

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION**

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of) ENTERGY NUCLEAR OPERATIONS, INC.) (Indian Point Nuclear Generating Units 2 and 3))	Docket Nos. 50-247-LR and 50-286-LR October 12, 2012
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**ENTERGY'S ANSWER OPPOSING RIVERKEEPER'S MOTION FOR LEAVE TO
FILE ADDITIONAL EXHIBITS CONCERNING
CONTENTION RK-TC-2 (FLOW ACCELERATED CORROSION)**

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Pursuant to 10 C.F.R. § 2.323(c), Entergy Nuclear Operations, Inc. (“Entergy”) hereby opposes the Motion for Leave to File Additional Exhibits Concerning Contention RK-TC-2 (Flow Accelerated Corrosion) (“Motion”) filed by Riverkeeper, Inc. (“Riverkeeper”) on October 11, 2012. The Board should deny the Motion because it improperly seeks to augment Riverkeeper’s prefiled testimony in an untimely fashion, without good cause.

Nearly ten months after the deadline for prefiled direct testimony, more than three months after the deadline for pre-filed rebuttal testimony, and four days before the hearing, Riverkeeper now seeks to introduce five new highly technical documents into evidence.¹ None of the five documents is less than nine years old.² Thus, at the very latest, these documents should have been introduced with Dr. Hopfenfeld’s pre-filed rebuttal testimony, which was due

¹ The five new exhibits are: (1) Digby D. Macdonald, The Point Defect Model for the Passive State, J. of the Electrochemical Society, Vol. 139, Issue No. 12 (Dec. 1992) (RIV000127); (2) Bryan Poulson and Russel Robinson, The Use of A Corrosion Process to Obtain Mass Transfer Data, Science, Vol. 26, No.4, pp. 265-280 (1986) (RIV000128); G.J. Bignold, K. Garbett, R. Garnsey, & I.S. Woolsey, Erosion/Corrosion in Nuclear Steam Generators, in Water Chemistry of Nuclear Reactor Systems 5, Paper 1 (British Nuclear Engineering Society, 1980) (RIV000129); (4) Entergy Ultrasonic Examination Report, IPEC00020853 (Apr. 3, 2003) (RIV000130); and (5) Jianrong Wang, Siamack A. Shirazi, A CFD based correlation for mass transfer coefficient in elbows, Int’l J. of Heat and Mass Transfer 44 (2001) 1817-1822 (RIV000131).

² Cf. Unopposed Motion by State of New York for Leave to File Additional Exhibits Concerning NYS-37 (Oct. 9, 2012) at 1 (seeking—without opposition—to introduce additional exhibits that “came into existence very recently”).

on June 29, 2012.³ Now, on the eve of the hearing, these new exhibits are simply untimely. Contrary to Riverkeeper's representations,⁴ the consideration of these documents will clearly expand the scope of the hearing. And, as the Staff advised Riverkeeper during the consultations prior to the filing of this Motion, the introduction of a significant set of new exhibits at the eleventh hour prejudices the other parties.⁵

Although Riverkeeper states that Dr. Hopenfeld recently identified these documents as materials he intends to reference in his presentation on CHECWORKS,⁶ that presentation is simply not an opportunity to introduce new evidence into the record or otherwise bolster previously-submitted testimony. As the Board specified only two days ago, the requested presentations are not an opportunity to submit new exhibits and any new evidence will be in the form of oral expert witness testimony.⁷

The Motion, moreover, seeks to introduce one exhibit that Riverkeeper did not even raise in consultations. Specifically, as shown in Attachment 1, Riverkeeper consulted with the parties regarding proposed exhibits RIV000127-129, and RIV000131, but did not consult with the parties on new exhibit RIV000130. Riverkeeper's request to admit RIV000130, therefore, must also be denied for this additional reason.

³ See Licensing Board Order (Granting Unopposed Extension of Time) (May, 16, 2012) (unpublished).

⁴ See Motion at 2.

⁵ See *id.*, Certification Pursuant to 10 C.F.R. § 2.323(b).

⁶ See *id.* at 1.

