

## NextEra Energy Seabrook Response:

Environmental Report Sections 3.1.3.3, Solid Radioactive Waste System and 3.1.3.4, Mixed Waste have been supplemented to clarify Seabrook Station's capacity to store and dispose of low-level radioactive waste over the term of license renewal and additional information about Seabrook's typical yearly mixed waste generation rates, processing methods, applicable permits, storage capacity, and disposal options during the period of license renewal. For clarity, the text for Environmental Report Sections 3.1.3.3, Solid Radioactive Waste System and 3.1.3.4, Mixed Waste have been revised in their entirety and are provided below.

#### 3.1.3.3 Solid Radioactive Waste System

The Solid Waste Management System processes wet and dry solid wastes using primarily the spent resin sluice and waste solids systems. Spent ion exchange resins from plant demineralizers are sluiced to the spent resin sluice tanks. The waste solids system transfers resins from the sluice tanks to liners which are packaged for shipment offsite. Spent filters removed from plant systems are placed directly into liners and after a drying period are packaged for shipment offsite. Dry Active Waste is normally directly packaged for shipment offsite in boxes and/or

#### cargo containers (Sea-Land). (Seabrook 2008a)

The Station also has installed waste concentration systems for evaporator bottoms and an asphalt solidification system that could be used for solid waste processing (Seabrook 2008a). Neither of these systems has ever been used and both are being evaluated for long-term lay-up or abandonment to avoid excessive waste generation and reduce operational complexity.

In the past, all low level wastes were shipped to either to the Clive Utah disposal facility for NRC class A waste or to the Barnwell Low Level Radioactive Waste Disposal Facility in South Carolina for NRC class B and C waste, either directly or through waste processors. On July 1, 2008, the Barnwell facility closed to all facilities that are not in a state that is a member of the Atlantic Interstate Low Level Radioactive Waste Management Compact. New Hampshire is not a member of the Compact. The Barnwell facility is closed to Seabrook Station.

Currently, NRC Class A radioactive wastes (primarily Dry Active Waste, as well as some resins and filters) are shipped to offsite facilities for further processing or direct disposal under a long term contract. All of Seabrook Station Class A wastes are disposed in a licensed radioactive waste landfill owned and operated by EnergySolutions in Clive, Utah. The Clive Utah disposal facility is not licensed to accept NRC Class B and C wastes.

NRC Class B & C wastes (primarily primary resins and filters) are sent to Studsvik, a waste vendor in Erwin, Tennessee under an existing contract for processing. Through a state of Tennessee-licensed attribution model, Studsvik is allowed to take title to Seabrook Station's Class B and C waste. Studsvik processes the material to reduce the volume, takes title to the wastes, and sends it to Waste Control Specialists in Andrews County, Texas for long-term storage and ultimately disposal as Studsvik's waste. Should the loss of this disposal outlet for NRC class B and C wet wastes (resins and filters) occur, the station has sufficient buffer capacity between: a) The NRC class B and C spent resin storage tank in the Waste Processing Building (operational capacity of 600 ft<sup>3</sup>, b) Four 120 ft<sup>3</sup> liner shields in the Waste Processing Building Drum Storage Area for resins or filters and c) Six 120 ft<sup>3</sup> filter liner storage cubicles below the 25' elevation Waste Processing Building floor for a minimum of ten years of operation. The current NRC class B and C generation rate is ~ 100 ft<sup>3</sup> per year. The generation rate and buffer capacity (~1,600 ft<sup>3</sup> combined) allow sufficient time such that should the Studsvik disposal option no longer be available, the station has adequate time to design and install a NRC class B and C storage facility on site.

All radioactive shipments are made in accordance with NRC, U.S. Department of Transportation and state regulations.

#### 3.1.3.4 Mixed Waste

"Mixed waste" refers to waste that contain both radioactive and hazardous constituents. Under normal operating conditions, the station generates approximately one gallon per year of mixed waste associated with NPDES oil & grease analyses. The mixed waste from these analyses are

collected in a disposal container which when filled is sent to a licensed mixed waste processing and disposal facility within 90 days. The station is not currently permitted for storage of mixed waste and is classified as a Federal Small Quantity Generator of Hazardous Waste. Occasionally, during special evolutions such as the chemical cleaning of the steam generators, the quantity of mixed waste generated may increase. "For example, during the 2009 refueling outage, 40 tons of mixed waste was generated in the residual iron solvent cleaning solution because of leachable lead and chromium in the waste exceeding 5 ppm in the presence of tritium and small quantities of gamma emitting by-product material. Conversely, the 2008 steam generator chemical cleaning for copper removal did not generate a mixed waste, only a radioactive waste because the copper solvent was not as effective as the iron solvent at removing lead and chromium. Chemical cleaning of steam generators may be performed in future refueling outages and has the potential to generate similar quantities of mixed waste." Any mixed waste arising from these potential future chemical cleanings will be collected in the disposal container(s) which when filled are sent to a licensed mixed waste processing and disposal facility within 90 days. The station is not currently permitted for storage of mixed waste and will need to claim a monthly one time Federal Large Quantity Generator of Hazardous Waste status when and if a steam generator chemical cleaning project generates a mixed waste.

# Request for Additional Information (RAI): Archaeological and Cultural Resources

1. Please provide any correspondence with the New Hampshire Division of Historical Resources or Native American tribes since the ER was submitted.

#### NextEra Energy Seabrook Response:

1. There has been no additional correspondence between NextEra Energy Seabrook, LLC and the New Hampshire Division of Historical Resources or Native American tribes since the ER was submitted.

#### Request for Additional Information (RAI): Hydrology and Water Quality

- 1. Please provide a summary of the last 12 months of analytical results of composite samples taken via the Radiation Monitor Control Station (located in the Auxiliary Building).
- 2. Has tritium been detected offsite above detection limits (based on quarterly sampling) in any of the new temporary monitoring wells (TW-1, TW-2, or TW-3) installed in the marsh south of the Auxiliary Building? If so, please identify the well(s), date(s) detected, and maximum observed results.

#### NextEra Energy Seabrook Response:

1. A summary of the last 12 months of analytical results of samples taken via the Storm Drain Rad Monitor is contained in the following Measurements Report dated 11/16/2010.

