RAS 2783

February 20, 2001

U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Docket Nos. 50-003 and 50-247 — In the Matter of CONSOLIDATED EDISON COMPANY OF NEW YORK, INC. and ENTERGY NUCLEAR INDIAN POINT 2 LLC, and ENTERGY NUCLEAR OPERATIONS, INC. (Indian Point Nuclear Generating Unit Nos. 1 and 2)

Dear Commissioners,

Enclosed for filing is the Citizens Awareness Network, Inc.'s Request for Hearing and Petition for Leave to Intervene in the License Transfer of Indian Point Nuclear Generating Unit Nos. 1 and 2.

Sincerely,

Timothy L. Judson
Citizens Awareness Network, Inc.

cc: Office of Secretary, USNRC;
General Counsel, USNRC;
Douglas Levanway, Esq.;
Brent Brandenburg, Esq.;
Paul Nolan, Esq.

Template = SECY-037

SECY-02

Before the
UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	**Docket Nos. 50-003 and 50-247**
CONSOLIDATED EDISON COMPANY OF NEW YORK, INC. and ENTERGY NUCLEAR INDIAN POINT 2, LLC, and ENTERGY NUCLEAR OPERATIONS, INC.	
(Indian Point Nuclear Generating Unit Nos. 1 and 2)	February 20, 2001

CITIZENS AWARENESS NETWORK'S REQUEST FOR HEARING AND PETITION TO INTERVENE IN THE LICENSE TRANSFERS FOR INDIAN POINT NUCLEAR GENERATING UNIT NOS. 1 AND 2

Pursuant to 10 CFR §§ 2.1306, 2.1308, the Citizens Awareness Network, Inc. ["CAN"] hereby requests a hearing on the application to transfer the ownership and operating licenses for Indian Point Nuclear Generating Unit Nos. 1 and 2 ["IP1" and "IP2," respectively] from Consolidated Edison Company of New York, Inc. ["ConEd"] to Entergy Nuclear Indian Point 2, LLC ["ENIP2"] and Entergy Nuclear Operations, Inc. ["ENO"], and petitions for leave to intervene in such hearing. CAN also supports the requests and motions set forth jointly by the Town of Cortlandt and the Hendrick Hudson School District ["Cortlandt"] in its Hearing Request and Petition to Intervene in the review of the application.

However, consideration of the application at this time would be premature, given the safety problems and systemic mismanagement of IP2. The NRC has noted the need for increased regulatory involvement and "consistent corporate support to the [IP2] station," classifying IP2 as an Agency Focus reactor. The potential for allowing the transfer of a systemically mismanaged reactor – where the licensee is being investigated, in a separate NRC

proceeding,[1] on allegations of perjury and creation of a chilled work atmosphere – is not only unprecedented, it could further endanger the public health and safety. Approval of the application could release ConEd from regulatory authority in the midst of enforcement action being taken against it, and thereby transfer this troubled reactor to entities that will not have the ability as public utilities to return to ratepayers for the potentially extensive improvements that will be necessary. The NRC has suspended Subpart M license transfers for less significant considerations, as it did in Nine Mile Point (1999) pending resolution of Rochester Gas & Electric's bid to undercut the proposed transferee through exercising its right of first refusal as a co-owner of Nine Mile Point Unit 2. *See Nine Mile Point, CLI-99-30, 50 NRC 12-13.* In the case of Indian Point 2, the health and safety of millions of people are potentially at stake. Surely the Commission can recognize the need for increased discretion under these special circumstances, and suspend review of the application pending resolution of the allegations against Con Edison.

Furthermore, as set forth herein below, the central issues on which the applications rely to demonstrate the Entergy companies' technical and financial qualifications are in dispute and already under review in two other NRC proceedings. The outcome of those proceedings could require the applicants to make substantial revisions to the application, or indeed may obviate the need for the instant proceeding altogether. CAN believes it would also be premature and a potential waste of NRC and other parties' resources to consider the application at this time.

[1] The NRC's Petition Review Board has accepted a petition pursuant to § 2.206, submitted December 4, 2000 by CAN and other groups. The PRB investigation will determine whether the NRC will pursue taking enforcement action against ConEd to revoke or suspend the operating license for IP2. As set forth herein below, the 2.206 proceeding supercedes the review of the license transfer application.

Therefore, CAN requests that the NRC suspend review of the application pending the resolution of those proceedings.

In addition, continuation of this proceeding, particularly on the current filing schedule, would impose an undue burden on CAN. CAN has still not been able to obtain a copy of the application, despite repeated attempts over the last two weeks to do so. CAN's arguments set forth herein are based on a partial copy of the application obtained from Cortlandt's attorney on an emergency basis, Saturday, February 17, 2001. Additionally, CAN is already involved in both of the aforementioned proceedings, as well as three other adjudicatory proceedings involving sales of nuclear reactors and a License Termination Plan hearing before the NRC. If the instant proceeding continues simultaneously, particularly where the matters at issue are duplicative of those being reviewed in other forums, the burden on CAN's financial and organizational resources as a volunteer, non-profit organization would be prohibitive. This *de facto* barrier preventing CAN from representing its interests would be a violation of CAN's hearing rights under the Atomic Energy Act. At the very least, if the Commission determines to continue review of the applications, CAN requires an extension of time until it can file properly documented and specific contentions on the applications.

In support of these requests, CAN has provided the attached declarations of a representative member of CAN, Marilyn Elie, Exhibit 1, attached hereto, and further sets forth as follows:

Standing Considerations

CAN is a volunteer, non-profit organization with six chapters in four states, including three chapters in New York State. Members of CAN's Westchester County live and work in close

proximity to the Indian Point Nuclear Generating Station, and their health and safety will be adversely affected by defects in the application or shortcomings in the Entergy companies' technical and financial qualifications to operate, maintain and decommission IP1 and IP2. CAN has already demonstrated, and the Commission has granted, standing on this basis through its petition to intervene in the license transfer of Indian Point 3, which involves ENO and ENIP2's affiliate company, Entergy Nuclear Indian Point 3, LLC ["ENIP3"]. *See FitzPatrick/IP3, CLI-00-22, 52 NRC 14.* Thus, it cannot be seriously disputed that CAN has standing to represent its interests. Clearly, a determination by the Commission that addresses shortcomings in the application will respond to CAN's concerns with respect to prospective harm that may result from an inadequate and incomplete application. However, to ensure that the record on this matter is complete, CAN has included the declaration of Marilyn Elie, a representative member of CAN, attached as Exhibit 1. Therefore, CAN has standing to intervene in this proceeding and has demonstrated the requisite interest under §2.1308.

Motion to Suspend Proceeding and/or Decision on Application for License Transfer

While the review of license transfer applications under Subpart M may encompass a wider array of issues, the NRC's review procedures are centrally concerned with the financial qualifications of the applicant to demonstrate it can provide adequate funds to ensure the safe operation and decommissioning of the reactor/s, pursuant to 10 CFR §§ 50.80, 50.33, and 50.75; the transferee must also demonstrate it satisfies technical qualifications requirements per § 50.34. However, problems with respect to these issues in the ConEd/Entergy application, which CAN and presumably other parties would seek to litigate, cannot be adequately evaluated – and ENO and ENIP2's qualifications cannot reasonably be determined – until ongoing reviews of the

design and licensing bases of the reactor and the financial qualifications of ENIP2's affiliate companies are completed. These matters are already under review in the Subpart M proceeding on the IP3 and FitzPatrick applications and a Request for Enforcement Action pursuant to § 2.206. In order to determine whether the application meets NRC requirements, these other proceedings must be concluded and resolved substantially in the Applicants' favor. Although suspending this proceeding will cause a delay in the initial stages, the delay is warranted and beneficial. While Subpart M's procedures were intended to increase efficiency of the review of license transfer applications, suspending review in the instant case can be expected to conserve the NRC's and parties' resources and to expedite review once the proceeding is resumed. These considerations constitute special circumstances which warrant an exception to §§ 2.1304, 2.1306 and the usual rules on scheduling for Subpart M proceedings, per the standard of § 2.1329(b).

1. Review of the application and schedule for filing of contentions should be suspended or revoked pending the Commission's decision in the FitzPatrick-Indian Point 3 license transfer, per §§ 2.1304 2.132.1329.

In the case of financial qualifications, the applications appear to rely on an arrangement nearly identical to the one proposed in the Indian Point 3 license transfer application: five-year cost-and-revenue projections; a four-year power purchase agreement ["PPA"] with the facilities' previous owner; supplemental funding through lines of credit provided by two other Entergy subsidiaries; and claims that arrangements for decommissioning satisfy the "Prepayment" option for demonstrating financial assurance under § 50.75. CAN is prohibited from formulating a properly specific argument on the basis of financial qualifications at this time both because the relevant information has been almost entirely redacted from the publicly available applications, and because CAN has not even been able to review the application in its entirety at this time.

However, CAN assumes that the application suffers from deficiencies nearly identical to those that are already being litigated in the FitzPatrick and IP3 license transfer proceeding. The application makes many of the same assumptions as, and the estimated revenues seem nearly identical to, those in the IP3 application, with the only variables being IP2's slightly lower generation capacity and the slightly higher rate for electricity under the IP2 PPA. In addition, the revenues from one reactor (IP2) apparently must also support the maintenance of another reactor (IP1), until decommissioning of both units can begin in 2013. *See Application For Transfer Of Facility Operating Licenses, Enclosure 1 at 2, 3, 6-9, 13-14.* In FitzPatrick/IP3, CAN's admitted contentions are (1) that the applicants' cost-and-revenue projections are unreasonable, based on the inability of the applicants to withstand reasonable uncertainties with respect to operating and maintenance costs and capacity factor-dependent revenues; and (2) the unreliability of the supplemental funding provided by the Entergy applicants. The resolution of that proceeding would effectively streamline the review of the application by ConEd and Entergy, thus conserving the agency's and parties' resources. Thus, it would only be prudent to wait until the previous proceeding is concluded before continuing the review of the application in the instant case and parties are required to file contentions. These considerations, as well as the fact that the two proceedings involve transferring reactors on the same site to identical or affiliated companies, constitute special circumstances which warrant suspension of the proceeding, per the standard of § 2.1329(b).

