October 10, 2000

Mr. John Groth  
Senior Vice President - Nuclear Operations  
Consolidated Edison Company of New York, Inc.  
Indian Point 2 Station  
Broadway and Bleakley Avenue  
Buchanan, NY 10511

SUBJECT: Assessment Follow Up Letter - Indian Point Unit 2

Dear Mr. Groth:

This letter summarizes our plans for overseeing performance improvement efforts at Indian Point Unit 2. In developing these plans, we considered information you provided in the September 11, 2000 management meeting held to address issues associated with the unit’s designation as an “agency-focus” plant. Our plans are also based on guidelines established in the new Reactor Oversight Process (ROP), which NRC began to implement in April of this year. The specific nature and level of our planned oversight activities have been determined through use of the significance determination process and “Action Matrix” guidelines (Attachment 1) of the new ROP.

Plant performance data collected over the past year indicate that several cornerstones in the NRC regulatory framework are degraded at the IP2 facility. These degraded cornerstones are associated principally with the performance problems revealed during an August 1999 reactor trip with electrical distribution system complications and a February 2000 steam generator tube failure. Following the multiple degraded cornerstones column of the Action Matrix, we will conduct a number of activities above NRC baseline oversight. These include monitoring your performance improvement plan and performing an independent team inspection (supplemental Inspection Procedure 95003) to review and assess the underlying causes for the degraded cornerstone.

In addition to planned inspections, we expect to monitor implementation of your improvement plan through periodic management meetings which will be open for public observation. One such meeting (as previously discussed with Mr. John McCann of your staff) has been scheduled in the NRC Region I office for October 25, 2000. This meeting will focus specifically on the area of engineering support and safety system readiness. We note, in this regard, that an important aspect of the 95003 supplemental inspection is a comprehensive review of system design, configuration control and equipment performance.
Mr. John Groth

Attachments 2, 3, and 4 provide additional details regarding the implementation of the reactor oversight program at IP2. In accordance with the NRC Action Matrix, additional agency actions are possible (e.g. Confirmatory Action Letter (CAL), Demand for Information (DFI), Order) for a plant with multiple degraded cornerstones. We have and continue to evaluate these actions as they might be appropriate for the IP2 situation; the ROP requires these actions be reconsidered following completion of the 95003 inspection.

Finally, we have concluded that the escalated level of oversight determined under Action Matrix guidelines for a plant with multiple degraded cornerstones is fully consistent with the heightened oversight contemplated by Senior Managers in designating IP2 an “agency focus” plant under transitional criteria used prior to ROP implementation. We will no longer use the “agency focus” designation at IP2 that was established for interim use during the transitional period leading up to implementation of the new ROP.

The Plant performance indicators and current inspection findings can be reviewed at the following NRC website: http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/index.html

In accordance with 10 CFR 2.790 of the NRC’s “Rules of Practice,” a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC’s document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/NRC/ADAMS/index.html (the Public Electronic Reading Room).

Our current inspection plan for IP2 is contained in Attachment 5. If circumstances arise which cause us to modify our plans, we will notify you as soon as possible. Please contact Peter Eselgroth at 610-337-5234 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

/RA/

Hubert J. Miller
Regional Administrator

Docket No. 05000247
License No. DPR-26

Attachments:
1. NRC Action Matrix
2. Revised Reactor Oversight Program (ROP) Implementation at IP2
3. IP2 Performance Summary (Inputs to NRC Action Matrix)
4. IP2 Performance Details (Inputs to NRC Action Matrix)
5. NRC Inspection Plans
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J. Baumstark, Vice President, Nuclear Power Engineering
J. McCann, Manager, Nuclear Safety and Licensing
B. Brandenburg, Assistant General Counsel
C. Faison, Director, Nuclear Licensing, NYPA
J. Ferrick, Operations Manager
C. Donaldson, Esquire, Assistant Attorney General, New York Department of Law
P. Eddy, Electric Division, Department of Public Service, State of New York
T. Rose, NFSC Secretary
F. William Valentino, President, New York State Energy Research
   and Development Authority
J. Spath, Program Director, New York State Energy Research
   and Development Authority
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Mr. John Groth

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R. Junod, DRP
R. Martin, DRP
Region I Docket Room (w/concurrences)
### Attachment 1

