

**IN THE MATTER OF THE APPLICATION OF PSEG NUCLEAR LLC AND EXELON
GENERATION COMPANY, LLC FOR THE ZERO EMISSION CERTIFICATE
PROGRAM – SALEM UNIT 1**

**IN THE MATTER OF THE APPLICATION OF PSEG NUCLEAR LLC AND EXELON
GENERATION COMPANY, LLC FOR THE ZERO EMISSION CERTIFICATE
PROGRAM – SALEM UNIT 2**

**IN THE MATTER OF THE APPLICATION OF PSEG NUCLEAR LLC FOR THE
ZERO EMISSION CERTIFICATE PROGRAM – HOPE CREEK**

BPU DOCKET NOs. ER20080557, ER20080558, ER20080559

**PSEG NUCLEAR LLC (“PSEG”) CROSS EXAMINATION QUESTIONS
TO RATE COUNSEL WITNESS ANDREA CRANE**

I. COSTS

ZEC2-Crane-XQ-0001

At page 19, line 22 through page 20, line 3, Rate Counsel witness Crane discusses the cash-flow approach presented by PSEG and Exelon, and concludes that “[t]his treatment is contrary to both common practice and basic accounting principles.”

- a. Please list each instance in which Rate Counsel witness Crane has reviewed the basis on which a business has made a decision to cease operations. For each listed item, please state the accounting methodology the business used in order to evaluate whether to cease operations.
- b. Please list each instance of which Rate Counsel witness Crane is aware in which a nuclear plant owner has made a decision to cease operations. For each listed item, please state the accounting methodology the nuclear plant owner used in order to evaluate whether to cease operations.

ZEC2-Crane-XQ-0002

Does Rate Counsel witness Crane agree that, if a nuclear plant owner defers maintenance that would have been required in the ordinary course of business, the operational risk associated with the plant may increase? Please confirm that PSEG remains obligated under federal law to pay for the removal of spent fuel from the Salem and Hope Creek facilities. Please confirm that the ZEC Act refers to “non-fuel capital expenses” as a type of cost that an applicant should submit.

II. RISKS

ZEC2-Crane-XQ-0003

In Rate Counsel witness Crane's opinion, is a regulated utility ordinarily compensated for risk through a return on invested capital?

ZEC2-Crane-XQ-0004

In Rate Counsel witness Crane's opinion, is there more or less risk associated with an investment in a merchant nuclear plant or an investment in a public utility?

ZEC2-Crane-XQ-0005

In Rate Counsel witness Crane's opinion, would an ROE of [BEGIN CONFIDENTIAL] [END CONFIDENTIAL] be appropriate for a regulated public utility?

- a. List all cases of which Rate Counsel witness Crane is aware where a regulator has approved a ROE of [BEGIN CONFIDENTIAL] [END CONFIDENTIAL] or less for a regulated public utility.

ZEC2-Crane-XQ-0006

In Rate Counsel witness Crane's opinion, would a negative ROE be appropriate for a regulated public utility?

- a. List all cases of which Rate Counsel witness Crane is aware where a regulator has approved a negative ROE for a regulated public utility.

ZEC2-Crane-XQ-0007

The ZEC Act defines "operational risks" to include "the risk that operating costs will be higher than anticipated because of new regulatory mandates or equipment failures."

- a. Does Rate Counsel witness Crane agree that, while a nuclear plant is operating, it faces the risk that costs may increase as a result of new regulatory mandates?
- b. Does Rate Counsel witness Crane agree that a new regulatory mandate that impacts the cost to operate a nuclear power plant could be issued at any time?
- c. Does Rate Counsel witness Crane agree that, while a nuclear plant is operating, it faces the risk that costs may increase as a result of equipment failures?
- d. Does Rate Counsel witness Crane agree that a major component of a nuclear power plant could unexpectedly require repair or replacement at any time?
- e. Does Rate Counsel witness Crane agree that, after a nuclear plant ceases operation, it no longer faces the risk that costs may increase as a result of equipment failures?

ZEC2-Crane-XQ-0008

The ZEC Act defines "operational risks" to include "the risk that per megawatt-hour costs will be higher than anticipated because of a lower than expected capacity factor."