2A. The Petition Review Board's investigation into whether the operating license for Indian Point 2 should be suspended or revoked supercedes review of the license transfer application.

In order to satisfy the NRC's technical qualifications requirements under § 50.34, the applications rely primarily on the existing design basis and license documentation (including the

UFSAR), and retention of the current staff, who are to become employees of ENO upon completion of the proposed sale. *Id. at 2, 15-17.* However, the NRC is considering taking enforcement action to revoke or suspend the IP2 operating license on the very bases that Con Edison and the Entergy companies are requesting permission to transfer it. On February 9, 2001, Mr. Christopher Gratton notified CAN via phone call on behalf of the NRC's Petition Review Board ["PRB"] that the PRB had accepted CAN and other groups' December 4, 2000 petition (submitted pursuant to 10 CFR § 2.206), and the agency would be conducting a four-month investigation to determine whether the NRC should revoke or suspend Con Edison's operating license for IP2.[2] Therefore, pending the results of the investigation and the PRB's decision, it is possible that there will not be an operating license to transfer. Although the 2.206 proceeding is arguably no farther along than the review of the license transfer application, the NRC's and other parties' resources would be wasted if this proceeding were to continue and the PRB later determines that the license should be revoked.

The petition, submitted by CAN and other groups pursuant to 10 CFR § 2.206, requests that the NRC suspend or revoke Con Edison's license to operate Indian Point 2 on the basis of systemic mismanagement, which has led to inaccuracies in the Updated Final Safety Analysis Report; repeated violations of NRC regulations; inadequate operator training; inaccurate and outdated operating and maintenance procedures; two site emergencies, in which efforts to safely shut down the reactor were also complicated by subsequent failures of multiple backup systems, operator workarounds, and procedural errors; and the failure of the emergency response program to provide timely, accurate and consistent information to local communities to protect the public

[2] Although CAN and other petitioners have yet to receive official written notice of the Board's determination, the fact and general scope of the decision has been confirmed in the media, attached as Exhibit 3. *"Con Ed to face NRC review," The Journal News, February 10, 2001.*

health and safety.[3] Although the NRC allowed the reactor to restart, a Con Edison report on activities leading up to and including the January 2001 restart of the reactor further supports CAN's contentions,[4] detailing pressure on workers to ignore safety and procedural problems in order to complete the restart.

Subsequent to filing the petition, workers at IP2 provided CAN with new information, in the form of condition reports ["CRs"],[5] which supports the ongoing accuracy of CAN's contentions and reveals additional problems at IP2, of which neither CAN nor the NRC were previously aware:

- *Existence of a "chilled work atmosphere,"* in which workers who raise safety concerns are harassed and intimidated.
- *Licensee's failure to fulfill commitments made under oath*, which allowed restart following the August 31, 1999 emergency.
- *Loss of radiological control*, evidenced by contamination of non-radiological areas of the site, the potential off-site migration of hot particles, and excessive exposure levels in supposedly low-radiation areas.

CAN supplemented the petition with the new information and issues in the CRs at a meeting with NRC Staff on January 24, 2001.

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[3] Separately from CAN's 2.206 petition, Public Citizens' Critical Mass Energy Project has filed another petition pursuant to § 2.206 challenging the licensing basis of IP2, alleging that the licensee has violated NRC requirements by failing to conduct exercises to demonstrate the licensee can satisfactorily execute the radiological response plan every two years. If it is determined that IP2 is in fact in violation of emergency planning requirements under § 50.47 and § 50 Appendix E, it would also undermine the applicants' ability to satisfy § 50.33(g).

[4] Attached as Exhibit 2D.

[5] Attached as Exhibit 2B, with supporting independent analysis by David Lochbaum, Nuclear Safety Engineer for the Union of Concerned Scientists, attached as Exhibit 2C.

While the review of license transfer applications under Subpart M may encompass a wider array of issues, the NRC's review procedures are centrally concerned with the financial qualifications of the applicant to demonstrate it can provide adequate funds to ensure the safe operation and decommissioning of the reactor/s, pursuant to 10 CFR §§ 50.80, 50.33, and 50.75. This is true even though applicants must also demonstrate they are technically qualified to maintain and operate the reactor, for in most cases applicants have been able to rely on the existing design and licensing basis and the staff's qualifications to satisfy § 50.34 requirements. In addition, the Commission has made it explicitly clear that a Subpart M proceeding is not a proper forum for reviewing the adequacy of management and day-to-day operations, the material condition, or the design and licensing basis of a reactor. In at least three recent proceedings, the Commission has rejected contentions relating to the accuracy of the reactor's Updated Final Safety Analysis Report ["UFSAR"], the culture of management, workforce and operator training, maintenance and corrective action programs, and the adequacy of the reactor's material condition.[6] *See Oyster Creek, CLI-00-6, 51 NRC 213, 214 ...; Vermont Yankee, CLI-00-20, 52 NRC at __, slip op. at 13; and FitzPatrick and Indian Point 3, CLI-00-22 at 39.* Thus, there is a central assumption in Subpart M proceedings that the licensee and the reactor already substantially comply with § 50 regulations and the reactor can be safely operated. However, until the PRB's review is complete and the 2.206 petition is closed, that assumption cannot be made about Indian Point 2. The instant case represents a special circumstance in which

[6] In Vermont Yankee and FitzPatrick-IP3, in fact, the Commission recommended that CAN pursue its concerns about the validity of the licensing basis and related safety issues by filing petitions for staff enforcement action under § 2.206 rather than through a license transfer proceeding. *See Vermont Yankee, CLI-00-20, 52 NRC at __, slip op. at 13; and FitzPatrick and Indian Point 3, CLI-00-22 at 39.* Thus, CAN has merely followed the Commission's guidance through using the appropriate venues to address its concerns. In light of this consideration, it

consideration of the application is not possible until there is a basis for determining the validity of its § 50.34 and § 50.33 filings – or whether the license can be transferred at all.

Furthermore, while this circumstance is unfortunate for the Applicants and could delay completion of the sale several months, premature approval of the license transfer to entities which may not be qualified to operate IP2 would compromise the public health and safety, and potentially undermine the Commission's regulatory authority over Consolidated Edison. ConEd could be allowed to escape Commission authority in the midst of the agency taking enforcement action by absolving ConEd of its responsibilities under the IP2 operating license. The possibility that a licensee could operate nuclear facilities in violation of NRC regulations, and then escape enforcement authority through transferring the operating license to a new, unaffiliated entity is completely unprecedented, repugnant to the public interest, and potentially undermines the Commission's authority and the integrity of its regulations.

In fact, CAN anticipated this dilemma facing the Commission when it filed the 2.206 petition. CAN requested that a condition be placed on the IP2 license preventing it from being transferred until the issues of systemic mismanagement are resolved:

> **... REQUESTED ACTION**
>
> ... 5.) No license transfer requests should be approved for Indian Point 2 until such time that the management can demonstrate that the UFSAR, CR back log, and maintenance requirements are up to date and workers have been retrained to the complete and revised UFSAR.

CAN presented this request in greater detail at the January 24 meeting with the Petition Review Board. When the transcript of that meeting becomes available, CAN will submit a copy of it as Exhibit 2E to this request. Furthermore, because IP2 is being investigated to determine, in part,

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should also be noted that CAN's 2.206 petition (December 4, 2000) was filed and pending before the license transfer application was submitted (December 12, 2000).

whether systemic mismanagement has resulted in erosion of the design and licensing basis and a technically unqualified staff, the Applicants' filing amounts to little more than dubious assertions and will not be sufficient to meet § 50.34 requirements unless the § 2.206 proceeding is resolved substantially in Con Edison's favor. Thus, the Commission must suspend the license transfer proceeding until the Petition Review Board has completed its investigation of IP2 and issued a decision on CAN's petition.[7]

2B. The Petition Review Board's investigation into whether the operating license for Indian Point 2 should be suspended or revoked supercedes review of the license transfer application.

The issues to be investigated under the NRC's review of CAN's 2.206 petition are also pertinent to IP2's ongoing classification as an Agency Focus Reactor in the NRC's new Reactor Oversight Process. On May 23, 2000, NRC notified ConEd of NRC senior management's determination:

> The senior managers discussed recent plant performance including two risk significant events: an August 1999 reactor trip with electrical system complications and a February 2000 steam generator tube failure. In both of these events, the senior managers noted concerns that illustrate a number of longstanding performance issues. Senior managers determined that these events revealed several interrelated problems: (1) communication and coordination weaknesses among various site organizations; (2) engineering support shortcomings that led to narrowly focused assessment of plant problems; (3) configuration management/control problems; (4) equipment reliability problems and large corrective action backlogs; and (5) operator knowledge, station training, and procedural weaknesses. The senior managers further were concerned with recurrent emergency preparedness weaknesses that have hampered performance during exercises and during the August 1999 and February 2000 events.
>
> The senior managers concluded that **the broad performance issues that have existed at Indian Point 2 for the past several years** have revealed deficiencies in licensee corrective action program efforts. A number of utility improvement

[7] CAN is currently litigating a similar issue in the FitzPatrick/IP3 license transfer proceeding: whether transferring the operating license would undermine the Commission's authority by allowing the original licensee to escape enforcement action for radioactive cleanup responsibilities which it retains as a result of contractual arrangements with the new owner.

> initiatives have yielded some progress **but, overall, have been limited in remedying the underlying problems.**
>
> Senior managers noted the current Chief Nuclear Officer has set high standards, has brought a more self-critical approach to the station, and has directed development of new improvement plans. However, *achieving fundamental improvements* including corrective action program efforts, *and dealing with legacy issues, **will require consistent corporate support to the station***. Based on these concerns, the senior managers concluded that Indian Point 2 warrants oversight as an agency-focus plant.