#### NRC Action Matrix

<table>
<thead>
<tr>
<th>Licensee Response Column</th>
<th>Regulatory Response Column</th>
<th>Degraded Cornerstone Column</th>
<th>Multiple/ Repetitive Degraded Cornerstone Column</th>
<th>Unacceptable Performance Column</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Assessment Inputs (Performance Indicators (PIs) and Inspection Findings) Green; Cornerstone Objectives Fully Met</td>
<td>One or Two White Inputs (in different cornerstones) in a Strategic Performance Area; Cornerstone Objectives Fully Met</td>
<td>One Degraded Cornerstone (2 White Inputs or 1 Yellow Input) or any 3 White Inputs in a Strategic Performance Area; Cornerstone Objectives Met with Minimal Reduction in Safety Margin</td>
<td>Repetitive Degraded Cornerstone, Multiple Degraded Cornerstones, Multiple Yellow Inputs, or 1 Red Input; Cornerstone Objectives Met with Longstanding Issues or Significant Reduction in Safety Margin</td>
<td>Overall Unacceptable Performance; Plants Not Permitted to Operate Within this Band, Unacceptable Margin to Safety</td>
</tr>
</tbody>
</table>

#### RESPONSE

<table>
<thead>
<tr>
<th>Regulatory Performance Meeting</th>
<th>Licensee Action</th>
<th>NRC Inspection</th>
<th>Regulatory Actions</th>
<th>Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Licensee Corrective Action</td>
<td>Risk-Informed Baseline Inspection Program</td>
<td>None</td>
<td>Assessment Reports</td>
</tr>
<tr>
<td>Branch Chief (BC) or Division Director (DD) Meet with Licensee</td>
<td>Licensee Corrective Action with NRC Oversight</td>
<td>Baseline and supplemental inspection procedure 95001</td>
<td>Supplemental inspection only</td>
<td>BC or DD review/sign assessment report (w/ inspection plan)</td>
</tr>
<tr>
<td>DD or Regional Administrator (RA) Meet with Licensee</td>
<td>Licensee Self Assessment with NRC Oversight</td>
<td>Baseline and supplemental inspection procedure 95002</td>
<td>Supplemental inspection only</td>
<td>DD review/sign assessment report (w/ inspection plan)</td>
</tr>
<tr>
<td>RA (or EDO) Meet with Senior Licensee Management</td>
<td>Licensee Performance Improvement Plan with NRC Oversight</td>
<td>Baseline and supplemental inspection procedure 95003</td>
<td></td>
<td>RA review/sign assessment report (w/ inspection plan)</td>
</tr>
<tr>
<td>Commission meeting with Senior Licensee Management</td>
<td></td>
<td></td>
<td></td>
<td>RA review/sign assessment report (w/ inspection plan)</td>
</tr>
</tbody>
</table>

#### COMMUNICATION

| Assessment Reports | Annual Public Meeting | |
|--------------------|----------------------||
| BC or DD review/sign assessment report (w/ inspection plan) | SRI or BC Meet with Licensee |
| DD review/sign assessment report (w/ inspection plan) | BC or DD Meet with Licensee |
| RA review/sign assessment report (w/ inspection plan) | RA (or designee) Discuss Performance with Licensee |
| RA review/sign assessment report (w/ inspection plan) | EDO (or Commission) Discuss Performance with Senior Licensee Management |
| RA review/sign assessment report (w/ inspection plan) | Commission Meeting with Senior Licensee Management |

1. It is expected in a few limited situations that an inspection finding of this significance will be identified that is not indicative of overall licensee performance. The staff will consider treating these inspection findings as exceptions for the purpose of determining appropriate actions.
Attachment 2

Revised Reactor Oversight Program (ROP) Implementation at IP2

During the last year, the NRC has implemented changes to its existing reactor oversight program to enhance reactor oversight by making it more objective and predictable. In April 2000, the NRC implemented a revised reactor oversight program (ROP) which changed the assessment process to make it more consistent and scrutable by requiring that risk information be used to characterize the significance of inspection findings and a new set of licensee performance indicators be implemented for a variety of plant performance areas. Together, these two processes are used to make risk informed decisions about plant assessments and the need for supplemental inspections.