Unit: 1 - Seabrook Station Unit 1 Sample Point: SD - STORM DRAINS

<u>TIT</u>	LE - DESCRIPTOR			
	Group - EFF			
Analysis Value/Meas Uni	System - LES <b>Date/Time</b>	Power	OpMode	Analyst
H3 (TRITIUM) <6.24E-07 uCi/m	1 22-Dec-2008 07:52:0	0 100.00	1	JIC
H3 (TRITIUM) 1.58E-05 uCi/m	11-Feb-2009 08:25:00	) 100.00	1	AP
H3 (TRITIUM) 9.41e-07 uCi/ml	23-Feb-2009 08:48:00	) 100.00		WJD
<b>Results Comment:</b> composited from grab samples	obtained from 2/16/09 to 2/22/09			
H3 (TRITIUM) <5.63E-07 uCi/m	09-Mar-2009 07:55:0	0 100.00	1	JIC
H3 (TRITIUM) 9.55E-07 uCi/m	1 23-Mar-2009 10:10:0	0 100.00	1	JIC
H3 (TRITIUM) 9.98E-07 uCi/m	20-Apr-2009 07:57:00	) 100.00	1	WJD
H3 (TRITIUM) <5.87e-7 uCi/ml	04-May-2009 08:05:0	0 100.00	1	WJD
Sample Comment: weekly composite				
H3 (TRITIUM) <5.54E-07 uCi/m	l 11-May-2009 08:10:0	0 100.00	1	AP
H3 (TRITIUM) <5.84e-7 uCi/ml	25-May-2009 06:37:0	0 100.00	1	WJD
Sample Comment: Weekly Composite Sample				
H3 (TRITIUM) <5.84E-07 uCi/m	08-Jun-2009 08:40:00	100.00	1 '	JIC
H3 (TRITIUM) <5.83E-7 uCi/ml	15-Jun-2009 10:17:00	100.00	1	WJD
Sample Comment: WEEKLY COMPOSITE SAM	PLE		· · · ·	
H3 (TRITIUM) <5.49E-07 uCi/m	07-Jul-2009 08:45:00	100.00	, <b>1</b> '	SDA
H3 (TRITIUM) <5.581E-07 uCi/r	nl 13-Jul-2009 09:05:00	100.00	1	AP
H3 (TRITIUM) <5.79e-07 uCi/ml	20-Jul-2009 11:35:00	100.00	1	WJD
Sample Comment: weekly composite sample				•
H3 (TRITIUM) <5.93E-07 uCi/m	17-Aug-2009 10:30:0	0 100.00	1 .	AP
H3 (TRITIUM) <5.57e-07 uCi/ml	07-Sep-2009 07:30:00	) 100.00	1	HBM
H3 (TRITIUM) <5.68E-07 uCi/m	14-Sep-2009 08:10:00	100.00	1	AP
H3 (TRITIUM) <5.83e-7 uCi/ml	26-Oct-2009 01:37:00	0.00	6	WJD
H3 (TRITIUM) 6.69e-07 uCi/ml	14-Dec-2009 12:28:00	0.00	5	VZ
H3 (TRITIUM) <5.42E-07 uGi/m	28-Dec-2009 09:10:00	0 100.00	1	AP
H3 (TRITIUM) <1.54e-06 uCi/ml	11-Jan-2010 00:06:00	100.00	1	HBM
H3 (TRITIÙM) <5.53e-07 uCi/ml	14-Jan-2010 03:10:00	100.00	1	HBM
H3 (TRITIUM) 5.92e-07 uCi/ml	15-Jan-2010 00:22:00	100.00	1	HBM
H3 (TRITIUM) <5.70E-07 uCi/m	17-Jan-2010 00:10:00	100.00	1	JIC
H3 (TRITIUM) 3.46E-06 uCi/m	25-Jan-2010 10:50:00	100.00	1 .	AP
H3 (TRITIUM) <5.77e-07 uCi/ml	15-Feb-2010 07:55:00	100.00	1	WJD
Sample Comment: Composite of last weeks grab s	amples			
H3 (TRITIUM) 7.69e-07 uCi/ml	08-Mar-2010 08:01:00	) 100.00	1	WJD
Sample Comment: composite of last weeks grab sa	mples			•
H3 (TRITIUM) <5.97e-07 uCi/ml	19-Apr-2010 08:15:00	100.00	1	WJD
H3 (TRITIUM) <5.93e-07 uCi/ml	26-Apr-2010 10:17:00	100.00	1	WJD
H3 (TRITIUM) <5.46e-7 uCi/ml	03-May-2010 08:16:0	0 100.00	. 1 .	WJD
H3 (TRITIUM) <5 95F-07 uCi/ml	24-May-2010 10:15:0	0 100.00	1	ΔP
		- 100.00	5 <b>*</b> 2 (	