William D. Travers, NRC Executive Director of Operations, Letter to Eugene R. McGrath, May 23, 2000, NRC Docket No. 05-247 (emphasis added). The need for "consistent corporate support to the station" must be interpreted as both organizational and financial in nature. While Con Edison is an electric utility with the ability to recover cost increases from ratepayers, the Entergy applicants are not electric utilities and would have no assets aside from the IP1 and IP2 facilities themselves and fixed-rate contracts for the sale of electricity generated by IP2. Since nuclear safety is not a commodity that grows on trees, it must be assumed that the improvements required to bring IP2 back within regulatory compliance could cause substantial increases in operation and maintenance costs, which the application does not demonstrate ENIP2 could afford.[8]

Thus, even if the Board does not recommend revocation of the license, the results of the investigation and the Board's decision could directly impact the ability of the existing application to meet financial qualifications requirements. The purpose of the PRB's investigation is to determine whether IP2 is in violation of its design and licensing basis and

[8] CAN has already won the right to argue a related point in FitzPatrick/IP3: that the projected operating costs in the license transfer applications must be tested for reasonable increases in operation and maintenance costs. CAN's contention was supported by the declaration of an expert witness with experience in the finances of nuclear operations, Edward A. Smeloff. The fact that ENIP2's projected profit margins are likely to be qualitatively similar to ENIP3's

relevant NRC regulations, as well as whether the staff is technically qualified to operate and maintain IP2 and whether the existing management has willfully violated NRC regulations and created a chilled work atmosphere. These concerns speak directly to the requirements of § 50.34 for demonstrating technical qualifications. However, should the PRB's review reveal that substantial improvements must be made to the IP2 facility, personnel, and organization, without requiring suspension or revocation of the license, it could increase the projected operating and maintenance costs which ENIP2 and ENO must be able to cover in order to satisfy the requirements of § 50.33 for demonstrating financial qualifications.[9] Should the NRC approve the existing applications, unenlightened by the PRB's findings, the Commission may unwittingly allow the transfer of reactors (IP1 and 2) to entities which are not qualified to own and operate them in their existing condition. The financial inability of a licensee to make the necessary improvements could engender a legacy of noncompliance, permanently compromising the safe operation of IP2 – a situation which the NRC's procedures under Subpart M were intended to prevent. Thus, an exception to the normal procedures is warranted, according to the standard of § 2.1329(b). Furthermore, although the Commission must approve both the license transfer application and the PRB's recommended actions and will certainly be aware of the emergent

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(accounting for the costs of maintaining IP1), with IP2's potentially much greater cost increases, makes the situation even more dire with IP2.

[9] It bears noting that merely satisfying the filing requirements under § 50.33 – namely the submission of five-year cost-and-revenue projections – does not demonstrate financial qualifications. The projections filed must, on their merits, demonstrate that the applicants possess or have "reasonable assurance of obtaining the funds necessary to cover estimated operation costs for the period of the license." The Commission has agreed with this interpretation in other Subpart M proceedings, and the Presiding Officer has recently accepted CAN's arguments on a related point in the FitzPatrick and IP3 license transfer proceeding. *See* North Atlantic Energy Service Corp., CLI-99-06, 49 NRC at 220; *and see* FitzPatrick/IP3, *Presiding Officer's Memorandum & Order (February 5, 2001) at 11-12.*

issues and information, there is no provision under Subpart M for integrating findings from a separate but simultaneous proceeding relevant to the same facility.

Request for Extension of Time to File Proposed Contentions

Continuation of the proceeding on the current schedule would also impose an undue burden on CAN, potentially in violation of CAN's hearing rights under the Atomic Energy Act. Should the Commission deny CAN's request to suspend review of the application, CAN requests an extension of time until it can review the application and prepare properly documented and specific contentions. However, based on a limited review of a partial version of the redacted application, which CAN was only able to obtain Saturday, February 17 from Cortlandt's counsel on an emergency basis, it would be no more possible to evaluate the Entergy companies' financial qualifications to operate IP2 and maintain IP1than it was with the IP3 and FitzPatrick applications. The NRC should, therefore, require that the Applicants provide unredacted versions of the application to intervening parties so they can understand what ConEd and the Entergy companies are proposing. Should the NRC grant this request, the NRC should also grant parties an extension of time to review the unredacted application and submit contentions.

1. **Continuation of the license transfer proceeding would impose an undue burden on CAN and preclude CAN from representing its interests. This *de facto* barrier to CAN's participation would be a potential violation of CAN's hearing rights under the Atomic Energy Act.**

CAN is already involved in the FitzPatrick-IP3 license transfer and IP2 2.206 proceedings, as well as four other adjudicatory proceedings:

- the Vermont Public Service Board hearing on the sale of Vermont Yankee;
- the New York Public Service Commission hearing on the sale of Nine Mile Point Unit Nos. 1 and 2;
- the New York Public Service Commission hearing on the sale of Indian Point 1 and 2;[10] and
- the hearing on the License Termination Plan for Connecticut Yankee.

As a volunteer, non-profit organization, CAN does not have the financial resources to obtain counsel, and is representing itself *pro se* in all but one of these proceedings (Vermont Yankee). CAN's representatives and volunteers are unable to take on yet another adjudicatory proceeding. Furthermore, in light of the arguments presented above, it would be a prohibitive burden to require CAN to litigate the same issues simultaneously before the NRC in different forums. Since there are good reasons to suspend review of the application, which would also conserve the NRC and other parties' resources and clarify matters that would also need to be litigated here, denying this request would impose an undue burden on CAN, a violation of CAN's hearing rights under the Atomic Energy Act.

2. The NRC should grant CAN an extension of time until it is able to obtain and review the application.

The NRC published notice of receipt of the application in the Federal Register on January 29, 2001. The notice required parties to submit hearing requests and petitions to intervene by February 20, 2001. However, CAN has been unable to obtain a complete

[10] CAN is also requesting that this proceeding be suspended, pending the PRB's investigation of IP2 and resolution of CAN's request for enforcement action against Con Edison. However, the PSC has not ruled on this request, and CAN would be committed to participating in that proceeding to the degree it is able.

copy of the publicly available application, despite repeated attempts to do so beginning the week of February 5. CAN has found the NRC's Agency-wide Document Access Management System (ADAMS), which replaced the Public Document Rooms previously maintained in each reactor community, inaccessible and impossible to use – particularly for documents as large as the license transfer application. No phone numbers were provided for any of the relevant NRC offices in the Federal Register Notice, and CAN's calls to the NRC Office of the Secretary and Entergy's counsel, Mr. Levanway, were not returned. In an eventual conversation with Mr. Emile Julian of the Secretary's Office on February 16, CAN was told to contact the IP2 Project Manager for a copy of the application. CAN was unable to reach anyone about obtaining a copy of the application until Friday, February 16, but the NRC was unable to provide CAN with a copy of the application until at least February 20 – the day requests and petitions are due.

Not only does this represent a catastrophic failure in the timely availability of documents to the public, it imposes an undue burden on CAN, and potentially other parties, for meeting the filing deadline. If the NRC denies the request to suspend review of the application, the Commission should grant CAN and any other parties who have had difficulty obtaining the application an extension of time to prepare hearing requests and intervention petitions. If the NRC does not extend the schedule for filing requests and interventions, and CAN's contentions are rejected under the standard for late-filed contentions per § 2.1308, it would constitute a violation of CAN's hearing rights under the Atomic Energy Act.

3. The NRC should order the Applicants to provide unredacted versions of the applications to interested parties and grant extensions of time for filing timely, well-documented and specific contentions challenging the Entergy companies' technical and financial qualifications.

In order to file these requests, CAN contacted Cortlandt's counsel, Mr. Paul Nolan, who was able to provide CAN with Enclosures 1 and 2 of the redacted application on an emergency basis. Based on those portions of the application, it appears that the applicants have redacted even more information than was redacted from the FitzPatrick and Indian Point 3 applications, thus making it impossible for the public to evaluate the Entergy companies' financial qualifications and submit properly specific and well-documented contentions. Although ENIP2's financial qualifications appear to suffer from nearly identical weaknesses as its counterparts in FitzPatrick-IP3, and it is possible to reconstruct some of the relevant information as Cortlandt has done in its hearing request and petition to intervene, parties are still unable to understand important matters particular to this application, such as the liability for operating costs for both IP1 and IP2, the room for error in the cost-and-revenue projections, financial matters pertaining to the operation and maintenance costs and agreements, and the supplemental funding agreements. These matters are central to the application's ability to demonstrate financial qualifications and ENIP2's ability to access to sufficient funds to ensure the maintenance and safe operation of IP1 and IP2. If the Entergy companies cannot access sufficient funds for these purposes, the public health and safety could be compromised, either because of workforce reductions or deferring necessary maintenance. Thus, if this proceeding continues at this or some other time, the NRC should order the Applicants to provide CAN and other interested parties with redacted versions

of the applications and extend the schedule for timely filing of contentions 20 days from the date they are available, per the Commission's application of § 2.1306(c) in FitzPatrick-IP3. *See FitzPatrick-IP3, CLI-00-22, 52 NRC 24, 58.*

CONCLUSION

For the reasons set forth above, CAN requests the NRC suspend review of the application to transfer the licenses for Indian Point Nuclear Generating Unit Nos. 1 and 2, and/or make other modifications to the procedures in this proceeding.

DATED at Syracuse, New York, this 20th day of February, 2001.

Respectfully submitted:

CITIZENS AWARENESS NETWORK, INC.

BY: _____
Timothy L. Judson, Organizer for CAN

BY: _____
Mark Jacobs, Westchester-CAN

BY: _____
Deborah B. Katz, Executive Director of CAN

pro se for CAN

cc: Office of Secretary, USNRC;
General Counsel, USNRC;
Douglas Levanway, Esq.;
Brent Brandenburg, Esq.;
Paul Nolan, Esq.