For IP2 and other plants, this new program was initially implemented in April 2000. However, the development of this program required that the NRC perform risk assessments of complicated events to verify that the significance determination process (SDP) was feasible and that the results compared favorably to the previously used individual plant evaluation (IPE) techniques. One of the events examined in the feasibility study in SECY-0049 was the complicated reactor trip that occurred at IP2 during August 1999. This assessment concluded that one hypothetical transient core damage sequence (assuming a loss of one motor-driven train of auxiliary feedwater, and loss of feed and bleed capability) resulted in a yellow (substantial safety significance) risk determination. Additionally, an SDP evaluation of one hypothetical loss-of-offsite power (LOOP) sequence (assuming an increased LOOP frequency with credit for recovery) resulted in a yellow (substantial safety significance) risk determination. Thus, two sequences within the SDP confirmed the yellow finding. The SDP results correlated with the licensee's risk assessment.

It is important to note that the NRC has been in transition in implementing the revised reactor oversight program and this transition affects all plants, including IP2. While the August 1999 event pre-dates the initial implementation of the ROP, determining what are appropriate oversight activities as we proceed in implementing the new ROP requires considering the results of the SDP for this event. In addition, there have been a number of other performance issues that have exceeded PI and SDP thresholds established by the ROP. These issues are summarized below and described further in Attachments 3 & 4.

Performance Indicators:

PI1 Emergency Preparedness (EP), Drill/Exercise Performance, CY1999 - Q4, White
PI2 Mitigating Systems, Emergency Diesel Unavailability, CY2000 - Q1, White
PI3 Barrier Integrity, Excessive Primary to Secondary Leak Rate, CY2000 - Q1, Yellow
PI4 Initiating Events, Reactor Trip Frequency Exceeded, CY2000 - Q1, White
PI5 Mitigating Systems, Emergency Diesel Unavailability, CY2000 - Q2, White

Inspection Findings:

IF1 Mitigating Systems, August 1999 Complicated Trip SDP, CY1999 - Q3, Yellow
IF2 EP, Drill/Exercise Critique Weaknesses, CY1999 - Q3, White
IF3 Initiating Events, SG Tube Failure Event SDP, CY2000 - Q3, Red or Yellow
IF4, IF5, IF6 EP, Emergency Response Organization Augmentation, Onsite Accountability, Joint New Center Effectiveness, CY2000 - Q2, Three (3) Whites
### ATTACHMENT 3
**INDIAN POINT 2 (October 2000 Evaluation)**

**SUMMARY, by Quarter, of INPUTS TO NRC ACTION MATRIX**

<table>
<thead>
<tr>
<th></th>
<th>CY 1999</th>
<th>CY 2000</th>
<th>CY 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q3</td>
<td>Q4</td>
<td>Q1</td>
</tr>
<tr>
<td>Cornerstone</td>
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<tr>
<td>IE</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>MS</td>
<td>IF1(^2) Yellow</td>
<td>IF1 Yellow</td>
<td>IF1 Yellow PI2 White</td>
</tr>
<tr>
<td>BI</td>
<td></td>
<td>PI3(^4) Yellow</td>
<td></td>
</tr>
<tr>
<td>EP</td>
<td>IF2 White</td>
<td>PI1(^5) White IF2 White</td>
<td>IF2 White</td>
</tr>
<tr>
<td>Matrix Column</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

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\(^1\) Classification based on event effects on CDF and LERF. NRC has preliminarily concluded that the tube failure was caused by a licensee performance issue. Final determination is pending supplemental information to be provided to address questions from the 9/26 Regulatory Conference.

\(^2\) Published in the RROP “Feasibility Review,” Attachment 7 to Sec’y 00-0049. The review of this event preceded the initiation of the Revised Reactor Oversight Program (RROP). While the August 1999 event pre-dates the initial implementation of the ROP, useful risk insights can be derived from considering the results of the SDP for that event.

\(^3\) In accordance with Manual Chapter 0305, this inspection finding will not be removed from consideration of future agency actions until the identified weaknesses have been corrected.

\(^4\) As posted on the NRC's external web page for the first quarter of 2000.

\(^5\) If a finding and PI turn color because of the same underlying issue, only one will be counted because of double jeopardy considerations.
Attachment 4

IP2 Performance Details (Inputs to NRC Action Matrix)

ASSESSMENT OF PERFORMANCE INDICATORS:

The performance indicators for the cornerstones were in the licensee response band with the following exceptions:

- **An Emergency Preparedness PI** crossed the white threshold for drill/exercise performance based on the fourth quarter 1999 PI data. This was due to weaknesses in classifications, notifications, and protective action recommendations. (PI1) Licensee-reported data for the first quarter 2000 show a return to the green range for this indicator.