⁷ E-mail from S. Lewman, Law Clerk, ASLB, "CHECWORKS Presentation," (Oct. 10, 2012) ("Clerk's E-mail"); see also Official Transcript of Proceedings, Indian Point Nuclear Generating Units 1 & 2 [sic—2 & 3] at 1227 (Sept. 24, 2012) ("Tr.") at 1227 ("the only way that you would comment to put it on the record would be through a witness"). Although the Chair later stated that "if Dr. Hopenfeld has . . . a specific document that he would want to make reference to during the course of explaining his perspective Riverkeeper should mark that as an exhibit and furnish that to the other parties and the Board," *id.* at 1228-29, Entergy does not understand this statement to open the door to voluminous new technical exhibits, particularly given the subsequent clarification in the Clerk's E-mail.

Finally, Entergy notes that it is reviewing Dr. Hopenfeld's presentation, which Riverkeeper filed today. From a preliminary review, it appears that the un-numbered pages 5 through 14 are not focused on how CHECWORKS is designed, or on how the program *theoretically* works "at any facility."⁸ Instead, these slides rely extensively on Indian Point-specific information and exhibits, and seek to reargue a variety of issues raised in Riverkeeper's testimony, directly contrary to the Board's explicit direction on this issue.⁹ Thus, Entergy reserves the right to address this issue at an appropriate opportunity at the hearing.¹⁰

For the foregoing reasons, the Board should deny Riverkeeper's Motion.

Respectfully submitted,

Signed electronically by Raphael P. Kuyler

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Counsel for Entergy Nuclear Operations, Inc.

Dated in Washington, D.C.
this 12th day of October 2012

⁸ Clerk's E-mail (emphasis added).

⁹ Tr. at 1227 ("the idea is not to just simply repeat the prefiled testimony"). In addition, some of the slides (slides 4, 8, and 9) rely on exhibits filed with the Motion, including Exhibit RIV000130.

¹⁰ Clerk's E-mail ("If the witnesses go beyond the limited focus of their presentations, the Board will terminate the presentations.").

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ENTERGY NUCLEAR OPERATIONS, INC.)	50-286-LR
(Indian Point Nuclear Generating Units 2 and 3))	October 12, 2012
))	

MOTION CERTIFICATION

Counsel for Entergy certifies that he has made a sincere effort to make himself available to listen and respond to the moving parties, and to resolve the factual and legal issues raised in the motion, and that his efforts to resolve the issues have been unsuccessful.

Signed electronically by Raphael P. Kuyler

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**ENTERGY'S ANSWER OPPOSING RIVERKEEPER'S MOTION FOR LEAVE TO
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ATTACHMENTS

Attachment	No.
E-mail from R. Kuyler dated October 10, 2012.....	1

**ENTERGY'S ANSWER OPPOSING
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ADDITIONAL EXHIBITS CONCERNING
CONTENTION RK-TC-2 (FLOW ACCELERATED
CORROSION)**

ATTACHMENT 1

E-mail from R. Kuyler dated October 10, 2012

Escher, Lance A.

From: Kuyler, Raphael Philip
Sent: Wednesday, October 10, 2012 7:23 PM
To: Turk, Sherwin; Deborah Brancato; Roth(OGC), David; Janice Dean; Bessette, Paul M.; Kathryn Liberatore; O'Neill, Martin; 'mannajo@clearwater.org'; 'karla@clearwater.org'; 'Richard Webster'; Mizuno, Beth; Harris, Brian; John J. Sipos; Rund, Jonathan M.
Cc: Phillip Musegaas
Subject: RE: Indian Point LRP - Consultation Regarding Riverkeeper's Motion for Leave to File Additional Exhibits

Please note Entergy's opposition as well, Deborah. Entergy agrees with the Staff's position and further notes that its understanding of today's e-mail from the clerk is that the requested presentations are not an opportunity to submit new exhibits and that any new evidence will be in the form of expert witness testimony.