Exhibit #1

Declaration of Marilyn Elie
Representative Member of
Citizens Awareness Network, Inc.

Exhibit #2

Documents Pertaining to CAN's Request for Enforcement Action Pursuant to 10 CFR § 2.206

A) CAN's Request for Enforcement Action (December 4, 2000)

B) IP2 Condition Reports Filed Supplementally in Support of CAN's Petition (January 24, 2001)

C) Union of Concerned Scientists Analysis of Condition Reports in Support of CAN's Petition (January 24, 2001)

D) Consolidated Edison Company of New York, Inc. Event Response Team Report: Condition Report 200100048 – Main Turbine Trip on High Steam Generator Level, January 2, 2001. Dated January 9, 2001.

E) [to be filed when available] Transcript of Petitioners' Meeting with NRC Staff to Review 2.206 Petition and Present New Information (January 24, 2001)

Exhibit #2A

CAN's Request for Enforcement Action (December 4, 2000)

Exhibit #2B

IP2 Condition Reports Filed Supplementally in Support of CAN's Petition (January 24, 2001)

Exhibit #2C

Union of Concerned Scientists Analysis of Condition Reports in Support of CAN's Petition (January 24, 2001)

Union of Concerned Scientists

FAX MESSAGE

TO:	**Deb Katz, Citizens Awareness Network** **Mark Jacobs, WESPAC**
FROM:	**Dave Lochbaum**
DATE:	**January 19, 2001**
NO. PAGES (including cover sheet):	**2**

I reviewed the IP2 Condition Report (CR) summaries. The bulk of the CRs involve problems typically reported by nuclear plant workers: burned out light bulbs, equipment failures discovered during testing, etc.. There were several CRs that suggest broader, systemic problems. Those CRs are:

1. **CR 200100287: According to this CR, ConEd made a commitment to the NRC for corrective actions following the August 31, 1999, event at IP2, but the Commitment Verification Project was unable to document that the commitment had been honored.**

2. **CR 200100288: Similar to CR 200100287, but for a different commitment.**
3. **CR 200100289: Similar to CR 200100287, but for a different commitment.**
4. **CR 200100290: Similar to CR 200100287, but for a different commitment.**
5. **CR 200100304: Similar to CR 200100287, but for a different commitment.**

6. **CR 200100292: According to this CR, an earlier CR (200003496) had been improperly closed out. These CRs involve safety analyses for transients such as loss of feedwater heating. The inference from this CR is that the safety analyses contain errors and omissions a la the Maine Yankee RELAP flap.**

7. **CR 200100295: According to this CR, an earlier CR (200005482) had been improperly closed out. These CRs involve vapor containment entries when containment integrity is required. This CR and CR 200100292 suggest that ConEd does not have an adequate problem identification and resolution process.**

8. **CR 200100306: According to this CR, the DC Systems Safety System Functional Assessment (SSFA) Team identified a number of CRs that had been improperly closed out. This CR reinforces the theme of CRs 200100292 and 200100295 that ConEd has an inadequate corrective action process.**

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9. **CR 200100376: According to this CR, the current operation of the Chemical and Volume Control System conflicts with the system's design as described in the UFSAR because some installed equipment is no longer used. The Demand for Information sent to ConEd in October 1996 elicited a response claiming that ConEd had adequate assurance that IP2's operation was within its design bases. This CR indicates otherwise.**

10. **CR 200100719: According to this CR, a water hammer was observed on the east main steam header after bypassing the MS-1s on December 25, 2000. The cause of the water hammer is not specified, but usually results from failure to follow procedures or following bad procedures. The January 2, 2001, event was complicated by failure to follow procedures and bad procedures.**

11. **CR 200100327: According to this CR, numerous discrepancies between as-built wiring for the Reactor Protection System (RPS) and the system design have been discovered. According to the CR, "Resolution of discrepancies between as-found plant conditions and design drawings have often been resolved by revising drawing to match the as-found plant condition. These 'design changes by default' have been made without the required quality assurance requirements such as design verification or ensuring preservation of the licensing basis through a documents safety evaluation." This CR suggests a safety problem affecting RPS. This CR, however, suggests an even larger safety issue if discrepancies between the plant and its design bases are being resolved using a process that circumvents the legally established process. As a minimum, ConEd should sample drawing changes for several safety systems.**

12. **CR 200100335: According to this CR, 8 of 53 CRs reviewed had been determined to have been closed out on an Unacceptable basis. That percentage (15%) applied to the 5,482 CRs written (at least) during 2000 (from the CR referenced in CR 200100295) suggests that ConEd improperly closed over 800 CRs last year alone. Once again, ConEd's corrective action process looks badly flawed.**

13. **CR 200100336: According to this CR, "Operability Determination conclusions often have not supporting basis." Operability Determinations are prepared to justify continued operation of the reactor with degraded equipment or potentially degraded equipment. Thus, inadequate Operability Determinations provide a direct, immediate threat to safety that cannot be tolerated.**

14. **CR 200100338: According to this CR, a temporary procedure change was used on January 29, 1999, to allow a non-routine equipment lineup. That temporary procedure change, which has been revised several times to broaden the scope of the non-routine equipment lineup, remains in effect two years later. As the CR points out, the temporary procedure change process circumvents all the checks and balances that are provided for permanent plant procedure changes.**

Dave Lochbaum
Nuclear Safety Engineer

Exhibit #2D

Consolidated Edison Company of New York, Inc.
Event Response Team Report: Condition Report 200100048 – Main Turbine Trip on High Steam Generator Level, January 2, 2001. **Dated January 9, 2001.**

From Frances Resheske VP Public Affairs

The attached report "Condition Report 200100048 Main Turbine Trip on High Steam Generator Level January 2, 2001" (Revision 3) was completed by a team of station individuals on January 9, 2001. This team of individuals is called an Event Response Team. Event Response Teams are comprised of station individuals with expertise in areas appropriate to the event. In this case the team consisted of personnel with experience in operations, training, quality assurance, personnel performance and nuclear physics. This report reviews the event of January 2 against a backdrop of standards of excellence in excess of minimum requirements. The report was initiated by the station corrective action committee on January 4, 2001 because the committee believed based on their review of the January 2, 2001 event that the event and its implications and lessons to be learned was not sufficiently understood by station management and personnel. Under the direction of this committee the report was drafted and reviewed by station management and the committee and approved on January 9, 2001. Plant power was held at 30% as we have already reported during this review period to allow any necessary corrective actions to be implemented. This report was shared with local NRC residents on January 9 and is being further reviewed by them.

It is important to note that the report compares plant operations not to requirements but to a higher level standard of excellence. The report concludes: "The actions of the licensed operators maintained the reactor core and equipment within all technical specification requirements and safety limits". Corrective actions being initiated by this event help the plant learn from its operating experience and support Indian Point 2's pursuit of excellence in plant operations. If you need further information regarding this report please call your designated contact person or 212-460-4111 and we will respond to any questions.

Indian Point Unit 2

[redacted]

Event Response Team

CONDITION REPORT 200100048
MAIN TURBINE TRIP ON HIGH STEAM GENERATOR LEVEL JANUARY 2, 2001
(Revision 2)

Operations Manager (Incoming) — 1/9/01 Date

Assistant Operations Manager — 1/9/01 Date

Section Manager – Audits and Surviellances — 1/9/01 Date

Operations Training Manager — 1/9/01 Date

Corrective Action Program Manager — 1/9/01 Date

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EXECUTIVE SUMMARY

On January 2, 2001, during preparations for Main Turbine Start-up, the plant experienced a main turbine trip from high steam generator level in 21 Steam Generator. The high steam generator level also resulted in a Main Boiler Feed Pump trip and the actuation of the Auxiliary Feedwater system. The primary data used for this report was from the plant information system (PI) and operator interviews.

The actions of the licensed operators maintained the reactor core and equipment within all technical specification requirements and safety limits. This event did not result in any safety violations or safety concerns. The areas of improvement identified in this report can support Indian Point 2's pursuit of excellance in plant operations.

EVENT DESCRIPTION

On January 2, 2001, at approximately 1500 hours, with Reactor power at approximately 6.5% and steam dumps in automatic, during preparations for a Main Turbine start-up, control room operators started 21 Condensate Pump. 21 Condensate Pump was the second Condensate pump placed in service and was required to be started by POP 1.3 (Plant Start-up from Zero Power Condition to Full Power Operation) to compensate for increased feedwater demand during the main turbine start-up and subsequent power escalation. In addition, plant conditions were such that starting the 21 Condensate Pump was necessary to increase an observed low Main Boiler Feed Pump suction pressure. The Condensate pump start-up increased the 22 Main Boiler Feed Pump discharge pressure approximately 50 PSIG. The Low Flow Feed Regulating Valves were open approximately 65% to 80% supplying feed water to the steam generators. Other existing plant conditions included 21 Main Boiler Feed Pump operating at approximately 1200 RPM with the discharge valve closed and in a recirculating line-up.

Following the start of the second condensate pump, levels immediately started increasing in all four-steam generators. Steam generator level increased from approximately 30% to 50%. It is important to note that condensate temperature was approximately 70 degrees. This level increase was identifed by the control room staff and the Low Flow Feed Regulating Valves were moved in the closed direction from their initial position to approximately 10% open between 50% and 60% steam generator level. At 60% steam generator level, the Control Room Supervisor directed the Low Flow Feed Regulating Valves be closed completely. In addition, the speed of the Main Boiler Feed Pump was decreased in an attempt to control the steam generator level increase. However, the cold feedwater already fed into the steam generators and being heated resulted in a steam generator level swell to the steam generator high level trip set point (73% Narrow Range). As a result of reaching the high level trip setpoint in 21 Steam Generator the 22 Main Boiler Feed Pump tripped and it's associated discharge valve closed. Also, the main turbine automatically tripped on high steam generator level. The Auxiliary Feed System automatically actuated on closure of

the Main Boiler Feed Pump discharge valve and the trip of the Main Boiler Feed Pump. Note that the 21 main boiler feed pump continued to run as its discharge valve was already closed (per system design the automatic trip function of the pump was not armed).

