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October 28, 2013

ALLIANCE FOR NUCLEAR RESPONSIBILITY Comments on DRAFT CEC IEPR 2013 * Report language (black)

* A4NR Comments and language changes (red)

California Energy Commission
DOCKETED
13-IEP-1A

TN 72280

OCT 28 2013

Recommendations

Diablo Canyon Power Plant

Complete and make available AB 1632 Report recommended studies.

PG&E should continue to provide updates on its progress in completing the <u>ALL</u> AB 1632 Report recommended studies to the Energy Commission and make its findings and conclusions available to the Energy Commission, the California Public Utilities Commission (CPUC), and the Nuclear Regulatory Commission during their reviews of the Diablo Canyon license renewal application.

Update evacuation time estimates.

PG&E should provide updated evacuation time estimates, including an [REAL TIME] evacuation scenario following a seismic event. TO BE INCLUDED IN THE 2014 IEPR UPDATE

Assess liability coverage adequacy.

Based on mounting clean up costs for the 2011 Fukushima accident, prior to reactivating the Diablo Canyon license renewal application with the Nuclear Regulatory Commission, PG&E should provide to the Energy Commission and CPUC a comprehensive study on whether the Price Anderson liability coverage for a severe event at Diablo Canyon would be adequate to cover liabilities resulting from a large offsite release of radioactive materials in San Luis Obispo County AND ITS ADJACENT THREE BORDERNG COUNTIES, and if not, identify and quantify other funding sources that would be necessary to cover any shortfall. The CPUC should consider requiring PG&E to complete such a study as a condition of License Renewal funding approval. THE STATE SHOULD REQUEST THAT CALIFORNIA'S CONGRESSIONAL DELEGATION SEEK A INCREASE IN PRICE-ANDERSON LIABILITY COVERAGE FOR ALL CALIFORNIA NUCLEAR POWER SITES (OPERATING, DECOMMISSIONED, OR IN PROCESS OF DECOMMISSIONING). FURTHERMORE, CALIFORNIA SHOULD REQUIRE THIS ADDITIONAL LIABILITY COVERAGE BE IN PLACE BEFORE CPUC LICENSE RENEWAL FUNDING CAN BE GRANTED.

Evaluate seismic hazard analysis against the licensed design.

To help ensure plant reliability and minimize costs to ratepayers, prior to reactivating the Diablo Canyon license renewal application with the Nuclear Regulatory Commission. PG&E should evaluate all seismic hazard analyses for Diablo Canyon against the licensed design basis elements for the Design Earthquake and the Double Design Earthquake, in addition to the Hosgri earthquake element. THIS EVAULATION SHOULD HAVE A QUALIFIED INDEPENDENT STATE REVIEW TEAM STUDY, ANALYZE AND REPORT ON THE FINDINGS IN ADDITION TO THE NRC.

Comply with applicable fire protection regulations.

PG&E should, as expeditiously as possible, bring Diablo Canyon into compliance with the applicable 2004 National Fire Protection Agency fire protection regulations and report to the Energy Commission on their progress until full compliance is achieved. THE CEC SHOULD RECOMMEND THAT THE NRC NOT ALLOW THE CONTINUED OPERATION OF DIABLO CANYON BEYOND THE NEXT 18-22 MONTH REFUELING CYCLE UNLESS COMPLIANCE ISSUE IS FULLY RESOLVED.

Evaluate long term impacts and costs of spent fuel storage options.

PG&E should evaluate the potential long term impacts and projected costs of spent fuel storage in pools versus dry cask storage of higher burn—up fuels in densely packed pools, and the potential degradation of fuels and package integrity during long term wet and dry storage and transportation offsite and submit the findings to the Energy Commission and CPUC. THE CEC SHOULD RECOMMEND THAT THE CPUC REQUIRE EXPEDITED TRANFER OF SPENT FUEL ASSEMBLIES BE INCLUDED IN THE DECOMMISSIONING PROCESS AND THE COSTS OF THIS EXPEDITED REMOVAL BE INCLUDED IN DECOMMISSIONING FUNDS BEFORE LICENSE RENEWAL FUNDING IS GRANTED.

Evaluate the structural integrity of the spent fuel pools.

To help ensure plant reliability and minimize costs to ratepayers, prior to reactivating the Diablo Canyon license renewal application with the Nuclear Regulatory Commission, PG&E should provide to the Energy Commission and CPUC an evaluation of the structural integrity of the concrete and reinforcing steel in the spent fuel pools, including any increased vulnerability to damage resulting from a seismic event. THE ALLIANCE FOR NUCLEAR RESPONSIBILITY SUPPORTS THIS RECOMMENDATION.

Evaluate the annual capability of moving spent fuel bundles to dry cask storage.

