

**From:** [Peterson, Alyse L \(NYSERDA\)](#)  
**To:** [Guzman, Richard](#)  
**Subject:** [External\_Sender] Informal questions: 3/24/20 license amendment request for new IP3 crane  
**Date:** Friday, July 31, 2020 8:34:08 AM

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Hi Rich,

We are continuing our review of the March 24, 2020 license amendment request for a new crane at IP3 and have some questions (see below). Please note that our review of this item is still ongoing and we will likely have additional questions and concerns along the way. I provide these now since you've previously expressed that you and the other NRC reviewers generally find our questions to provide a helpful perspective as you conduct your NRC review. The questions have been divided up into several categories: safety, timeline & installation, procedures, operations & training, cost, and precedent.

Thanks,  
Alyse

- Safety

1. In general, what are the concerns with the wet transfer method of spent fuel removal that would favor the installation of the HI-LIFT crane? Pg. 5/39
2. Compared to the wet transfer method, what additional benefits would the installation of Hi-Lift crane provide to plant safety and operations? Pg. 5/39
3. Considering there is an existing 40-ton crane in the fuel storage building at IP3, how will the NRC evaluate any potential safety concerns with the installation and operation of the HI-LIFT crane?
4. What takeaways from the San Onofre fuel handling issue in August 2018 is the NRC applying to its safety analysis of the proposed HI-LIFT crane and its operation?
5. The proposed HI-LIFT crane will have a maintenance position, which will allow the HI-LIFT to pivot further over the truck bay in the Unit 3 spent fuel pool building. Will NRC require Entergy to perform seismic and safety analyses of the HI-LIFT crane when placed in the maintenance position?
6. The License Amendment states that the HI-LIFT will be supported entirely by the south Spent Fuel Pool wall, which was built with six-foot thick concrete. What was the original intent/criteria that led to the robust construction of this wall? How does the installation and use of the HI-LIFT not interfere with the original intent of the south Spent Fuel Pool wall?

- Timeline and Installation

1. In addition to the installation of the HI-LIFT crane, what other changes does the NRC expect to be implemented by Entergy within 90 days of approval of the license amendment? Pg. 2/39
2. Will acceptance of this license amendment relieve Entergy of any other regulatory commitments with regards to safety? Will acceptance of this license amendment require additional regulatory commitments on behalf of Entergy with respect to safety?
3. Has Entergy provided additional information on the scope and timeline of work activities associated with the HI-LIFT crane to the NRC? If no, why not? If yes, how does the NRC plan to evaluate the scope and timeline of work activities?
4. Does the NRC plan to assess and/or inspect the locations of crane anchors? Pg. 11/39
5. Why didn't the NRC require Entergy to locate and validate the anchor pattern prior to submitting a structural evaluation to the NRC? Does the NRC plan to review Entergy's structural evaluation again after an anchor pattern and anchor locations have been finalized? Pg. 11/39
6. How will the NRC ensure that the installation of the HI-LIFT crane is completed safely and

efficiently?

- Procedures

1. How will the NRC evaluate the procedures for testing, inspecting, and maintaining the HI-LIFT crane device?
2. Has the impact of dropped loads/canisters on spent fuel pool safety and operations been assessed and provided to the NRC? If no, does the NRC plan to have Entergy study the impact of dropped loads/canisters on spent fuel pool safety and operations? Pg. 13/39
3. Has the NRC qualified a spent fuel removal crane as a single failure proof crane in the past? If yes, please specify when and where.
4. What criteria will the NRC consider in assessing whether the HI-LIFT crane should be qualified as a single failure proof crane? Pg. 13/39
5. Will the NRC have a person on-site to oversee testing of the HI-LIFT crane? Is this required? Will the NRC need to be present for any or all further testing performed on the HI-LIFT crane after initial testing? If not, does the NRC have an oversight or audit program to confirm plant conformance with mandated testing schedules and procedures?
6. Has the NRC considered additional requirements, regulations or standards in order to address "below-the-hook" accidents at nuclear plants? If so, what are they and how would they be implemented or enforced?

- Operation and Training

1. How will the NRC evaluate the adequacy of the operator control station? Will the NRC perform unplanned spot-checks, site visits or inspections?
2. How will the NRC assess the training of the HI-LIFT crane operators?
3. If this license amendment is approved prior to the proposed License Transfer, will any additional filings be required on behalf of the incoming owner in terms of further operations of the HI-LIFT crane?
4. Has NRC considered what would happen if the HI-LIFT Seismic Switch disconnected the power supply controlling HI-LIFT motion during spent fuel movement (either because of an earthquake or due to equipment malfunction)? Pg. 8/39

- Cost

1. Has Entergy provided the costs to purchase and install the HI-LIFT crane to the NRC? If no, why not? If yes, how does the NRC plan to assess these costs?
2. Will the purchase and installation costs of the HI-LIFT crane be funded through the Indian Point decommissioning trust fund? How does the NRC plan to evaluate the funding source for the purchase and installation of the crane?

- Precedent

1. Is the NRC aware of any other nuclear plants that utilize a wall-mounted crane for spent fuel transfers?
2. Entergy cited the approval of the Davit Crane at the Humboldt Bay Power Plant as precedent for approving this license amendment. How is this crane similar and/or different from the HI-LIFT crane? Pg. 16/39
3. Why should the approval of the Davit crane be used as precedent for approving the HI-LIFT crane? Pg. 16/39

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