To respond to the Main Turbine trip, the Control Room staff entered AOI 26.4.6 (Main Turbine Trip Without a Reactor Trip). The procedure implies that the operators should decrease power to less than four percent if Auxiliary Feedwater is the only source of feed to the steam generators. The Control Room staff began inserting Control Rods to decrease Reactor power to less than three percent to be within the capability of the motor driven Auxiliary Feedwater Pumps and to reduce the rising reactor coolant average temperature. Control Rods were initially inserted 24 steps and subsequently inserted an additional five steps to further reduce Reactor power. The operator inserted the controls to a known rod position from earlier in the day when reactor power level was at approximately 2%. Steam dumps were taken to manual for steam generator pressure control. Following the rod insertion the Control Room Supervisor directed the steam dumps opened to decrease steam generator pressure from 1020 psig to 1000 psig.

Reactor power decreased to approximately 1% based on the indication monitored by the control room staff. During this transient the Reactor Coolant Temperature increased to a maximum of approximately 552 degrees, a minimum of 543 degrees, and was stabilized at approximately 547 degrees. The Reactor Operator was directed to withdraw Control Rods to return power to approximately 2% as directed by the Shift Manager via the Control Room Supervisor. Subsequent control rod withdrawals were in accordance with AOI 26.4.6 (Main Turbine Trip Without a Reactor Trip) to return reactor coolant average temperature to no-load value. The increase of Reactor power was conducted while carefully monitoring Reactor power and average temperature.

Reactor power was stabilized at approximately two percent and average Reactor Coolant Temperature was stabilized at 547 degrees.

A debrief was conducted by the Operations Manager with the Control Room staff immediately following the event and resultant transient.

On the day following the event station management summoned a team to independently confirm statements from the critique that the reactor had not gone subcritical. By close of business that day the team determined that the reactor was not taken below the point of adding heat (POAH) and thus was not taken to a net subcritical condition.

The reactor engineering team used the lowest reactor power level achieved during the event as measured by the plant computer and compared this power to the power level measured during physics testing at the point of adding heat by the reactivity computer. The comparison indicated that reactor power remained well above the point of adding heat.

The second team comprised of the incoming operations manager, assistant operations manager of work control, and the quality assurance audits and surveillance manager performed a rudimentary reactivity balance for the evolution. This calculation confirmed that the combination of rod worth, power defect, and moderator temperature coefficient from the event resulted in a positive outcome from the reactivity balance.

More specific details of the calculations are given in addendum #1.

ROOT CAUSE

An off-normal secondary system condition resulting in low main boiler feed pump suction pressure during the start of the second condensate pump along with untimely operator action resulted in turbine trip on high steam generator level. (ICA # 4,5,9,10,13)

Contributing Factors

1. Less than adequate questioning attitude regarding the low main boiler feed pump suction pressure failed to identify the off-normal secondary system condition. (ICA # 9,12,13)
2. Procedural conflicts between the abnormal operating instruction for Turbine Trip without Reactor Trip (AOI 26.4.6) and station reactivity management requirements (SAO-442 and OAD-39) provided unclear guidance to the operating crew regarding withdraw of control rods during transient conditions. (ICA #1,2,3,6,8)
3. Less than adequate procedure adherence (AOI 26.4.1) resulted in manual operation of the steam dump system exacerbating the transient. (ICA # 4,7,13,14)
4. Pressure to perform while restoring the unit to service may have led the operators to reduce their questioning attitude and make them more willing to accept less than adequate plant conditions during startup. (ICA #9, 10, 11)

SAFETY SIGNIFICANCE

The actions of the licensed operators maintained the reactor core and equipment within all technical specification requirements and safety limits. This event did not result in any safety violations or safety concerns.

The event response team recommends a classification of this event as a Significant Reactivity Management Event (SRME) per SAO 442 step 3.3 for the following:

Positive reactivity was simultaneously inserted into the reactor core during the transient by two means. The two means of positive reactivity insertion were the uncontrolled decreasing reactor coolant average temperature and the methodical withdrawal of control rods. Reactor coolant average temperature was decreasing due to the following:

- Main Boiler Feed Pump continuing to run using steam from the steam generators
- The existence of the cold water injected into the steam generators by first, the increased feed flow and second, the actuation of the auxiliary feed system
- The operation of the steam dump system in manual and valves open
- Initial control rod insertion

The second method of positive reactivity insertion was the withdrawal of the control rods while reactor coolant temperature was decreasing. While the withdrawal of the control rods was conducted in a slow and methodical manner, data analysis indicates that reactor coolant temperature continued to decrease during the initial rod withdrawal. Initial rod withdrawal was comprised of five small rod withdrawals, one withdrawal of one step, and four withdrawals of two steps. After the initial withdrawals reactor coolant temperature was stabilized by the operators. The addition of positive reactivity from two sources (uncontrolled cooldown and controlled withdrawal of rods) represents a condition that may degrade the ability of the operators to monitor and control reactivity.

The event was an unplanned reactivity change in that high steam generator level caused a loss of normal feed water to the steam generators and reactor power had to be decreased to allow continued operation within the capacity of the Auxiliary Feed Water System. In addition, this event exceeded a 2% change in reactor power and resulted in the insertion of greater than 100 pcm of negative reactivity.

The plant transient that resulted from the steam generator level transient result in an engineered safety features (ESF) actuation reportable under 10CFR50.72 (b) (ii), automatic start of the auxiliary feed pumps. The auxiliary feed water system (AFW) performed as designed. This is a four-hour notification as indicated by SAO-124, "Oral Reporting of Non-Emergency Events and Items of Interest and Significant Occurrence Reporting" item number 55. This notification was not made in the required time. Condition report 200100200 has been issued to determine the cause of the late report.

ROOT CAUSE BASIS

Interviews of the operating crew indicated that main boiler feed pump suction pressure was abnormally low, and that 22 main boiler feed pump speed demand was higher than expected. The main boiler feed pump suction flow recorder trace, steam generator level response trace and reactor power trace were obtained from the control room. This information was compared to the plant computer system archive data using the Process-book software (PI). A time line was developed using operator interviews and the data gathered above. The resultant time line is included below:

Time	
1502	21 Condensate pump started (note 1)
1518	22 Main Feed Pump suction flow rapidly rises (note 2)
	All steam generator levels approximately 31% and slowly trending down
	Tave reducing
1519	All steam generator levels trending up
1522	Reactor power slowly lowering from 0.287 volts
1524	Steam generators reach highest levels: 21-75%, 22-70%, 23-61%, 24-53%
	22 Main Feed Pumps trip, Turbine trips, auxiliary feed water starts (note 3)
	21 Main Feed Pump continues to run due to its discharge valve being shut
	Rod insertion of 24 steps begins, reactor power reducing rapidly
1526	Rod insertion of 5 steps begins, Tave reaches its highest value (593)
1527	Steam generator levels appear to swell after an approximately 13% reduction: 21-62 to 68%, 22-57 to 63%, 23-48 to 55%, 24-42 to 46%
1528	Tave stable at 548 degrees
	Steam generator levels stable
1530	Tave begins reducing
1531	Rod withdraw begins
1532	Reactor power reaches lowest value of 0.024 volts
1536	Tave reaches lowest value of 542 degrees
1537	Tave stable at 547 degrees
	Reactor power stable at approximately 2%
Note 1	Time of actual condensate pump start is believed to be inaccurate and that actual start was approximately 3:18
Note 2	Steam Generator Feed Pump suction flow rate rapidly from approximately 4.2e3 to 6.2e3 lbs/hr. Time is approximate based on simulator level response data
Note 3	This response based on interviews and simulator information

The plant specific simulator was then utilized to attempt to re-create the event as described by using the time line and the plant data. To achieve the low main boiler feed pump suction pressure condition described by the operators, two possible condensate system off-normal conditions were used.

The first condition involved excess flow through the gland seal condenser. While this flow path resulted in some of the indications matching the plant line up, the magnitude of level rise on start of the condensate pump was less than plant data. The second condition assumed that the discharge valve on the first condensate pump was either never fully opened, throttled closed due to human error or had become separated from its stem. A plant field operator was asked how far open (percentage) the discharge valve is at 13 turns open. The field operator indicated that the valve was 10-15% open. The plant specific simulator was set up with the condensate pump discharge valve at 19% open, resulting in a low (approximately 300 psig) suction pressure. Normal suction pressure was 420 psig. When the second condensate pump was started in this alignment, the simulator response was nearly identical to the plant.

While it is unclear that the cause of low suction pressure was a condensate system off-normal condition issue with the gland seal condenser and/or the condensate pump discharge, the team has concluded that the low suction pressure condition combined with the start of the second condensate pump was the initiating event for the steam generator level transient.

The operating crew did not initially compensate for the increased feed water flow to steam generators caused by the start of the condensate pump and determined that there was sufficient time to address the steam generator increasing level based on the decreased level achieved in the steam generators in preparation for the eventual start-up of the main turbine. It should be noted that Just-In-Time operator training conducted prior to start-up activities did not have a second Main Boiler feed Pump operating.

Contributing Factor #1 Basis

When the operating crew reached the step in POP 1.3 to start the second condensate pump, they started the second pump with the low main boiler feed pump suction pressure without questioning why the suction pressure was low. The operating crew had assumed that the lower suction pressure was due to the second main boiler feed pump being aligned to its recirculation path. However, this flow path when validated on the plant specific simulator resulted in only a small decrease in suction pressure. It was also noted the previous turbine roll that occurred 2 days prior was performed without starting the second condensate pump.