PG&E should perform and report to the Energy Commission and CPUC as part of the 2014 *IEPR Update*, an evaluation of the inventory of the spent fuel pools to determine the maximum number of spent fuel bundles it can move on a per year basis from the spent fuel pools into dry cask storage, taking into consideration the following constraints: Thermal limits of the dry casks imposing a minimum threshold on the age of the spent fuels; Federal requirements on older spent fuels surrounding newer spent fuels; Availability of dry casks; Building schedule(s) of dry cask storage pads; Coordination of refueling

outages and dry casks loading schedules; and Availability of plant staff and contractors for dry cask loadings. PG&E SHOULD REPORT THE NUMBER AND AGE OF ASSEMBLIES WITH SPENT FUEL WITH HEAT CONTENT GREATER THAN 45 GWd/t CURRENTLY IN THE REACTORS AND IN THE POOLS AND CALCULATE THE ADDITIONAL COSTS OF USING HIGH BURN UP FUEL ON THE WET STORAGE SYSTEM AND THE TIME NEEDED TO TRANSFER FUEL TO DRY CASK SYSTEM.

Transfer spent fuel to dry casks as expeditiously as possible. To reduce the volume of spent fuel packed into Diablo Canyon's storage pools (and consequently the radioactive material available for dispersal in the event of an accident or sabotage), PG&E should, as soon as practicable, transfer spent fuel from the pools into dry casks, while maintaining compliance with Nuclear Regulatory Commission spent fuel cask and pool storage requirements and report to the Energy Commission on its progress until the pools have been returned to open racking arrangements. <u>AND COMPARE THE VULNERABILITIES OF SPENT FUEL WITH HEAT CONTENT GREATER THAN 45 GWd/t TO ORIGINAL FUEL USED FOR POWERING DIABLO CANYON (SEE ABOVE RECOMMENDATION)</u>

Complete the evaluation of laminar flaws on Unit 2 pressurizer nozzles.

The Diablo Canyon Independent Safety Committee should monitor PG&E's progress in completing the root cause evaluation of laminar flaws on the Unit 2 pressurizer nozzles and identification of required corrective actions over the next cycle of operation, and follow the issue until it is resolved.

ADDITIONAL RECOMMENDATION

IN LIGHT OF THE SUDDEN EARLY RETIREMENT OF SAN ONOFRE, THE STATE OF CALIFORNIA SHOULD PRIORTIZE INNOVATIVE ENERGY GENERATION PROJECTS, ENERGY EFFICIENCY, OR OTHER RELATED MEASURES THAT WILL PROVIDE BENEFITS TO CALIFORNIA. MORE DIRECTLY, THESE PROJECTS SHOULD BE SITUATED IN THE SAN LUIS OBISPO REGION TO REPLACE THE POSSIBLE LOSS OF WHAT PG&E CLAIMS IS \$919.8 MILLION, PLUS INDIRECT AND INDUCED IMPACTS OF \$244.3 MILLION IN BENEFITS TO SAN LUIS OBISPO AND NORTHERN SANTA BARBARA COUNTY.

San Onofre Nuclear Generating Station

Complete and make available AB 1632 Report recommended studies on security of spent fuel.

SCE should continue to complete *AB 1632 Report* recommended studies as they apply to the security of spent fuel storage facilities at San Onofre and provide updates to the Energy Commission and CPUC on its progress.

Expand timely and safe transfer of spent fuel to dry casks.

SCE should, as soon as practicable, expand the Independent Spent Fuel Storage Installation and transfer spent fuel from pools into dry casks, while maintaining compliance with Nuclear Regulatory Commission spent fuel cask and pool storage requirements and report to the Energy Commission on its progress until all spent fuel is transferred to dry cask storage. THE CEC RECOMMENDS THAT SCE SHOULD PROVIDE THE CPUC WITH THE COST IMPACTS OF USING SPENT FUEL WITH HEAT CONTENT GREATER THAN 45 GWd/t, INCLUDING THE ADDITIONAL COOLING TIME AND SPECIAL CASKS NECESSITATED BY THE UTILITY'S CHOICE OF FUEL TYPE.

Develop and implement a decommissioning plan as quickly as possible.

SCE should submit a decommissioning plan to the Nuclear Regulatory Commission as soon as possible and proceed with decommissioning of San Onofre swiftly, providing progress updates to the Energy Commission until decommissioning of the site is completed. THE CEC SHOULD RECOMMEND "DECOMMISSION" OVER THE "SAFESTOR" OPTION.

Nuclear Waste

Represent California's interests in federal nuclear waste management program activities.

The Energy Commission will continue to monitor federal nuclear waste management program activities and represent California in the reactivated Yucca Mountain licensing proceeding to ensure that California's interests are protected regarding potential groundwater and spent fuel transportation impacts in California. THE CEC RECOMMENDS THE NRC SHOULD OBSERVE A MORATORIUM ON LICENSE RENEWALS UNTIL SUCH TIME AS THERE EXISTS A PERMANENT OFFSITE REPOSITORY FOR HIGH LEVEL RADIOACTIVE WASTE.

Submitted by:

/s/

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