Report Generated: 11/16/2010 07:00

Unit: Sample Point:	1 - Seabrook Station SD - STORM DRAI	Unit 1 NS		- 1 		
		<u>TITLE - D</u>	ESCRIPTOR			
		Grou	<b>p - EFF</b>			
		Syste	m - LES		· · ·	
Analysis		Value/Meas. Unit	<u>Date/Time</u>	Power	OpMode	Analyst
	· · · · · · · · ·	<5.600-07 uCI/mi	31-1May-2010 04:25:00	100.00	1	WJD
		<5.66E-07 uCl/ml	07-Jun-2010 08:10:00	100.00	I	VZ
		<5.5/E-0/ uCl/ml	21-Jun-2010 12:35:00	100.00	ſ	MID
	· · · · · · · · · · · · · · · · · · ·	6.608e-07 uC1/ml	05-Jui-2010 10:40:00	100.00	1	AJB
H3 (TRITIUM)		<6.417e-07 uCi/ml	12-Jul-2010 08:28:00	100.00	1	AJB
H3 (IRITIUM)		1.03e-06 uCi/mI	19-Jul-2010 10:45:00	100.00	1	WJD
H3 (TRITIUM)		<5.57E-07 uCi/ml	26-Jul-2010 08:35:00	100.00	1	JSB
H3 (TRITIUM)		<5.631e-07 uCi/ml	02-Aug-2010 08:40:00	100.00	1 .	АЉ
H3 (TRITIUM)		<5.54e-07 uCi/ml	16-Aug-2010 08:35:00	100.00	1	JSB
H3 (TRITIUM)		<5.6E-07 uCi/ml	23-Aug-2010 09:05:00	100.00	1	SDA
H3 (TRITIUM)		<5.658E-07 uCi/ml	30-Aug-2010 00:10:00	100.00	1.	CAS
H3 (TRITIUM)		<5.29E-07 uCi/ml	06-Sep-2010 11:23:00	100.00	· 1	JSB
H3 (TRITIUM)		8.018e-07 uCi/ml	13-Sep-2010 08:17:00	100.00	1	AJB
H3 (TRITIUM)	• • • • •	8.12e-07 uCi/ml	27-Sep-2010 10:08:00	100.00	1	· WJD
H3 (TRITIUM)		<5.77E-07 uCi/ml	04-Oct-2010 10:15:00	100.00	. 1	SDA
H3 (TRITIUM)		<5.72e-07 uCi/ml	11-Oct-2010 07:09:00	100.00	1 .	WJD
H3 (TRITIUM)		<5.73E-07 uCi/ml	17-Oct-2010 18:00:00	100.00	1	JSB
H3 (TRITIUM)		<5.64e-07 uCi/ml	25-Oct-2010 10:33:00	100.00	. 1	WJD
H3 (TRITIUM)		2.97e-06 uCi/ml	01-Nov-2010 13:30:00	100.00	1.	SMD
H3 (TRITIUM) {	Dup=1}	<5.84E-07 uCi/ml	01-Nov-2010 13:30:00	100.00	. 1	AP
TGA (TOTAL GA	MMA ACTIVITY)	0.0000E+00 uCi/cc	03-Nov-2008 09:10:00	100.00	1	SMD
TGA (TOTAL GA	MMĄ ACTIVITY)	0.0000E+00 uCi/cc	10-Nov-2008 13:00:00	100.00	1	SMD
TGA (TOTAL GA	MMA ACTIVITY)	0.0000E+00 uCi/cc	18-Nov-2008 08:08:00	100.00	1	CAS
TGA (TOTAL GA	MMA ACTIVITY)	1.5114E-07 uCi/cc	08-Dec-2008 07:45:00	100.00	1	SMD
TGA (TOTAL GA	MMA ACTIVITY)	0.0000E+00 uCi/cc	11-Dec-2008 05:25:00	100.00	1	CAS
TGA (TOTAL GA	MMA ACTIVITY)	0.0000E+00 uCi/cc	15-Dec-2008 07:40:00	100.00	1	SMD
TGA (TOTAL GA	MMA ACTIVITY)	0.0000E+00 uCi/cc	22-Dec-2008 07:52:00	100.00	1.	SMD
TGA (TOTAL GA	MMA ACTIVITY)	0.0000E+00 uCi/cc	29-Dec-2008 08:05:00	100.00	1	SMD
TGA (TOTAL GA	MMA ACTIVITY)	0.0000E+00 uCi/cc	19-Jan-2009 19:20:00	100.00	1	SMD
TGA (TOTAL GA	MMA ACTIVITY)	0.0000E+00 uCi/cc	26-Jan-2009 09:10:00	100.00		SMD
TGA (TOTAL GA	MMA ACTIVITY)	0.0000E+00 uCi/cc	02-Feb-2009 08:45:00	100.00	ĩ	SMD
TGA (TOTAL GA	MMA ACTIVITY)	0.0000E+00 uCi/cc	11-Feb-2009 08:25:00	100.00	1	SMD
TGA (TOTAL GA	MMA ACTIVITY)	0.0000E+00 uCi/cc	16-Feb-2009 09:09:00	100.00	1	CAS
TGA (TOTAL GA	MMA ACTIVITY)	0.0000E+00 uCi/cc	18-Feb-2009 12:55:00	100.00	1	CAS.
TGA (TOTAL GA	MMA ACTIVITY)	0.0000E+00 uCi/cc	19-Feb-2009 10:25:00	100.00	<u>1</u>	SMD
TGA (TOTAL GA	MMA ACTIVITY)	0.0000E+00 uCi/cc	20-Feb-2009 12:40:00	100.00	- 1	SMD
TGA (TOTAL GA	MMA ACTIVITY)	0.0000E+00 uCi/cc	21-Feb-2009 07:45:00	100.00	1	CAS

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Unit: 1 - Seabrook Station U Sample Point: SD - STORM DRAINS	nit 1 S			
	TITLE - DESCRIPT	<u>for</u>		
	Group - EFF	1140		
	System - LES			
Analysis	Value/Meas. Unit	<u>Date/Time</u>	<u>Power</u> OpMode	<u>Analyst</u>
	0.000+00 UCI/cc	23-Feb-2009 08.48.00	100.00 1	ULW ULW
	1.7970E-07 uCrcc	24-Feb-2009 14:00:00	100.00 1	
IGA (IOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	27-Feb-2009 13:14:00	100.00 1	CAS
	0.0000E+00 uCi/cc	28-Feb-2009 08:19:00	100.00 1	CAS
IGA (IOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	03-Mar-2009 10:45:00	100.00 1	CAS
IGA (IOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	04-Mar-2009 08:00:00	100.00 1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	05-Mar-2009 08:45:00	100.00 1	SMD
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	05-Mar-2009 16:14:00	100.00 1	
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	09-Mar-2009 07:55:00	100.00 1	SMD
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	11-Mar-2009 14:30:00	100.00 1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	23-Mar-2009 10:10:00	100.00 1	SMD
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	29-Mar-2009 13:18:00	100.00 1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	29-Mar-2009 19:05:00	100.00 1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	30-Mar-2009 09:24:00	100.00 1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	30-Mar-2009 15:07:00	100.00 1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	04-Apr-2009 08:10:00	100.00 1	CAS ,
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	06-Apr-2009 10:06:00	100.00 1	SMD
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	06-Apr-2009 17:45:00	100.00 1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	13-Apr-2009 11:00:00	100.00 1	SMD
TGA (TOTAL GAMMA ACTIVITY)	0.00E+00 uCi/cc	20-Apr-2009 07:57:00	100.00 1	WJD
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	21-Apr-2009 08:11:00	100.00 1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.00e+00 uCi/cc	04-May-2009 08:05:00	100.00 1	WJD
Sample Comment: weekly compo	osite			
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	07-May-2009 10:00:00	100.00 1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	08-May-2009 04:50:00	100.00 1	SMD
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	10-May-2009 01:00:00	100.00 1	SMD
TGA (TOTAL GAMMA ACTIVITY)	5.7409E-08 uCi/cc	11-May-2009 08:10:00	100.00 1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.00e+00 uCi/cc	25-May-2009 06:37:00	100.00 1	WJD
Sample Comment: Weekly Comp	oosite Sample			
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	30-May-2009 08:35:00	100.00 1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	01-Jun-2009 11:00:00	100.00 1	CAS
TĢA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	08-Jun-2009 08:40:00	100.00 1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	12-Jun-2009 01:20:00	100.00 1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	14-Jun-2009 10:40:00	100.00 1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	15-Jun-2009 10:17:00	100.00 1	CAS
Sample Comment: WEEKLY CO	OMPOSITE SAMPLE			
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	22-Jun-2009 09:05:00	100.00 1	SMD