Regards,

Ray P. Kuyler

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From: Turk, Sherwin [mailto:Sherwin.Turk@nrc.gov]
Sent: Wednesday, October 10, 2012 7:20 PM
To: Deborah Brancato; Roth(OGC), David; Janice Dean; Bessette, Paul M.; Kathryn Liberatore; O'Neill, Martin; 'mannajo@clearwater.org'; 'karla@clearwater.org'; 'Richard Webster'; Mizuno, Beth; Harris, Brian; John J. Sipos; Rund, Jonathan M.; Kuyler, Raphael Philip
Cc: Phillip Musegaas
Subject: RE: Indian Point LRP - Consultation Regarding Riverkeeper's Motion for Leave to File Additional Exhibits

Deborah –
In Dave Roth's absence, let me express the Staff's position –

Regardless of the contents of your newly proposed exhibits, the Staff opposes their proffer and admission at this time. The Board put in place, two years ago, a requirement that the parties present proposed evidence in accordance with clearly stated deadlines. Under the Board's scheduling Orders, Dr. Hopenfeld should have conducted his literature review before filing his initial testimony, 10 months ago. At best, he should have conducted that search 5 months ago, before filing his rebuttal testimony. It is far too late, extremely unfair, and highly irresponsible, for you to try to present these exhibits now, for the first time – especially since you claim that Riverkeeper has previously disclosed them. Please state the Staff's position as follows:

“The Staff objects to Riverkeeper's late filing of these lengthy and highly complex proposed exhibits on the eve of hearing, fully 10 months after they were required to be filed under the Board's Scheduling Orders. Riverkeeper's untimely identification of these documents as proposed exhibits contravenes the Board's Orders and would result in prejudice to the Staff and other parties, who have not had an adequate opportunity to study and address this proposed evidentiary material as had been contemplated in the Board's scheduling Orders.”

Sherwin

From: Deborah Brancato [mailto:DBrancato@riverkeeper.org]
Sent: Wednesday, October 10, 2012 6:44 PM
To: Roth(OGC), David; Janice Dean; Bessette, Paul M.; Kathryn Liberatore; O'Neill, Martin; 'mannajo@clearwater.org'; 'karla@clearwater.org'; 'Richard Webster'; Turk, Sherwin; Mizuno, Beth; Harris, Brian; John J. Sipos; Jonathan M. Rund;

Kuyler, Raphael Philip

Cc: Phillip Musegaas

Subject: RE: Indian Point LRP - Consultation Regarding Riverkeeper's Motion for Leave to File Additional Exhibits

David, Ray:

Thank you for your responses. As a brief explanation, in the course of preparing to respond to Entergy's prospective presentation at that adjudicatory hearing, Dr. Hopenfeld conducted a review of relevant literature (including documents already disclosed to the parties), and determined the listed additional documents were relevant and could assist the ASLB.

Unless you have any further thoughts, I will indicate your opposition.

-Deborah

From: Roth(OGC), David [<mailto:David.Roth@nrc.gov>]

Sent: Wednesday, October 10, 2012 6:29 PM

To: Deborah Brancato; Janice Dean; 'Bessette, Paul M.'; Kathryn Liberatore; 'O'Neill, Martin'; 'mannajo@clearwater.org'; 'karla@clearwater.org'; 'Richard Webster'; Turk, Sherwin; Mizuno, Beth; Harris, Brian; John J. Sipos; 'Jonathan M. Rund'; Kuyler, Raphael Philip

Cc: Phillip Musegaas; Roth(OGC), David

Subject: RE: Indian Point LRP - Consultation Regarding Riverkeeper's Motion for Leave to File Additional Exhibits

Good evening,

As your e-mail indicated, the documents you are proposing to introduce are 10 years old and older. They are also highly technical, and currently not relied upon for Riverkeeper's testimony. With the hearing starting in just a few days, it would not be fair to the Staff to introduce these new technical exhibits, which the Staff would then need to review in-depth and be able to discuss during the hearing.

With respect to Dr. Joram Hopenfeld's Power Point presentation, the email from Shelbie R. Lewman, Law Clerk, Atomic Safety and Licensing Board Panel, dated Wed 10/10/2012 4:43 PM, addresses how the visual aid is to be treated.

Accordingly, the Staff would oppose a motion to add these as exhibits.

David Roth

Counsel to the Staff

From: Deborah Brancato [<mailto:DBrancato@riverkeeper.org>]

Sent: Wednesday, October 10, 2012 5:25 PM

To: Roth(OGC), David; Janice Dean; 'Bessette, Paul M.'; Kathryn Liberatore; 'O'Neill, Martin'; 'mannajo@clearwater.org'; 'karla@clearwater.org'; 'Richard Webster'; Turk, Sherwin; Mizuno, Beth; Harris, Brian; John J. Sipos; 'Jonathan M. Rund'; Kuyler, Raphael Philip

Cc: Phillip Musegaas

Subject: RE: Indian Point LRP - Consultation Regarding Riverkeeper's Motion for Leave to File Additional Exhibits

Sure David, see attached.