Contributing Factor #2 Basis

The abnormal operating instruction for turbine trip without reactor trip (AOI 26.4.6) step 4.13.1 indicates that withdraw of control rods to raise reactor coolant system temperature is an acceptable mitigation strategy if reactor coolant system average temperature is falling due to secondary plant heat load requirements.

Station and operations administrative procedures for reactivity management (SAO-442 and OAD-38) prohibit rod withdraw as a mitigation strategy for a secondary system induced cool down. Industry practice for this type of event is to reduce secondary system heat loads to stabilize the plant.

Contributing Factor #3 Basis
The abnormal operating instruction for turbine trip without reactor trip (AOI 26.4.6) step 4.11 states, "ENSURE that the Steam Dump Control Switch is in PRESS CONT. AND set to MAINTAIN 985 – 1005 psig (81-84 percent)." It was determined by interview of the operating crew that this step was not followed. The steam dumps were transferred to manual early in the event. This occurred through a communication error. By placing the steam dumps in manual, the control system could not automatically close steam dumps as reactor coolant system temperature decreased below 547. This plant response was verified against the plant specific simulator and the result was that leaving the steam dumps open and in manual increased the severity of the cool down.

Contributing Factor #4 Basis
Discussions with Control Room operators, as well as daily observations by Quality Assurance indicate that once physics testing had ended there was a strong desire by station management to bring the outage to a close. Not all the following information has been validated but the information serves to reflect the perceptions of the non-supervisory control room staff.

- Operators interviewed indicated that one of the on shift startup directors' body language indicated frustration with the rate of pulling vacuum.
- A tube of silicon RTV was used to make up the limit switch on 21 Main Boiler Feed Pump steam supply valve so startup could progress while repairs to the limit switch continued. This was removed after the repairs were completed.
- Operators felt that the five temporary procedure changes that were written on the morning of the event were to keep the startup progressing forward.
- The day prior to the event the three reactor operators determined who would be in the positions of operator at the controls, steam generator level control and balance of plant operator. On the day of the event, the operator designated for steam generator level control requested a pre-job brief be performed. The operator designated for steam generator level control was replaced with an operator with more experience. The pre-job brief did not occur.
- During the startup the low flow motor operated isolation valve for 21 steam generator (BFD 90-1) would not open. A tag out was applied to replace a burned out auxiliary contact limit switch. Once it was discovered that the valve would provide feed water isolation and the valve could be opened the tag out was removed prior to any work being performed. The operators were unaware that the repair plan had been revised and scheduled for later in the power escalation.
- Several days prior to the event a decision was made to roll the main turbine to synchronous speed with no speed indication in the control room until 1500 RPM.

- The three reactor operators on shift during the turbine trip had been at the control panels continuously from 1000 until after the trip recovery with no break.
- Operators commented that on the day of startup, operations shift management performed activities typically completed by field operators associated with clearing tags/troubleshooting on 21 main boiler feed pump, 21 steam generator low flow feed water isolation valve, and the main turbine lube oil cooler.
- Some log entries leading up to and during the event did not meet the required level of detail or accuracy required by operations standards.

This type of atmosphere may have led the operators reduce their questioning attitude and more willing to accept things that were good enough.

INTERIM ACTIONS

Attachment 1 provides the result of preliminary assessment on core critical conditions. This report found that the reactor remained critical at all times. The operators reduced power lower than required to maintain steam generator levels with auxiliary feed water.

An event review team was formed to investigate the event. The event review team or the station has taken the following actions:

- The plant specific simulator was utilized run a series of plant configurations to replicate this event.
- Verified condensate discharge valves are fully open for current plant configuration.
- The operations manager is completing crew briefings on the event with all watch crews.
- Watch Engineers have been directed to brief the crew on current reactivity equivalents (thumb rules) during the start of watch meeting.
- Plant power escalation is on administrative hold until the event review is complete and approved.
- Procedure revisions to OAD-39 and OAD-15 have approved.
- Procedures to be used for the balance of the start-up effort are being re-validated considering the lessons learned on the plant specific simulator.
- Procedures POP-1.3, AOI-21.1.1 and AOI-26.4.6 have been enhanced to reflect lessons learned.

RECOMMENDATIONS

Reactivity Control
ICA #1 (Reactor Engineering): Recommend Reactor Engineering validate the classification of this event as a Significant Reactivity Management Event (SRME) per SAO 442 step 3.3.

ICA #2 (Operations): Revise OAD – 39, Reactor Power Control, to more accurately comply with industry standards of not allowing control rod withdrawal during off normal events. This revision should be completed prior to exceeding 30% power.

ICA #3 (Reactor Engineering): Revise SAO – 442, Reactivity Management step 2.7.8, to more accurately comply with industry standards of not allowing control rod withdrawal during off normal events.

ICA #4 (Reactor Engineering): Review and revise SAO – 442, Reactivity Management as required to reflect current industry practices and standards regarding reactivity event classification.

Procedure Revisions

ICA #5 (Operations): Abnormal Operating Instructions for turbine trip without trip of the reactor (AOI 26.4.8) and loss of feed water pumps (AOI 21.1.1) will need revision to include the requirement to trip the reactor if a turbine trip and loss for feed water occurs with reactor power is greater than 4%. Turbine roll and generator synchronization activities are 24-month cycles (infrequently performed). Thus challenging operators to reduce power to within auxiliary feed water capabilities during a turbine trip without a reactor trip during a loss of main feed water is an unnecessary risk for reactivity management. This should be completed prior to exceeding 30% power.

ICA #6 (Operations): Include additional guidance and clear steps for startup and operation of a second and third condensate pump in SOP 20.2, condensate pump operation to include system hydraulic response.

ICA #7 (Operations): AOI 26.4.6 step 4.13.1 does not allow compliance with station and industry reactivity management guidelines. Recommend this step be deleted or revised to comply with station expectation to not withdraw control rods during an off normal secondary transient. This should be completed prior to exceeding 30% power.

ICA #8 (Operations): Add step or expectations to Operation Administration Directive (OAD – 15) to direct operators to maintain controllers and systems in automatic control. This should be completed prior to exceeding 30% power.

ICA #9 (Ashcraft): Conduct a review and complete revisions as required of abnormal operating instructions that result in power changes for potential non-conservative reactivity actions that do not comply with present station reactivity management policies. This should be completed prior to exceeding 30% power.

Management

ICA #10 (Executive Management): Evaluate conditions or processes that allowed the station to continue with power increase and synchronization without fully understanding the cause of this event. Develop a process to ensure proper control of the power escalation from 30 to 100%. This should be completed prior to exceeding 30% power.

ICA #11 (Corrective Action Group): Develop procedures, controls, and authorization for establishment of a station administrative order for development of a event review team to investigate station events that may affect business interests, personal safety, equipment operation, equipment maintenance, or outside organizations.

ICA #12 (Corrective Action Group): Make appropriate notifications to INPO such that the Operating Experience of this event can be shared with the rest of the industry.

ICA #13 (Operation Manager): Review the lessons learned from this event regarding "pressure to perform" with all Operators in an open interactive forum. This could be accomplished during the designated Operating Experience section in continuing training.

Training

ICA #14 (Operations Training): Develop simulator scenarios to challenge operators on loss of turbine without a reactor trip and loss of feed water. Include these revised or new simulator scenarios in continuing training and initial training.

ICA #15 (Operations Training): Develop a simulator scenario to demonstrate this event as part of the plant operating experience review.

ICA #16 (Operations): Operations management should provide training to control room staff on changes to procedures (OAD – 15 and OAD – 39) prior to exceeding 30% power. This should be completed prior to exceeding 30% power.

Addendum 1 - Objective data for turbine trip without reactor trip on 01/02/01.

Event

Operators experienced a high level in steam generator. The high steam generator level initiated a turbine trip signal, isolation of feed water signal, and trip signal to the running main boiler feed water pump. The auxiliary feed water system received an auto start signal from loss of the boiler feed water pump (although a non-ESF signal it is reportable as an ESF actuation).

Initial conditions:		Final Conditions at lowest power level
Reactor power	6.5% PR NIS	0.2% PR NIS
RCS Boron	1610 ppm	1610 ppm
RCS Temp	550 F	542 F
SG Level	73% (21 SG)	49%
Rod height (bank D)	137 step	108 steps (delta = 29)
Rod worth	4 pcm / step	

Power calculation by Reactor Engineering

Reactor engineering performed a comparison of NIS voltages taken at Point of Adding heat (POAH) during initial criticality and compared to NIS currents seen a lowest power level during the event (29 step rod insertion).

NIS voltages at POAH

CH 44 top = .003 vdc Bottom = .002 vdc => % RX power = .065%

NIS voltages at event

CH 44 top = .015 vdc Bottom = ..026 vdc => % RX power = .49%

Per reactor engineer the NIS voltage for the lowest power seen during the event was well above the POAH voltages, thus the reactor was not taken subcritical.