Unit: 1 - Seabrook Station U Sample Point: SD - STORM DRAINS	nit 1 S				·
	TITLE - DESCRIPT	OR			
	Group - EFF		s.		
	System - LES				· · · .
<u>Analysis</u>	Value/Meas. Unit	Date/Time	Power_	<u>OpMode</u>	<u>Analyst</u>
IGA (IOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	22-Jun-2009 13:40:00	100.00	1	CAS
IGA (IOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	22-Jun-2009 23:15:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	23-Jun-2009 16:05:00	100.00	1 .	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	25-Jun-2009 17:59:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	25-Jun-2009 21:11:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	26-Jun-2009 09:20:00	100.00	1	SMD
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	29-Jun-2009 10:10:00	100.00	1	SMD
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	29-Jun-2009 10:15:00	100.00	1	SMD
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	01-Jul-2009 12:40:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	02-Jul-2009 12:50:00	100.00	1	SMD
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	04-Jul-2009 08:15:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	05-Jul-2009 08:35:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	06-Jul-2009 09:10:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	07-Jul-2009 08:45:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	09-Jul-2009 10:25:00	100.00	1.	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	12-Jul-2009 16:00:00	100.00	1	HBM
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	13-Jul-2009 08:00:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	14-Jul-2009 07:45:00	100.00	1	AAG
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	15-Jul-2009 08:40:00	100.00	1	SMD
TGA (TOTAL GAMMA ACTIVITY)	0:0000E+00 uCi/cc	20-Jul-2009 11:35:00	100.00	1	- HBM
Sample Comment: weekly compo	osite sample				
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	27-Jul-2009 13:40:00	100.00	1	HBM
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	30-Jul-2009 16:35:00	100.00	1	HBM
TGA (TOTAL GAMMA ACTIVITY)	3.8871E-08 uCi/cc	31-Jul-2009 07:50:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	04-Aug-2009 08:00:00	100.00	1	, SMD
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	05-Aug-2009 08:00:00	100.00	1	SMD
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	07-Aug-2009 07:45:00	100.00	1	ĤBM
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	10-Aug-2009 09:03:00	100.00	1	MKL
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	31-Aug-2009 09:20:00	100.00	1	AAG
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	07-Sep-2009 07:30:00	100.00	1	CAS
TGA (TOTAL GÁMMA ACTIVITY)	0.0000E+00 uCi/cc	14-Sep-2009 08:10:00	100.00	1	SMD
TGA (TOTAL GAMMA ACTIVITY)	6.2303E-07 uCi/cc	21-Sep-2009 01:15:00	100.00	1	AAG
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	21-Sep-2009 12:48:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	24-Sep-2009 01:35:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	27-Sep-2009 23:40:00	100.00	1	AAG
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	29-Sep-2009 01:45:00	100.00	1	AAG
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	02-Oct-2009 07:50:00	0.00	5	CAS

Report Generated: 11/16/2010 07:00

Unit: 1 - Seabrook Station Unit 1 Sample Point: SD - STORM DRAINS						
	TITLE - DESCRIP	TOR				
	Group - EFF					
	System - LES	To	n	0.14	A	
<u>Analysis</u> TGA (TOTAL GAMMA ACTIVITY)	<u>Value/Meas. Unit</u> $0.0000E\pm00.0Ci/cc$	Date/Time08_Oct_2009_03.05.00	Power 0.00	<u>Opiviode</u>	<u>Analyst</u>	
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	08-Oct-2009 03:30:00	0.00	6	AAG	
		09-Oct 2009 03:30:00	0.00	6		
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	10 Oct 2009 01:30:00	0.00	6		
TGA (TOTAL GAMMA ACTIVITY)	1.4670E.07.uCi/cc	10-Oct-2009 13:00:00	0.00	6		
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00.0Ci/cc	12-Oct-2009 00:55:00	0.00	6	AAG	
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	12-Oct-2009 01:00:00	0.00	6	AAG	
	1 10/3E-06 uCi/cc	12-Oct-2009 22:55:00	0,00	6	AAG	
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00.0Ci/cc	12-Oct-2009 23:40:00	0.00	6	AAG	
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	19-Oct-2009 01:22:00	0.00	6	AAG	
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	21-Oct-2009 19:55:00	0.00	· 6 ·	AAG	
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	22-Oct-2009 20:25:00	0.00	6 ·	AAG	
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00.uCi/cc	26-Oct-2009 00:42:00	0.00	6	CAS	
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	26-Oct-2009 01:37:00	0.00	6	CAS	
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	27-Oct-2009 00:29:00	0.00	6	CAS	
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	28-Oct-2009 01:20:00	0.00	6	AAG	
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	28-Oct-2009 23:05:00	0.00	6	AAG	
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	29-Oct-2009 22:55:00	0.00	6	AAG	
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	30-Oct-2009 21:15:00	.0.00	5	CAS	
TGA (TOȚAL GAMMA ACTIVITY)	5.7303E-08 uCi/cc	31-Oct-2009 23:13:00	0.00	5	AAG	
TGA (TOTAL GAMMA ACTIVITY)	1.4235E-07 uCi/cc	01-Nov-2009 23:20:00	0.00	5	AAG	
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	01-Nov-2009 23:26:00	0.00	5	AAG	
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	03-Nov-2009 00:33:00	0.00	5	CAS	
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	03-Nov-2009 23:50:00	0.00	5	CAS	
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	06-Nov-2009 02:10:00	0.00	4	AAG	
TGA (TOTAL GAMMA ACTIVITY)	4.0177E-09 uCi/cc	07-Nov-2009 00:35:00	0.00	3	AAG	
TGA (TOTAL GAMMA ACTIVITY)	2.4054E-08 uCi/cc	07-Nov-2009 19:50:00	0.00	3	AAG	
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	08-Nov-2009 00:10:00	0.00	. 3	AAG	
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	08-Nov-2009 23:30:00	0.00	3	AAG	
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	10-Nov-2009 02:00:00	25.00		CAS	
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	11-Nov-2009 01:20:00	15.00	. 1	CAS	
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	12-Nov-2009 01:00:00	15.00	1 .	AAG	
TGA (TOTAL GAMMA ACTIVITY)	4.6063E-08 uCi/cc	13-Nov-2009 00:09:00	15.00	1	CAS	
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	14-Nov-2009 00:09:00	49.00	1	CAS	
TGA (TOTAL GAMMA ACTIVITY)	9.6099E-07 uCi/cc	15-Nov-2009 00:22:00	65.00	1	CAS	
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	16-Nov-2009 00:40:00	65.00	1	CAS	
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	16-Nov-2009 08:40:00	65.00	1	CAS	