From: Roth(OGC), David [<mailto:David.Roth@nrc.gov>]

Sent: Wednesday, October 10, 2012 3:28 PM

To: Deborah Brancato; Janice Dean; 'Bessette, Paul M.'; Kathryn Liberatore; 'O'Neill, Martin'; 'mannajo@clearwater.org'; 'karla@clearwater.org'; 'Richard Webster'; Turk, Sherwin; Mizuno, Beth; Harris, Brian; John J. Sipos; 'Jonathan M. Rund';

Kuyler, Raphael Philip

Cc: Phillip Musegaas; Roth(OGC), David

Subject: RE: Indian Point LRP - Consultation Regarding Riverkeeper's Motion for Leave to File Additional Exhibits

Good afternoon,

Are you able to provide access to the documents as part of your consultation?

David Roth

From: Deborah Brancato [<mailto:DBrancato@riverkeeper.org>]

Sent: Wednesday, October 10, 2012 12:59 PM

To: Janice Dean; 'Bessette, Paul M.'; Kathryn Liberatore; 'O'Neill, Martin'; 'mannajo@clearwater.org'; 'karla@clearwater.org'; 'Richard Webster'; Turk, Sherwin; Mizuno, Beth; Harris, Brian; John J. Sipos; 'Jonathan M. Rund'; Kuyler, Raphael Philip

Cc: Phillip Musegaas

Subject: Indian Point LRP - Consultation Regarding Riverkeeper's Motion for Leave to File Additional Exhibits

Dear Parties:

Riverkeeper plans on a filing a motion seeking leave to submit the following documents as exhibits and is circulating this email as part of the consultation process. These documents are relevant and have the potential to be discussed in the course of the evidentiary hearing on RK-TC-2 (Flow Accelerated Corrosion). Please let me know whether you oppose the motion and/or if you would like to discuss it. The documents, which have been previously disclosed to the parties (except for the prospective presentation of Dr. Hopenfeld), are:

- 1.) Digby D. Macdonald, *The Point Defect Model for the Passive State*, J. OF THE ELECTROCHEMICAL SOCIETY, Vol. 139, Issue No. 12 (Dec. 1992);
- 2.) G.J. Bignold, K. Garbett, R. Garnsey, & I.S. Woolsey, *Erosion/Corrosion in Nuclear Steam Generators*, in WATER CHEMISTRY OF NUCLEAR REACTOR SYSTEMS 5, Paper 1 (British Nuclear Engineering Society, 1980);
- 3.) Bryan Poulson and Russel Robinson, *The Use of A Corrosion Process to Obtain Mass Transfer Data*, SCIENCE, Vol. 26, No.4, pp. 265-280 (1986);
- 4.) Jianrong Wang, Siamack A. Shirazi, A CFD based correlation for mass transfer coefficient in elbows, INT'L J. OF HEAT AND MASS TRANSFER, 44 (2001) 1817-1822;
- 5.) Power point presentation of Dr. Joram Hopenfeld to the ASLB in response to Entergy/Dr. Horowitz Presentation (prospective/ placeholder).

I am reachable today at the following phone number: 203-803-3778, should anyone wish to discuss this matter.

Thanks for your consideration.

Deborah Brancato, Esq.
Staff Attorney

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)	50-286-LR
ENTERGY NUCLEAR OPERATIONS, INC.)	
)	
(Indian Point Nuclear Generating Units 2 and 3))	
)	October 12, 2012

CERTIFICATE OF SERVICE

Pursuant to 10 C.F.R. § 2.305 (as revised), I hereby certify that, on this date, copies of “Entergy’s Answer Opposing Riverkeeper’s Motion for Leave to File Additional Exhibits Concerning Contention RK-TC-2 (Flow Accelerated Corrosion) were served upon the Electronic Information Exchange (the NRC’s E-Filing System), in the above-captioned proceeding.

Signed (electronically) by Raphael P. Kuyler
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