Additionally, a balance of added reactivity based on Indian Point 2 for the current core indicated the following:

Total inserted worth (29 steps)	116 pcm (-)
Power defect (6.5 % to 0.2%)	108 pcm (+)
Total defect from MTC (547 F to 542 F)	20 pcm (+)
Total	12 pcm (+)

Initial Operator Response:

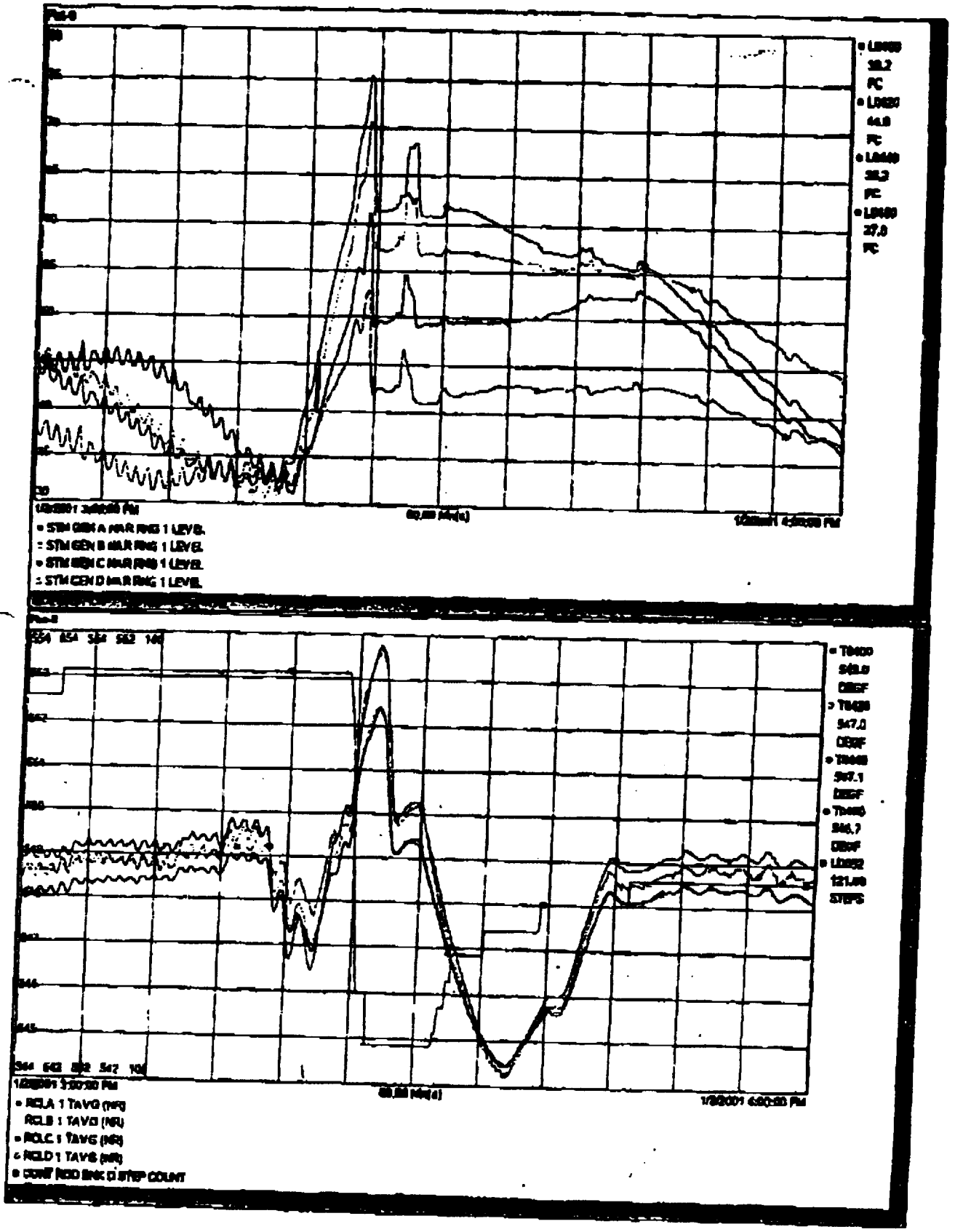
Operators entered abnormal operating procedure AOI-26.4.6 (Main Turbine Trip without a reactor Trip). This procedure directs the operator to maintain reactor power less than 4% reactor power if auxiliary feed water is the only source of feed water to the steam generators. The procedure does allow the operator to go to a maximum reactor power level of 6 % to maintain RCS temperature 541 F to 547 F. However the procedure does not provide detailed instruction on how to reduce power.

A review of indicated reactor power over the course of the event indicates that the initial power decrease may have been conservative. However, the subsequent recovery by pulling rods out seven steps was also conservative in that about a 0.1 decade per minute startup rate was achieved.

Conclusion:

The reactor remained critical at all times. The operators reduce power lower than required to maintain steam generator levels with auxiliary feed water.

Attachment 1 – PI Data for the event


STM GEN A NAR RNG 1 LEVEL
STM GEN B NAR RNG 1 LEVEL
STM GEN C NAR RNG 1 LEVEL
STM GEN D NAR RNG 1 LEVEL
RCLA 1 TAVG (NR)
RCLB 1 TAVG (NR)
RCLC 1 TAVG (NR)
RCLD 1 TAVG (NR)

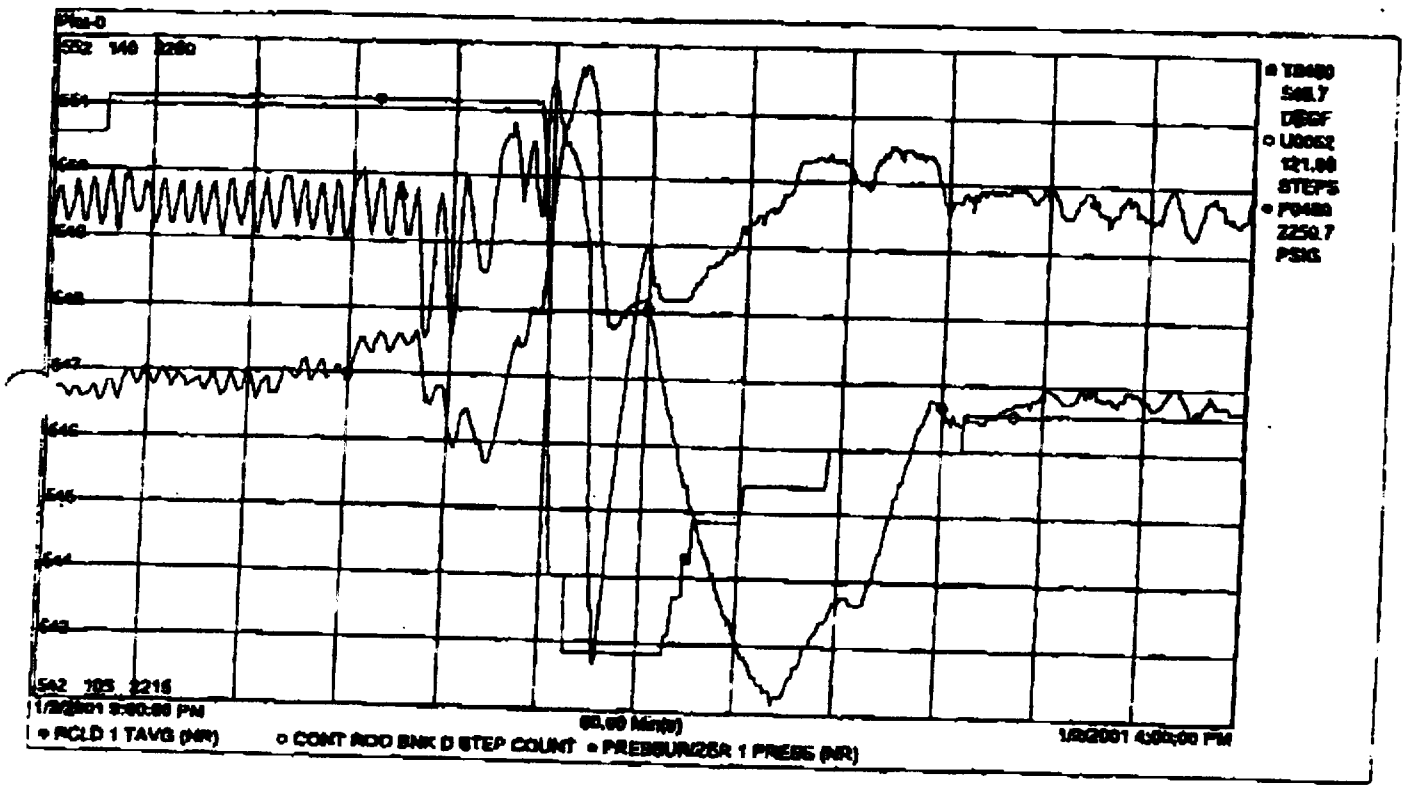

RCLD 1 TAVG (NR)
CONT ROD BNK D STEP COUNT
PRESSURIZER 1 PRESS (NR)

Exhibit #2E

[to be filed when available]

Transcript of Petitioners' Meeting with NRC Staff to Review 2.206 Petition and Present New Information (January 24, 2001)

Exhibit #3

"Con Ed to face NRC review," *The Journal News*, February 10, 2001.

http://www.nyjournalnews.com/regional/021001/10ip2/

News TheJournalNews.com

Con Ed to face NRC review

ROGER WITHERSPOON
THE JOURNAL NEWS
Original publication: Feb. 10, 2001

The U.S. Nuclear Regulatory Commission decided yesterday to review Consolidated Edison's management of the Indian Point 2 nuclear power plant to determine whether the utility's operating license should be suspended or revoked.

The review will focus on the question of whether mismanagement at the plant could jeopardize public safety.

The investigation stems from a petition filed Dec. 4 by a coalition of five civic groups. The petition by the Citizens Awareness Network and others asked that the plant be shut down until a special, three-week inspection being conducted by a 14-member NRC team was completed. That request was denied. The results of that inspection are to be disclosed at a public hearing next month.

The coalition also asked that Con Edison's license be suspended or revoked, based on claims that the utility was not managing the plant safely. No action had been taken on that request, until the coalition last month gave the NRC internal Con Edison documents the coalition says reveals improper nuclear reactor operations and a pattern of unsafe practices.

"When we sat down with the NRC two weeks ago, they did not expect new information from us. And when we presented the condition reports, they were really blown away," said Kyle Rabin of the Albany-based Environmental Advocates, a coalition member.

Yesterday's decision by the NRC's six-member review board coincides with the agency's release of its year-end inspection report on Indian Point 2, which includes an evaluation of the plant's January restart following a nearly 10-month shutdown.

The report was prepared by the NRC's two resident inspectors and approved by Brian E. Holian, deputy director of the agency's division of reactor safety. It criticizes Con Edison for a persistent inability to root out the causes of mechanical and procedural problems that reduce the plant's safety margins.