Report Generated: 11/16/2010 07:00

# Unit: 1 - Seabrook Station Unit 1 Sample Point: SD - STORM DRAINS

	<u>TITLE - DESCH</u> Group - EF	<u>UPTOR</u> F			
	System - Ll	ES	n de Nacional Antonio de Carlos		
Analysis	Value/Meas. Unit	Date/Time	Power	<u>OpMode</u>	<u>Analyst</u>
TGA (TOTAL GAMMA ACTIVITY)	6.0641E-09 uCi/cc	16-Nov-2009 23:30:00	65.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	19-Nov-2009 13:00:00	65.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	20-Nov-2009 10:15:00	65.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	21-Nov-2009 00:10:00	65.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	22-Nov-2009 00:20:00	65.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	23-Nov-2009 09:10:00	65.00	1	AAG
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	25-Nov-2009 00:55:00	65.00	1 .	MKL
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	26-Nov-2009 03:19:00	65.00	1	MKL
TGA (TOTAL GAMMA ACTIVITY)	1.8989E-08 uCi/cc	30-Nov-2009 00:33:00	65.00	1	MKL
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	30-Nov-2009 08:15:00	65.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	30-Nov-2009 23:11:00	65.00	. 1 .	MKL
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	01-Dec-2009 00:55:00	65.00	1	MKL
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	02-Dec-2009 02:24:00	65.00	1	MKL
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	03-Dec-2009 04:05:00	65.00	. 1	MKL
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	05-Dec-2009 01:25:00	65.00	1.	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	06-Dec-2009 02:00:00	65.00	1	JSB
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	07-Dec-2009 01:55:00	0.00	4	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	07-Dec-2009 09:11:00	0.00	5	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	08-Dec-2009 00:06:00	0.00	5	CAS
TGA (TOTAL GAMMA ACTIVITY)	8.9501E-09 uCi/cc	09-Dec-2009 00:45:00	0.00	5	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	10-Dec-2009 00:17:00	0.00	5	CAS
TGA (TOTAL GAMMA ACTIVITY)	6.0373E-07 uCi/cc	11-Dec-2009 00:25:00	0.00	5	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	12-Dec-2009 00:18:00	0.00	5	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	12-Dec-2009 23:45:00	0.00	5.	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	14-Dec-2009 00:15:00	0.00	5	CAS
TGA (TOTÀL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	15-Dec-2009 01:37:00	0.00	. 4	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	16-Dec-2009 00:15:00	0.00	3	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	18-Dec-2009 01:05:00	5.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	20-Dec-2009 00:19:00	5.00	1	HBM
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	20-Dec-2009 10:30:00	15.00	ĺ	AAG
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	22-Dec-2009 04:15:00	15.00	1	HBM
TGA (TOTAL GAMMA ACTIVITY)	7.7364E-07 uCi/cc	23-Dec-2009 00:40:00	15.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	24-Dec-2009 01:45:00	15.00	. 1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	28-Dec-2009 09:10:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	05-Jan-2010 02:00:00	100.00	1	HBM
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	06-Jan-2010 01:20:00	100.00 /	1	HBM
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	07-Jan-2010 03:06:00	100.00	1	HBM

Unit: 1 - Seabrook Station Unit 1 Sample Point: SD - STORM DRAINS

	TITLE - DESCRIP	<u>ror</u>			
	Group - EFF				
Anolysis	System - LES	Data/Tima	Dowar	OnMada	Analyst
TGA (TOTAL GAMMA ACTIVITY)	2 1481E-07 uCi/cc	<u>Date/Time</u> 09-Jan-2010 00:11:00	100.00	1	HBM
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	10-Jan-2010 00:44:00	100.00	1	HBM
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	11-Jan-2010 00:06:00	100.00	. 1	HBM
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	12-Jan-2010 02:07:00	100.00	1	HBM
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	13-Jan-2010 00:11:00	100.00	1	HBM
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	14-Jan-2010 03:10:00	100.00	1	HBM
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	15-Jan-2010 00:22:00	100.00	1	HBM
TGA (TOTAL GAMMA ACTIVITY)	8.8481E-08 uCi/cc	16-Jan-2010 00:15:00	100.00	1	HBM
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	17-Jan-2010 00:10:00	100.00	1	ЛС
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	18-Jan-2010 07:50:00	100.00	1	HBM
TGA (TOTAL GAMMA ACTIVITY)	5.2824E-09 uCi/cc	19-Jan-2010 01:21:00	100.00	1	HBM
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	21-Jan-2010 00:20:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	22-Jan-2010 00:15:00	100.00	· 1 ·.	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	23-Jan-2010 00:30:00	100.00	.1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	25-Jan-2010 10:50:00	100.00	1	SMD
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	26-Jan-2010 00:45:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	27-Jan-2010 01:25:00	100.00	1	, CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	29-Jan-2010 17:30:00	100.00	1	HBM
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	30-Jan-2010 02:40:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	03-Feb-2010 00:40:00	100.00	1 .	HBM
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	04-Feb-2010 01:10:00	100.00	. 1	HBM
TGA (TOTAL GAMMA ACTIVITY)	9.8882E-09 uCi/cc	04-Feb-2010 23:30:00	100.00	. 1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	06-Feb-2010 00:40:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	07-Feb-2010 00:00:00	100.00	· 1 ·	CAS
TGA (TOTAL GAMMA ACTIVITY)	0:0000E+00 uCi/cc	10-Feb-2010 00:45:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	11-Feb-2010 10:15:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	14-Feb-2010 00:50:00	100.00	. 1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	16-Feb-2010 00:15:00	100.00	· 1 ··	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	17-Feb-2010 00:30:00	100.00	1 .	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	18-Feb-2010 00:36:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	23-Feb-2010 00:29:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	2.3157E-07 uCi/cc	24-Feb-2010 00:06:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	26-Feb-2010 01:35:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	27-Feb-2010 00:45:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	28-Feb-2010 00:45:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	02-Mar-2010 01:45:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	1.6680E-07 uCi/cc	04-Mar-2010 04:15:00	100.00	1	SMD

Report Generated: 11/16/2010 07:00

# OpenCDM

# Measurements - Samplepoint, Analysis, Sampledate FPL Energy -SEABROOK STATION From: 01-Nov-2008 00:00 To: 16-Nov-2010 23:59

