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2. While National Grid's predecessor (KeySpan) had undertaken measures to study and limit the entrainment and impingement of fish, fish eggs and fish larvae through the plant's cooling water intake system, the bottom line is that the current SPDES permit has allowed as many as 175 million fish and other aquatic organisms to be killed each year. This level is unacceptable.
3. Local governments around Hempstead Harbor have collectively invested tens of millions of dollars in restoring the harbor's quality. Included among these efforts has been a restoration of wetlands by the Town of North Hempstead directly opposite the discharge from the plant. In fact, just this week, these efforts were recognized by the National Oceanic and Atmospheric Administration (NOAA) on September 21<sup>st</sup> with an on-site press conference and the presentation of awards. It is not unreasonable to require National Grid to make a similar commitment to the improvement of the harbor's water quality.
4. Because a closed cycle cooling system would eliminate up to 95% of the intake of water from the harbor, a reduction in mortality along the same magnitude would be expected. We therefore believe that this is the Best Technology Available (BTA) for minimizing Adverse Environmental Impact (AEI) as required by § 316(b) of the Clean Water Act and by 6 NYCRR Part 704.5. However, we would support its usage at Glenwood only if this can be done without utilizing the two National Grid parcels north of the main plant on the west side of Shore Road which were the subject of a voluntary cleanup and which are under consideration for purchase as open space by the Town of Oyster Bay. We should point out that these two parcels are contained on the New York State Open Space Plan and should remain as open space. To the extent that this technology can be employed on the remaining parcels, we would support its usage.
5. Utilizing a closed cycle cooling system would not only eliminate nearly all of the problems of entrainment and impingement but would eliminate the issue of thermal pollution in the harbor.
6. Regardless of whether or not a closed cycle cooling system is found to be feasible, we believe that the variable speed pumps should be installed as quickly as possible. While we understand that a decision has not been made yet as to whether the plant will continue operation beyond the current Power Service Agreement with LIPA which expires on May 28, 2013, we do not believe that this obviates the need for, or provides sufficient reason for delaying the implementation of this, or any other needed mitigation. We note that the date for the expiration of the Power Service Agreement has been extended in the past and believe that it is quite feasible that this date may continue to be pushed back. In the event that a closed cycle cooling system is deemed not feasible, then this will provide the next best level of protection to our marine resources. In the event that the closed cycle cooling system is deemed to be feasible, the variable speed pumps will provide protection during the design and construction period for the closed cycle cooling system.

7. Since the Water Quality Improvement Plan for Hempstead Harbor (Coastal Environmental Services, 1998) identified non-point source pollutants (i.e. stormwater) as the single-largest threat to the harbor's water quality, we believe that the permit should include more stringent controls on this significant source of pollutants. We originally requested this in 2006 in our comments during the last permit cycle and re-iterate our request.

In 2003, when KeySpan and LIPA applied to add new generation capacity on their parcel on the east side of Shore Road, this Committee undertook an extensive review of that site's stormwater control measures and found that although their stormwater output and system was in compliance with their SPDES permit, it did not come close to meeting then applicable Nassau County or New York State standards as referenced in the October, 2001 New York State Stormwater Management System Design Criteria. By KeySpan's own admission at the time, the stormwater system on that site could only handle a 0.29 inch storm, while the New York State design criteria called for a 1.20 inch storm and the Nassau County design criteria called for a 2.00 inch storm (*note: the County's criteria now calls for an 8.00 inch storm*).

In reviewing the adequacy of their system, we first obtained rainfall data for the year from NOAA's website (<http://www.erh.noaa.gov>) for the closest location (LaGuardia airport) and found that there were 92 days with rainfall of at least 0.01" (since March 1<sup>st</sup>, the earliest date for which data is available). We then looked at how many of these days had rainfall greater than 0.29" and how many days had rainfall greater than 1.2". We have summarized these results on the following chart.

#### 2003 RAINFALL DATA – LaGUARDIA AIRPORT

MONTH (2003)	# DAYS IN MONTH	# DAYS WITH RAINFALL > 0.01"	# DAYS WITH RAINFALL > 0.29"	# DAYS WITH RAINFALL > 1.2"
March	31	12	5	0
April	30	12	4	0
May	31	14	2	1
June	30	15	9	2
July	31	17	2	1
August	31	12	4	1
September	30	10	6	1
<b>TOTALS</b>	<b>214</b>	<b>92</b>	<b>32</b>	<b>6</b>

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As you can see, that study period consisted of 92 rain events. Of these, Glenwood's system was able to handle the volume of 60 (65% of all storm events) of them but unable to handle all of the volume of 32 of them.