- **A Mitigating Systems PI** crossed the white threshold based on excessive emergency diesel generator unavailability. This was due to an improper setpoint for an Emergency Diesel Generator breaker as revealed by investigation of the August 1999 event. (PI2)

- Due to the February 2000 steam generator tube failure, a Barrier Integrity PI crossed the yellow threshold based on exceeding the Technical Specification Leak Rate (ConEd Reported 109 gpm) for Steam Generator Tube Integrity based on the first quarter 2000 PI data. This resulted in a degraded cornerstone. This PI currently is shown as gray (not applicable) because existing plant conditions do not allow adequate assessment of plant leakage. (PI3)

- **An Initiating Events PI** crossed the white threshold based on excessive reactor trip frequency. This was primarily due to the August 1999 automatic and the February 2000 manual reactor trips. This PI currently is shown as gray because plant shutdowns for greater than one quarter do not require continued evaluation of this PI. (PI4)

- The Mitigating Systems PI reported in PI2 above remained above the white threshold based on continued emergency diesel generator unavailability. (PI5)

ASSESSMENT OF INSPECTION FINDINGS:

NRC inspections identified and/or confirmed risk significant findings in three cornerstones: Initiating Events, Mitigating Systems, and Emergency Preparedness. These were based on applying the RROP Significance Determination Process (SDP) to findings that were the result of licensee performance problems or issues.

- Based on inspection follow-up of the August 1999 event, an inspection finding for the Mitigating System Cornerstone crossed the yellow threshold based on the unavailability of certain auxiliary feedwater components and a degradation in feed and bleed capability. Some of the important licensee performance issues that led to these findings were the improper configuration of a Station Auxiliary Transformer Tap Changer and an improper setpoint for an Emergency Diesel Generator breaker. If the plant was in the new ROP at the time this was identified, this would have been evaluated as a degraded cornerstone. (IF1)
Based on NRC observations of a September 1999 exercise, an inspection finding for the Emergency Preparedness Cornerstone crossed the white threshold based on a failure to identify an improper classification during self-critique of a September exercise. (IF2)

An inspection finding for the Initiating Event Cornerstone potentially crossed the red threshold based on a significant increase in the likelihood of a steam generator tube rupture with a corresponding increase in Core Damage Frequency (CDF) and large early release frequency (LERF). This was based on a preliminary review of a February 2000 event which characterized the underlying problem as risk significant. The licensee performance issue that led to this finding was a steam generator tube inspection program that was deficient in many respects. The final significance determination of this finding is pending the receipt and evaluation of licensee materials needed to address NRC questions during a 9/26 regulatory conference. The licensee presented information at the conference that characterized the issue as a yellow finding. The NRC's assessment is that the final determination will be red or yellow, either of which results in a degraded cornerstone. (IF3)

Three inspection findings for the Emergency Preparedness Cornerstone crossed the white threshold because of problems associated with ERO augmentation, accountability of onsite personnel, and joint news center effectiveness. This results in a degraded cornerstone. (IF4, IF5, IF6)
### NRC Inspection Plans

**Inspections (not including resident inspections)**

<table>
<thead>
<tr>
<th>Inspection</th>
<th>Weeks of:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steam Generator Replacement (50001)</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Problem Identification &amp; Resolution (71152)</td>
<td>10/2 &amp; 10/16</td>
</tr>
<tr>
<td>Operator Requalification (7111111B)</td>
<td>10/16</td>
</tr>
<tr>
<td>Operational Assessment (7111114)</td>
<td>Mid-November</td>
</tr>
<tr>
<td>Multiple/Repetitive Degraded Cornerstones (95003) (Full Scope)</td>
<td>Currently planned for 1/7, 1/14, 1/28</td>
</tr>
</tbody>
</table>

**Emergency Preparedness (EP)**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Review of Corrective Actions for White PIs</td>
<td>10/2</td>
</tr>
<tr>
<td>Detailed EP Review (95003)</td>
<td>1/7 &amp; 1/14</td>
</tr>
<tr>
<td>Evaluation of Drill/Exercise Performance (7111401)</td>
<td>2nd Quarter 2001</td>
</tr>
</tbody>
</table>