# Unit: 1 - Seabrook Station Unit 1 Sample Point: SD - STORM DRAINS

	<u>TITLE - DESCRIP</u>	<u>TOR</u>			
	Group - EFF				
<b>A</b> nalveis	System - LES Value/Meas Unit	Date/Time	Power	OnMode	Analyst
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	05-Mar-2010 04:40:00	100.00	1	SMD
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	07-Mar-2010 04:35:00	100.00	1	SMD
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	09-Mar-2010 04:15:00	100.00	1	SMD
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	10-Mar-2010 02:40:00	100.00	1	SMD
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	11-Mar-2010 01:15:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	12-Mar-2010 03:50:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	5.1132E-09 uCi/cc	13-Mar-2010 02:15:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTÍVITY)	0.0000E+00 uCi/cc	13-Mar-2010 23:20:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	23-Mar-2010 08:25:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	25-Mar-2010 01:50:00	100.00	1	AP
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	26-Mar-2010 01:45:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	29-Mar-2010 10:10:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	05-Apr-2010 08:15:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	12-Apr-2010 11:22:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	19-Apr-2010 08:15:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	26-Apr-2010 10:17:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	03-May-2010 08:16:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	10-May-2010 07:54:00	100.00	1	SMD
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	17-May-2010 15:10:00	100.00	1	SMD
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	24-May-2010 10:15:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	29-May-2010 12:30:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	01-Jun-2010 04:10:00	100.00	1	SMD
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	02-Jun-2010 03:50:00	100.00	1	SMD
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	03-Jun-2010 03:30:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	04-Jun-2010 02:00:00	100.00	.1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	14-Jun-2010 09:00:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	21-Jun-2010 12:35:00	100.00	1	AAG
TGA (TOTAL GÁMMA ACTIVITY)	0.0000E+00 uCi/cc	23-Jun-2010 13:17:00	100.00	. <b>1</b>	MJP
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	28-Jun-2010 10:05:00	100.00	1	SMD
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	05-Jul-2010 10:40:00	100.00	1	AAG
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	12-Jul-2010 08:28:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	16-Jul-2010 21:50:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	19-Jul-2010 10:45:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	26-Jul-2010 08:35:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	02-Aug-2010 08:40:00	100:00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	10-Aug-2010 08:35:00	100.00	1.	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	16-Aug-2010 08:35:00	100.00	1	CAS

Report Generated: 11/16/2010 07:00

# OpenCDM

# Measurements - Samplepoint, Analysis, Sampledate FPL Energy -SEABROOK STATION From: 01-Nov-2008 00:00 To: 16-Nov-2010 23:59

Unit: 1 - Seabrook Station Unit 1 Sample Point: SD - STORM DRAINS

	TITLE - DESCRIP	<u>TOR</u>			
	Group - EFF				
	System - LES				
$\frac{\text{Analysis}}{\text{TCA}}$	Value/Meas. Unit	<u>Date/Time</u>	Power	<u>OpMode</u>	Analyst
	0.0000E+00 uC1/cc	23-Aug-2010 09:05:00	100.00		SDA
	0.0000E+00 uC1/cc	26-Aug-2010 03:30:00	100.00	' I .	CAS
	0.0000E+00 uCi/cc	27-Aug-2010 09:05:00	100.00	I	SDA
IGA (IOTAL GAMMA ACTIVITY)	1.9462E-07 uCi/cc	28-Aug-2010 00:45:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	29-Aug-2010 00:15:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	30-Aug-2010 00:10:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	06-Sep-2010 11:23:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	13-Sep-2010 08:17:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY).	0.0000E+00 uCi/cc	17-Sep-2010 08:30:00	100.00	1	AJB
Results Comment: Water in Can	boy - No alarm, strip chart showe	d spike.			
Sample Comment: Spike in acti	vity due to significant rain fall.		· · ·		·
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	18-Sep-2010 00:33:00	100.00	. 1.	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	20-Sep-2010 09:20:00	100.00	1	SMD
TGA (TOTAL GAMMA ACTIVITY)	0.00e+00 uCi/cc	27-Sep-2010 10:08:00	100.00	1	WJD
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	04-Oct-2010 10:15:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.00e+00 uCi/cc	11-Oct-2010 07:09:00	100.00	1	WJD
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	17-Oct-2010 18:00:00	100.00	1 .	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	25-Oct-2010 10:33:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	01-Nov-2010 13:30:00	100.00	1	SDA
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	08-Nov-2010 10:30:00	100.00	1.	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	15-Nov-2010 07:40:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	23-Feb-2009 08:48:00 ,	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	11-May-2009 08:10:00	100.00	1	CAS
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	13-Jul-2009 09:05:00	100.00	1	AAG
{Dun=1}	0.00e+00 uC1/cc	12-Oct-2009 22:55:00	0.00	6	WJD
TGA (TOTAL GAMMA ACTIVITY)	0.0000E+00 uCi/cc	07-Nov-2009 19:50:00	0.00	3	AAG
{Dup=1}					· · · · ·
TGA (TOTAL GAMMA ACTIVITY) {Dup=1}	0.0000E+00 uCi/cc	30-Nov-2009 00:33:00	65.00	1	MKL
TGA (TOTAL GAMMA ACTIVITY)	0.00e+00 uCi/cc	24-Feb-2010 00:06:00	100.00	-1	, WJD
TGA (TOTAL GAMMA ACTIVITY) {Dup=1}	0.0000E+00 uCi/cc	11-Oct-2010 07:09:00	100.00	1 · · · ·	CAS

**TOTAL NUMBER OF MEASUREMENTS: 313** 

END OF MEASUREMENTS REPORT

Based on quarterly sampling, tritium has not been detected above detection limits in any of the new temporary offsite monitoring wells (TW-1, TW-2, or TW-3) installed in the marsh south of the Auxiliary Building. The results of quarterly sampling of the wells are provided below.

Date	TW-1	TW-2	TW-3
	pCi/L)	pCi/L)	(pCi/L)
09/29/09	<580	<580	<579
01/21/10	<610	<602	<602
06/17/10	<573	<564	<564
09/15/10-	<662	(<660	<647

# **Request for Additional Information (RAI): Socioeconomics**

1. For the last three years, please provide: visitor center attendance data, emergency preparedness fees, mill rates and education taxes, and tax appraisal value of Seabrook Station.

# NextEra Energy Seabrook Response:

1.a <u>Visitor Center Attendance Data:</u> The Science & Nature Center (S&NC) has welcomed the general public and scheduled group visitors since 1978. In the 1980s and early 90s, the Center averaged 25,000 - 30,000 visitors annually. After 9/11 the Center was closed for a period of time and then had limited offerings from 2001-2004. Just prior to September 11, 2001 the S&NC visitations had reached 500,000 visitors. Since 2001 the S&NC has averaged 3,000 - 4,000 visitors per year. The estimated total lifetime visitations for the S&NC from 1978-2010 is estimated at 536,000. Specific numbers of visitors for 2007 - through September 2010 are provided below:

Year	Students	Walk-Ins	Total
2007	2,432	948	3,380
2008	1,883	1,916	3,799
2009	2,167	2,319	4,486
2010	2,283	2,083	4,366

2.

1.b <u>Emergency Preparedness Fees:</u> Emergency Preparedness Fees and contributions to state and federal agencies for the past three years are provided in the table below.