- a. Does Rate Counsel witness Crane agree that when a nuclear plant is operating it faces the risk of an unanticipated outage?
- b. Does Rate Counsel witness Crane agree that if a nuclear plant experiences an unanticipated outage, its per-MWh costs will be higher than they would have been without the outage?
- c. Does Rate Counsel witness Crane that after a nuclear plant ceases operation, it no longer faces the risk of an unanticipated outage?
- d. Does Rate Counsel witness Crane agree that with nuclear plants generally running at all available hours other than refueling outages, that are unavoidable, with forced outage rates in the single digits, there is more downside risk than upside risk?

ZEC2-Crane-XQ-0009

The ZEC Act defines “market risks” to include “the risk of a forced outage and the associated costs arising from contractual obligations.”

- a. Does Rate Counsel witness Crane agree that, while a nuclear plant is operating, it faces the risk that a forced outage may occur?
- b. Does Rate Counsel witness Crane agree that, all things equal, when a large baseload generating unit experiences a forced outage, prices tend to rise?
- c. Does Rate Counsel witness Crane agree that, after a nuclear plant ceases operation, its owner or operator no longer faces the risk that a forced outage may occur?

ZEC2-Crane-XQ-0010

The ZEC Act defines “market risks” to include “the risk that output from the nuclear power plant may not be able to be sold at projected levels.”

- a. Does Rate Counsel witness Crane agree that, while a nuclear plant is operating, it faces the risk that its output may not be able to be sold at projected levels?
- b. Does Rate Counsel witness Crane agree that forward energy prices in PJM have generally come down over time in the past ten years?
- c. Does Rate Counsel witness Crane agree that, after a nuclear plant ceases operation, it no longer faces the risk that its output may not be able to be sold at projected levels?

ZEC2-Crane-XQ-0011

At page 16, lines 19-20, Rate Counsel witness Crane states that “Operational and Market Risks included in the Companies’ analysis do not reflect an actual cost to the nuclear operators.”

- a. Does witness Crane dispute that risks are inherently forward looking, and whether risks will actually materialize is inherently uncertain?
- b. When the risk of an equipment failure materializes, will it impose an actual cost on a nuclear operator?

ZEC2-Crane-XQ-0012

At page 16, line 22 through page 17, line 3, Rate Counsel witness Crane states, “Ratepayers should not be put in the position of having to guarantee owners of these deregulated facilities against either market uncertainty or operational risks, especially when the nuclear operators themselves control much of the risk relating to operations.”

- a. Please refer to PSEG witness Fricker’s testimony at page 3, line 18 through page 4 line 2. Is it Rate Counsel witness Crane’s position that PSEG could have controlled the scope of work required by the NRC’s response to the Fukushima Dai-Ichi incident?
- b. Please refer to PSEG witness Fricker’s testimony at page 4, lines 3-11. Is it Rate Counsel witness Crane’s position that PSEG could have controlled the scope of work required by the NRC’s response to the September 11 events?
- c. Please refer to PSEG witness Fricker’s testimony at page 4, lines 12-19. Is it Rate Counsel witness Crane’s position that PSEG is able to control the scope of work associated with NRC Generic Safety Issues?
- d. Is it witness Crane’s position that PSEG is able to control the risk that the NRC imposes additional regulatory mandates in the future?

III. OTHER POLICY ISSUES

ZEC2-Crane-XQ-0013

At page 10, line 22 through page 11, line 1, Rate Counsel witness Crane states that “It would [] be inappropriate for the Board to apply a regulated ratemaking methodology to determine if further financial subsidies are needed to maintain nuclear operations during the next three years.”

- a. Reconcile this statement with Rate Counsel witness Crane’s statement, at page 30, lines 8-12, that excess ADIT should be considered in calculating the subsidy because “the benefits of the excess deferred income taxes [] would have been refunded to ratepayers in a regulated environment.”

IV. ERRORS IN DATA

ZEC2-Crane-XQ-0014

Please confirm that the table on page 12 of Rate Counsel witness Crane’s analysis provides values for Hope Creek, Salem 1 and Salem 2 that are incorrect. (The chart reflects figures that appear to be designated to the wrong respective plant.)

- a. Please provide a corrected version of the chart and the corresponding discussion of witness Crane’s analysis.