Viewed another way, there were 32 days out of 214 days (or 14.95% of these days) in which the site's stormwater capacity was exceeded. This equates to 1 out of every 6 or 7 days in which we had a storm that resulted in stormwater discharging directly into the harbor.

When we looked at how many storm events exceeded the 1.2" criteria set forth in the New York State Stormwater Management Design Manual, we see that we only experienced this amount of rain on 6 out of the 92 rain events. Therefore, if Glenwood's system was designed to meet this standard, they would have been able to handle 86 out of the 92 storm events (or 93.5% of all storm events).

The bottom line appears to be that by capturing only the first 0.29" of rain, Glenwood's system can only effectively handle 65% of the storm events. If their system were designed to meet the 1.2" criteria, you would have been able to handle 93.5%. If they met Nassau County's former 2.0" criteria, they would have handled 96.7%. If they met Nassau County's current 8.0" criteria, they would have handled 100%.

A review of the previous year's storm data shows a similar pattern of rainfall (note that since only quarterly figures were available, we were not able to break down individual rainfall events on a more specific basis for a direct comparison):

**2008 – 2009 RANFALL DATA – LaGUARDIA AIRPORT**

<b>MONTH</b>	<b># DAYS IN MONTH</b>	<b># DAYS WITH RAINFALL &gt; 0.01"</b>	<b># DAYS WITH RAINFALL &gt; 0.10"</b>	<b># DAYS WITH RAINFALL &gt;0.50"</b>	<b># DAYS WITH RAINFALL &gt;1.00"</b>	<b>TOTALS</b>
September 2008	30	28	17	7	3	<b>55</b>
October 2008	31					
November 2008	30					
December 2008	31	33	15	6	2	<b>56</b>
January 2009	31					
February 2009	28					
March 2009	31	32	21	8	1	<b>62</b>
April 2009	30					
May 2009	31					
June 2009	30	41	31	12	3	<b>87</b>
July 2009	31					
August 2009	31					
<b>TOTALS</b>	<b>365</b>	<b>134</b>	<b>84</b>	<b>33</b>	<b>9</b>	<b>260</b>

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It thus appears to us that the New York State Stormwater Design Manual and Nassau County's requirements set the proper design criteria for stormwater management systems like National Grid's.

In view of the above and the fact that nine of the outfalls listed in the draft permit are stormwater outfalls, we request that all stormwater discharges from this facility be required to at least meet the 1.2" standard set forth in the New York State Stormwater Management Design Manual if not the 8.0" Nassau County stormwater design standard.

8. Since the Hempstead Harbor Protection Committee has the responsibility for the harbor's most comprehensive water quality monitoring program, in order to enhance our data collection efforts, we request that as a condition of this permit that the Committee be included as a recipient of all water quality data, monitoring reports and incident reports that are required under this permit. Wherever possible, we would appreciate the receipt of these data electronically. We have made this request in the past and have not received any data or water quality reports from the facility. Our e-mail address is [HempsteadHarbor@yahoo.com](mailto:HempsteadHarbor@yahoo.com).
9. We would like to request that the DEC consider adding a permit condition that would require the installation of a permanent continuous monitoring device in the harbor downstream of the cooling water discharge outfall (such as a YSI Model 600XLM-S or similar) that would provide real-time readings on a publicly accessible website on a 24 hour basis.
10. We request that any water quality monitoring that is required to be undertaken pursuant to this permit, be performed only pursuant to an EPA-approved Quality Assurance Program Plan (QAPP). This will help to ensure the quality and usability of the data in evaluating the health of the harbor.
11. Finally, we request that the Hempstead Harbor Protection Committee be included on all future public notices of new SPDES permits or modifications to existing permits for this or any other National Grid facility on Hempstead Harbor.

Thank you once again for the opportunity to comment on this application. If you need to contact us, I can be reached at (516) 677-5790.

Sincerely,

Eric Swenson  
Executive Director

*Copy to: William Clemency, Chair, Hempstead Harbor Protection Committee  
John Jacobs, Nassau County Department of Health*