· · · · · · · · · · · · · · · · ·			
-	2008	2009	2010
FEMA	451,076	492,326	517,171
NH	2,018,746	2,178,750	2,254,711
MASSACHUSSETTS	845,957	672,034	658,984
MASS DEPT PUBLIC	·		
HEALTH	85,170	92,446	86,956
MAINE	59,964	70,500	73,000
MASS TRAINING	225,000	165,000	195,000
EOC GENERATORS in			
MASS and NH			· .
(replacement and repair)	80,000	80,000	80,000
Radio Replacement in			
MASS	153,264	0	0
NH PAGERS	20,000	20,000	20,000
DOSIMETRY NH and			
MASS	21,000	21,000	21,000
TOTALS	3,962,185	3,794,065	3,908,832

#### 1.c Mill rates and education taxes, and tax appraisal value of Seabrook Station:

Tables 2 and 3 provide data for the NextEra Energy Seabrook ownership share (88.22889%). Additionally, Tables 2b and 3b have been provided which represent the taxes paid by all Seabrook Station Joint Owners.

Table 4 provides the Town of Seabrook tax rates for 2007 to 2009. Town of Seabrook collections include rates associated with the town, local schools and the county. Local property taxes are assessed, levied, and collected by municipalities in accordance with RSA Chapter 76, "Apportionment, Assessment, and Abatement of Taxes" Seabrook Station is subject to RSA Chapter 83-F, "Utility Property Tax" which provides funds for the Education Trust Fund and is assessed and collected by the State of New Hampshire. Therefore, the Town of Seabrook does not assess or collect for the Education Trust Fund and the "State School Rate" in Table 2.7-4 is zero.

RSA Chapter 83-F, "Utility Property Tax" (NHRSA2010b) provides details related to the process that applies to Seabrook Station utility property taxes. Per the statute, the tax commissioner shall determine the value of utility property for the purposes of this chapter by appraising such property at its full and true value. The tax is imposed upon the value of utility property at the rate of \$6.60 on each \$1000 of such value, to be assessed annually as of April 1.

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RSA Chapter 76, "Apportionment, Assessment, and Abatement of Taxes" provides details related to the process that applies to local property taxes that are assessed, levied, and collected by municipalities. The taxes are based on land and building value as of April 1.

Appraised values are determined using industry standard practices. One approach is the income approach which determines value based a forecast of future net operating income.

Year	Seabrook Property Tax Payments (\$)	Town of Seabrook's Net Tax Commitment (\$)	Seabrook Payments as Percent of Town's Net Tax Commitment
2003	9,734,012	25,972,265	37.5%
2004	7,809,505	23,225,879	33.6%
2005	7,439,760	25,169,483	29.6%
2006	9,103,912	26,966,949	33.8%`
2007	9,709,631	28,722,320	33.8%
2008	13,589,935	32,002,616	42.5%
2009	12,265,972	32,014,031	38.3%

# Table 2Town of Seabrook Tax Information for NextEra (88.22889% of Seabrook<br/>Station)

Та	ble	2b	
		<i>m N</i>	

To

Town of Seabrook Tax Information for all Joint Owners (100%)

Year	Seabrook Property Tax Payments (\$)	Town of Seabrook's Net Tax Commitment (\$)	Seabrook Payments as Percent of Town's Net Tax Commitment
2003	11,029,861	25,972,265	42.5%
2004	8,848,570	23,225,879	38.1%
2005	8,429,081	25,169,483	33.5%
2006	10,526,811	26,966,949	39.0%
2007	11,227,201	28,722,320	39.1%
2008	15,598,308	32,002,616	48.7%
2009	14,122,602	32,014,031	44.1%

# Table 3New Hampshire Department of Revenue Administration Education TrustFund Utility Property Tax Information for NextEra (88.22889% of Seabrook<br/>Station)

Year	Seabrook Property Tax Payments (\$)	NHDRA Education Trust Fund Revenues (\$)	Seabrook Payments as Percent of NHDRA Education Trust Fund Revenues
2003	3,616,741	282,495,534	1.3%
2004	3,988,828	289,071,911	1.4%
2005	4,009,624	304,732,913	1.3%
2006	4,277,710	360,775,854	1.2%
2007	5,809,354	383,781,559	1.5%
2008	7,649,709	395,977,096	1.9%
2009	6,528,730	373,942,370	1.7%

# Table 3b New Hampshire Department of Revenue Administration Education TrustFund Utility Property Tax Information for all Joint Owners (100%)

Year	Seabrook Property Tax Payments (\$)	NHDRA Education Trust Fund Revenues (\$)	Seabrook Payments as Percent of NHDRA Education Trust Fund Revenues
2003	4,099,271	282,495,534	1.5%
2004	4,521,000	289,071,911	1.6%
2005	4,703,575	304,732,913	1.5%
2006	4,917,109	360,775,854	1.4%
2007	6,657,661	383,781,559	1.7%
2008	8,802,955	395,977,096	2.2%
2009	7,536,520	373,942,370	2.0%

Total Rate	10.74	9.44	10.64
Beach Precinct Rate	0	. 0	0
County Rate	0.76	0.71	0.96
State School Rate	0	0	. 0
Local School Rate	4.77	3.96	4.40
Town Rate	5.21	4.77	5.28
	2007	2008	2009
		Year	· . ,

# Table 4 Town of Seabrook Tax Rates (dollars per \$1,000 taxable value)

# <u>Request for Additional Information (RAI): References Requested for Docketing at the</u> <u>Seabrook Station Environmental Site Audit</u>

	Meteorology and Air Quality
А.	Seabrook Station, Design Basis Document, Meteorological Monitoring System, DBD-
	MET-01, Revision 2, January 7, 2010.
В	FPL Company – New England Division, 345 kV Seabrook Transmission Substation SF6
	Emissions Reduction Partnership for Electric Power Systems, Annual Reports for 2005-
	2009.
С	NHDES, Stage I/II Gasoline Vapor Recovery System, Certificate of Compliance, March
	20, 2008.
D	NHDES, Title V Operating Permit, TV-OP-017, Issued June 5, 2006.
E	NHDES, Issuance of General State Permit: GSP-EG-225, Issued July 2, 2008.
F	Letter of Deficiency for the Title V air permit issued by New Hampshire Department of
•	Environmental Services in 2010 and any subsequent related correspondence
	Aquatic Ecology-
A.	ARCADIS et. al. (ARCADIS, Normandeau Associates Inc., Wayne C. Micheletti, Inc.,
·.	and Harris Group, Inc.). 2008. Cooling Water Intake Structure information Document.
	Prepared for FPL Energy Seabrook, LLC. July 2008.
	(Note that Appendix F is privileged and confidential. If the NextEra feels it is
	appropriate, you can request that this appendix be non-public by filling out an affidavit
	under 10 CFR 2.390.)
В	Florida Power and Light (FPL). 2006. Seabrook Station NPDES Permit NH0020338
	Renewal Application. September 2006.
· .	(Please include cover letter and Clean Water Act Section 316(a) and (b) certifications.)

