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Part 4 of my comments on reliability & climate implications of Diablo Canyon reactors

August 17-18, 2022

Dear CEC, CA Legislature, and to whom it may concern:

I want to give an overview of the waning days of some commercial nuclear power facilities in California. This is essentially part 4 of my comments. (Part 3 was sent at 4:45 PM on August 12th, and was entitled "How the Rancho Seco nuclear reactor's later stage could relate to Diablo Canyon" excuse me that I did not call it "Part 3" since I called the first two parts of my submissions "Part 1" and "Part 2".)

In regards to the Rancho Seco nuclear reactor in southeastern Sacramento County, there was a malfunction in the control circuitry which caused a serious "overcooling" accident which almost led to melting of the nuclear fuel back on December 26th, 1985, which led the Union of Concerned Scientists to note the resulting 27-month shutdown in which the Sacramento Municipal Utility District spent over \$400 million to upgrade the reactor.

Sacramentans for Safe Energy (SAFE) and Campaign California qualified a ballot measure, Measure B, for the June 1988 ballot which basically said that voters would need to approve any further operation of Rancho Seco's nuclear reactor, and that the reactor would then be shut after 18 more months of operation during its re-fueling shutdown. The SMUD Board voted to add a competing initiative to that June 1988 ballot in Sacramento County, which was Measure C.

SMUD had done some upgrading of the Rancho Seco reactor to try to meet post-Three Mile Island standards, so tried to convince Sacramento County voters that they need to "GIVE the NEW RANCH A CHANCE" by voting for Measure C (and not Measure B) to let the nuclear reactor operate some more rather than waste all the funds that were sunk into it. One article noted that SMUD and some others saw it as "a chance, then a choice".

The public was fooled just enough that Measure B fell short by garnering 49.6% of the vote, while the measure which the utility board voted onto the ballot got 51.7%. That latter measure was also notable in that it would be seeking a company to take over the facility if Sacto. County voters voted to shut it down, plus it had wording which stated that the facility would be closed if Rancho Seco's operating performance fell below 50% for 4 months in a row after Dec. 31, 1988.

Part of the ploy of Measure C to try to convince voters that the somewhat refurbished nuclear reactor deserved another chance was that you need to give the "New Ranch" a try, and then vote again in a year. Well, by the time voters of Sacto. County voted again (on June 6th, 1989) as to whether to shut down the Rancho Seco reactor, it was clear that the reactor was still having a bunch of problems despite all the refurbishing, so voters of Sacramento County said no more and voted to shut it down on June 6th, 1989!

Don May, who I believe is in his 90s, was the main San Onofre legal intervenor (who had Friends of the Earth, Nuclear-Free California and Friends of the Los Cerritos Wetlands hats, so to speak), informed me about the scenario around the shutdown of San Onofre Unit One. The reactor was having problems so had been shut down for awhile. Then the PUC approached the utility and told them that unless they got San Onofre Unit One operating again, that it would be taken out of the rate-base. So, despite SCE knowing that "Unit One leaked like a sieve" (as Don May put it), it was allowed to operate some more. But after awhile it became clear that the reactor was undependable, so it was closed for good.

And then, doing this one from memory rather than researching it at this time, SCE placed too many tubes in a replacement steam generator which made the steam too wet which led to some rusting which led to the shutdown of the reactors. There was an abrupt firing of most workers at San Onofre which was problematic in that they generally were the ones with the experience on nuclear issues. Another unfortunate thing is that a judge allowed the destruction of the building which contained pools for spent nuclear fuel rods at San Onofre, which oftentimes can be the sensible location to seek to get the spent fuel waste into thick transportable casks " rather than thin "cansisters" or "garbage cans" whose whole top is a vent which helps to cool spent fuel from the "high burn-up fuel" used by commercial nuclear reactors in the 21st century.

I note that Gary Headrick of San Clemente Green recently mentioned in his Zoom meeting comment that the scare tactics acting like the lights will go out if San Onofre's reactors were shut never did materialize.

It is important to point out that "the Diablo deal" of 2016 was the position which refused to demand modifications to reduce thermal pollution into Diablo Cove, and thus allow PG&E to operate Diablo Canyon's reactors until their operating licenses expire in 2024 and 2025. It was sad that so many interest groups were willing to pander to Pacific Gas & Electric and allow these preposterously-sited nuclear reactors to continue to operate. Yes, "the Diablo deal" was a coalition sell-out to PG&E. (But recall that PG&E is not too popular " even besides causing wildfires, pipeline blasts, and high bills " which resulted in PG&E losing in their ballot measure effort in June 2010 which tried to squelch community choice energy / community choice aggregation where the electrons come over PG&E wires but come from alternative energy resources which had been added to the grid.). Now, there is another batch of hoodwinked folks who seek to sever the 6-years-thus-far agreement of the "Diablo deal" in order to

sell-out to PG&E further by the state and feds seeking to lavishly subsidize one of the least deserving companies in the world! These industry-bought or industry-confused sell-outs seek to pander as much as possible to PG&E by dangling prolonged reactor operation subsidies in front of them using the excuse of concern about climate. As loitering for prostitution laws are erased from the books in California by Governor Newsom's pen, at the same time the bought-out and hoodwinked are uniting to pander to an extreme degree to one of the worst corporate actors in the world by supporting the "WEASELING OUT of the DIABLO Deal DEAL !!!"

It is sad to note that Joe Biden is of an age that did not pay much attention to dangers from the nuclear industry, while younger state legislators such as Henry Stern were in diapers rather than paying attention during anti-nuclear struggles of the 1980s.

I also have mentioned in some earlier comments that by the later 2010s, some parts (including things as basic as oil pans) were becoming unavailable for my 1998 Ford Escort auto. However, there were a whole bunch more autos made in any given year (including 1998) than nuclear reactors "and the odds of finding "dealership parts", so to speak, for commercial nuclear reactors at this point in their life / half-life is not very likely. So are utilities supposed to operate nuclear reactors for additional 5, 10, 10, 40(?) years on make-shift components?!

I call for the CEC, Governor's office, and CA Legislature to stop wasting our time with false and dangerous climate "solutions" such as nuclear power, most biomass, certain hydrogen, etc., and send a clear message that people who still retain basic logic skills reject this reckless proposal which would endanger our future in California in order to help a corrupt and powerful investor-owned utility operate its Diablo Canyon nuclear reactors beyond the earlier-postulated "life" " which apparently is two half-lives) of the reactors.

Sincerely yours,

Bruce Campbell