"There are issues in their corrective action program and their ability to fix problems," said Bill Raymond, the senior resident NRC inspector at Indian Point 2.

The NRC report noted a tendency of Con Edison personnel to fix broken or

malfunctioning items, sometimes repeatedly, without taking the additional time to find the malfunction's cause.

The NRC will formally notify Con Edison and the citizens network of its decision to review the utility's management within the next 30 days. A formal decision on whether to suspend or revoke the utility's license will be made within 120 days by Sam Collins, the NRC's director of nuclear reactor regulation. A recommendation to suspend or revoke the license would ultimately have to be approved by NRC Chairman Richard Meserve.

"The decision by the review panel does not mean that the NRC has decided the issues have merit," NRC spokesman Neil Sheehan said. "It means only that they warrant further review and that is what they will get."

Con Edison spokesman Mike Clendenin said the utility was studying the NRC's report, but he declined comment on the documents given to the NRC by the civic groups. "We are always looking to achieve standards of excellence," he said. "We will go through the report and see what recommendations were made."

The civic groups' request, formally known as a 2.206 petition, is a special process that allows members of the public to bring safety issues to the attention of regulators.

"No one here can think of a case where a license was suspended in response to a 2.206 petition," Sheehan said.

The NRC previously had decided there was no reason to close the plant, based on its own inspection reports and an analysis of incident, mechanical readiness and other system reports prepared by Con Edison. Thousands of such documents are generated by Con Edison annually.

"We have access to everything," Sheehan said, "but do we review every condition report? No. Can we look over every single document at the plant? No."

The Citizens Action Network relied on whistle blowers to present specific condition reports that CAN Director Deb Katz said indicated a "pattern of cavalier indifference to safety."

Sheehan said the NRC viewed the reports as Con Edison property and had to decide if they could be used publicly. He said the agency censored the documents to protect worker's identities, but will use them as a basis of examining safety issues at Indian Point 2.

The NRC has suspended a company's operating license only once, in 1987 at the Peach Bottom nuclear plant in Pennsylvania. Sheehan said operations there were immediately suspended after control room operators were found sleeping on the job. The plant never reopened.

But Sheehan said a license suspension, if ordered for Indian Point 2, did not necessarily mean the plant would permanently be shut down. "Suspending a license doesn't mean you bolt the doors and walk away," Sheehan said. "Your authority to operate is suspended, and the first thing you do, of course, is shut

down the reactor. But you still have to take care of things like environmental monitoring and the safety of nuclear materials. You are still responsible for the site."

The petition was filed by the Massachusetts-based Citizens Action Network and its local affiliate, Westchester CAN; the Nuclear Information and Resource Service in Washington, D.C.; the Westchester People's Action Coalition; Environmental Advocates; and the Public Citizen Energy Project in Washington, D.C.

CAN representatives said their 560 documents focused on two main areas — safety issues in major nuclear systems and management pressure to keep the plant running regardless of safety issues.

The plant had been shut for 10 months following the leak of nearly 20,000 gallons of radioactive water from a ruptured tube in an aging steam generator. Con Edison eventually replaced all four steam generators at a cost of $150 million. The firm reported losing an estimated $600,000 daily, and aimed to restart the plant by the end of last year. The plant rejoined the power grid on Jan. 3.

Con Edison has acknowledged some workers said they felt pressured by managers to get the plant up and running. But the utility has insisted that was not a pervasive feeling among workers.

Katz said a whistle blower reported that, when Con Edison examined pipes taking water from the steam generator, the testing was done without any water in them and no radiation was noted.

"When they put water through the system," she said, "there was a spike on the radiation monitors showing there may have been radioactive debris in the system. If people went to work on the pipes later, and Con Edison said it was clean when it was really contaminated, then workers could be inadvertently contaminated. But when the worker raised the issue, his manager said don't worry about it."

Another report turned over to the NRC states the wiring for the reactor's protection system is not the same as in the system's design and has apparently been changed over the years by various workers.

A copy of that report, obtained by The Journal News, concludes that "these design changes by default have been made without the required quality assurance requirements."

"Whistle blowers are contacting us because they don't feel safe," Katz said, "and they believe we will raise the issues so the NRC will be forced to look at them."The U.S. Nuclear Regulatory Commission has no clear guidelines on what happens to a nuclear power plant after its operating license is revoked or suspended. The only precedent is at the former Peach Bottom reactor in Pennsylvania, which had its license suspended in 1987. The utility chose not to invest in improvements needed to reopen.

If a license is suspended, the company must shut down the reactor and maintain

the plant, taking particular care of its stockpile of spent and active nuclear fuel.

The operator would have to meet NRC criteria to correct deficiencies before seeking permission to return to operation.

Before the
UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	**Docket Nos. 50-003 and 50-247**
CONSOLIDATED EDISON COMPANY OF NEW YORK, INC. and ENTERGY NUCLEAR INDIAN POINT 2, LLC, and ENTERGY NUCLEAR OPERATIONS, INC.	
(Indian Point Nuclear Generating Unit Nos. 1 and 2)	February 20, 2001

DECLARATION OF MARILYN ELIE IN SUPPORT OF CAN'S STANDING

I, Marilyn Elie, state the following as true:

1. My name is Marilyn Elie.

2. I reside at 2A Adrian Court, Cortlandt Manor, NY.

3. I have lived at that address for over six years.

4. The place where I live is approximately 5 to 5 1/12 miles from the Indian Point 2 Nuclear Power Station in Buchanan, New York.

5. I am also a citizen of Westchester County which purchases some of its power from Indian Point 2 and a New York State resident.

6. I have concerns for my health and safety because I live so close to Indian Point 3 Power Station.

7. I am a member of the Citizens Awareness Network, Inc. {CAN}, and have authorized CAN to represent me in this matter.

8. I am aware of the issues that CAN is raising in this proceeding and agree with the concerns that CAN has, as I share those concerns.

9. In particular, as I enjoy walking, hiking and biking in this area, I would like to be able to hike and walk in the lands now occupied by the Indian Point 2 Nuclear Power Station -- if they can be completely cleaned up of any radioactive contamination so that it is safe to be there. I am concerned that whoever owns Indian Point 2 has the experience and financial ability to completely clean up the site for release to the public when the useful life of the plant has ended. In this way, the license transfer matter has a direct bearing on the possibility of my being able to safely enjoy the natural environment in this area. I think that the NRC should conduct a full environmental assessment of the Indian Point 2 facility to determine the extent of contamination there so that it can be sure that any new owner has the financial means necessary to clean up the site. Also, given the history of lack of oversight in many other reactors in the New York area, I would like to see the NRC conduct an independent evaluation of the Indian Point 2 Nuclear Power Plant so that people living nearby, like me, would be certain that all of the problems with the reactor are known and documented before a new owner takes over.

10. I am also aware that Entergy is not assuming liability for off-site contamination caused by Indian Point 2 during the time when Consolidated Edison has owned and operated it. I am aware that Indian Point 2 and other reactors routinely release radioactive materials into the air and water, and that the spread of radiation does not stop at the edge of the Indian Point site. Someone has to be responsible for ensuring that these pollutants do not continue to affect the health and safety of me and other people living near Indian Point 2 after it closes down, and I am concerned that the license transfer application by Entergy doesn't guarantee that. It has also been brought to my attention radioactive sludge from nuclear power plants have in some instances been shipped to municipal sewage facilities. This could affect the health of people living in the area. Since this was so common at FitzPatrick, there needs to be an investigation of whether Consolidated Edison has also done this at Indian Point 2. Certainly, a thorough Environmental Impact Study must be done before the license can be transferred to Entergy. But more importantly, there has to be a guarantee that whoever runs Indian Point 2, the pollution released off-site from Indian Point 2 is eventually cleaned up.

11. I am also concerned about the problems which may arise if the license to operate Indian Point is transferred to a company lacking the resources

and experience to operate many aging reactors at the same time. In particular, I am concerned about license transfer to a company such as Entergy which does not have experience dealing with an aging nuclear reactor like Indian Point 2. In addition, I am concerned about what I have heard concerning the overtime practices and job-cutting which the would-be owner, Entergy, has engaged in with their transmission and delivery services and at other nuclear plants they operate or have purchased, such as the Pilgrim plant in Massachusetts. I think the NRC should fully investigate these charges before any license transfer is permitted so that persons like myself living near Indian Point 2 will know that they will not be endangered by work practices that cut corners on safety for profit. Already, there is evidence that these conditions have compromised safety at Consolidated Edison's Indian Point 2 reactor, resulting in an emergency on August 31, 1999, and an accident on February 15, 2000. For this reason, I would like some assurance, which the NRC could provide by making this a condition for license transfer, that persons at Indian Point with experience will not lose their jobs, and that the new owner will not be allowed to fire a lot of experienced people and replace them with contract labor.

12. Finally, I am also concerned about the way in which Entergy's intention to buy up many nuclear reactors could affect my health and safety. Unless the NRC looks into the potential affects of such a plan upon energy dependence in this area, we could end up stuck for years with a company that controls most of the electricity available to us. This could mean high prices, unsafe conditions at Indian Point in order to keep up profits to support other Entergy operations, and other practices that would cut costs on site--all of which is dangerous to persons living near Indian Point 3 as I do. In my mind, the NRC is supposed to look at the national security and health and safety implications of any actions which could reasonably affect the ability of its licensees to safely operate their nuclear plants.

14. For the reasons I stated above, I believe the license transfer in this case should be open to dealing with the health and safety issues CAN is raising. I hope that the NRC will permit these issues to be discussed so that I and persons like me living near Indian Point may be assured any new owner will operate it as safely as possible.

I declare under penalty of perjury that the foregoing is true and correct.

DATED: Cortlandt Manor, New York the 20th day of February, 2001.

Marilyn Elie
Westchester-CAN

cc: Office of Secretary, USNRC;
General Counsel, USNRC;
Douglas Levanway, Esq.;
Brent Brandenburg, Esq.;
Paul Nolan, Esq.