. C	NAI (Normandeau Associates, Inc.). 1988. Seabrook Environmental Studies, 1987. A
	Characterization of Baseline in the Hampton-Seabrook Area, 1975-1987. A
	preoperational study for Seabrook Station Technical Report XIX-II. Prepared for NH
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		Hydrology and Water Quality				
	A.	Seabrook, 2010, Environmental Reclamation of 32 Acres behind General Office				
		Building, Rev. 1, March 23				
	B	Radiation Safety & Control Services, Inc. (RSCS), 2009a, Site Conceptual Ground				
		Water Model for Seabrook Station, Rev. 01, TSD #09-019, June 9				
	С	Radiation Safety & Control Services, Inc. (RSCS), 2009b, Tritium Distribution and				
		Ground Water Flow at Seabrook Station, Rev. 00, TSD #09-039, August 31				
	D	NextEra Energy Seabrook, LLC, 2009, Stormwater Pollution Prevention Plan for				
		NextEra Energy Seabrook, Rev. 41, July 1				
	E	NHDES, 2010, NPDES Compliance Evaluation Inspection for NPDES Permit No.				
		NH0020338, letter from P. Heirtzler, Wastewater Engineering Bureau, to A. Legendre,				
		NextEra Energy Seabrook LLC, July 20				
	F	NHDES, 2010, NPDES Compliance Evaluation Inspection for NPDES Permit No.				
	· .	NH0020338, letter from P. Heirtzler, Wastewater Engineering Bureau, to A. Legendre,				
		NextEra Energy Seabrook LLC, June 15				
	G	NextEra Energy Seabrook, 2010, Response to Letter of Deficiency – NPDES				
		Compliance Evaluation Inspection, letter from M. O'Keefe, Licensing Manager, to State				
•		of New Hampshire, Department of Environmental Services, July 15				
	Η	Well completion data and elevation data for wells TW-1, TW-2, and TW-3 and the				
		recent SW- series wells (circa 2009 and 2010)				
	Ι	Current illustrations of tritium data (plume) and groundwater elevation contours in				
		surficial and bedrock aquifers, September 2010 (prepared by RSCS)				
	J	USEPA letter regarding timely and complete NPDES permit renewal application (circa				
		2006)				
	Κ	Discharge Monitoring Reports (DMRs) for the last 12 months, as submitted to the				
		USEPA per NPDES Permit #NH0101303				
	Archaeological and Cultural Resources					
	A.	A.   Seabrook Station Program Manual, Environmental Compliance Manual, Rev. 41				
		(NAEC) excluding appendices				
	В	Cultural Resources Protection Plan (Draft) and Final, when available				
	С	Cultural Resources Management Plan, Seabrook Nuclear Power Plant, Seabrook and				
•		Hampton Falls, New Hampshire, May 2010 by Brian Valimont, New England				
		Archaeology Co., LLC				

## NextEra Energy Seabrook Response:

The requested documents are enclosed in Attachment 2 as indexed in the list above. In some instances as described below, additional information is provided for clarity.

## **Meteorology and Air Quality**

- <u>Item A</u> Revision 3 of the Seabrook Station Design Basis Document, Meteorological Monitoring System, DBD-MET-01, was issued on October 19, 2010, and is included along with the requested Revision 2.
- Item F A response to the NH DES identified Air Toxics Deficiency, letter SBK-L-10150, was submitted on November 8, 2010.

### **Aquatic Ecology**

# Item A

Is provided without inclusion of Appendix F; "Analysis of a Cooling Tower Retrofit Option for FPL Seabrook Nuclear Power Station". As noted in the document request, Appendix F is considered Privileged and Confidential. Should the reviewers determine that the material in Appendix F be required, NextEra Seabrook, LLC will make the information available for review at NextEra offices or submit for docketing in accordance with 10 CFR 2.390.

#### Hydrology and Water Quality

#### Item D

Revision 42 of the Stormwater Pollution Prevention Plan for NextEra Energy Seabrook was issued on October 15, 2010, and is included along with the requested revision. Attachments A-E were not revised in Revision 42 and are only included with Revision 41.

Item JShelley B. Puleo, US Environmental Protection Agency to Mr. Gene St. Pierre, FPL<br/>Energy Seabrook, LLC: RE: NPDES Application No. NH0020338-FPL Energy<br/>Seabrook LLC, dated May 25, 2007.

<u>Item H</u> Well completion data is provided for the following wells:. BD-6, SD-5, SW-4, SW-5, TW-1, TW-2, TW-3. United States Nuclear Regulatory Commission SBK-L-10185 / Enclosure

#### Archaeological and Cultural Resources

<u>Item B</u> The drafts of the Cultural Resourse Plan that will be added to the Seabrook Station Environmental Compliance Manual and associated site excavation procedure are provided.

Item C

Cultural Resources Management Plan, Seabrook Nuclear Power Plant, Seabrook and Hampton Falls, New Hampshire, May 2010, by Brian Valimont, New England Archaeology Co., LLC, will be submitted via separate letter (SBK-L-10190). NextEra Energy Seabrook, LLC requests that the Enclosure to SBK-L-10190, which contains information regarding the location of historic properties, be withheld from public disclosure in accordance with 36 CFR 800.11(c).

# Attachment 1 to SBK-L-10185

# Seabrook Station Response to Request for Additional Information NextEra Energy Seabrook License Renewal Environmental Report

1.a The annual air emission reports for Title V permitted source TV-OP-017

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•	2009:	SBK-L-10059,	April 8, 2010
	2008:	SBK-L-09062,	April 15, 2009
	2007:	SBK-L-08040,	March 31, 2008
• ·	2006:	SBK-L-07076,	April 17, 2007
•	2005:	SBK-L-06075,	April 13, 2006

1.b The Title V permitted source GSP-EG-225 reports.

0	2006/2007	SBK-L-08071,	April 23, 2008
•	2008	SBK-L-09120,	May 22, 2009
•	2009	SBK-L-10058,	April 13, 2010

# Attachment 2 to SBK-L-10185

Seabrook Station Response to Request for Additional Information NextEra Energy Seabrook License Renewal Environmental Report

References Requested for Docketing at the Seabrook Station Environmental Site Audit

# Attachment 3 to SBK-L-10185

# Seabrook Station Response to Request for Additional Information NextEra Energy Seabrook License Renewal Environmental Report

New Hampshire Fish and Game Department letter dated August 10, 2010; regarding Seabrook Station 2010 Environmental Monitoring Program Mid-Year Report

NextEra Energy Seabrook, LLC letter SBK-L-10175; "Response to Comments on 2010 Environmental Monitoring Program Mid-Year Report, October 15, 2010.

Seabrook Station memo NYE-97010 dated March 20, 1996, documenting the suspension the Seabrook Station Gill Net Monitoring Program on March 19, 1997.