Obviously, I wish to remain anonymous. I would like to continue to work at SONGS and others that have spoken out in opposition to the chosen vendor (Holtec) in public have been ———— ————

However, the decision to change dry cask storage designs does not seem to be advantageous and rightly raised a lot of questions with the public. I have been ———————— ———————————————————and as I see it, there is no clear advantage (semiburied) for the Holtec design as proposed to be installed at SONGS vs the AREVA TN design and appears to have some disadvantages (nearness to water table, this design is not currently licensed for SONGS,etc).

I just think the wrong design was chosen for whatever reason (I have been told that the decision makers and their relationships with the vendors appear to have influenced the decision, ———————————— I understand there was a difference in the bid values amongst the bidders, but that AREVA resubmitted a new bid value which was not accepted. Perhaps the bid window had closed.

You can do what you wish with these two issues – the choice to change vendors and the fuel inspection results.

(Two more pages follow)

Issue 1

What gives?

SCE is proposing to give to the existing AREVA TN dry cask storage loading equipment to Holtec for free. This equipment which has been used to load all the spent fuel currently stored at the SONGS ISFSI is still functional and in good shape. This equipment is currently worth about 5-8 million. This equipment consists of the transfer cask and yoke, yoke extension, transfer trailer and skid positioning system, automatic welder, vacuum dryer, and prime mover.

SCE is also proposing to give to Holtec, the new unused dry cask storage loading equipment recently purchased. This includes a new transfer cask and yoke, skid positioning system, automatic welder and vacuum dryer. This equipment is brand new and is worth about 10 million dollars. Along with that equipment, all existing unused AREVA storage modules and dry storage canisters are to be given to Holtec for free. These modules and canisters are worth about 30 million. It has been stated that Holtec will attempt to sell all this new unused equipment back to AREVA or another buyer and be able to keep the money.

There is also the sunk money in the construction of the ISFSI pad section which will be unused since no more AREVA modules/canisters will be loaded. This unused portion of the pad was to store about 30 AREVA modules.

SCE has already paid for this equipment and ISFSI pad which will not be used to load any more SONGS fuel into dry storage. I assume the rate payers have been billed. I wonder if the DOE has been/will be billed for this equipment from the Nuclear Waste Fund?

Additionally, it has been said that there is a contract termination fee to be/has been paid to AREVA to get out of the existing contract for providing dry cask storage services and equipment. This will probably be around 25 to 30 million.

You have to wonder if the approximately 50 million in equipment and the 30 million in termination fees were attractive enough to tilt the bid evaluation to Holtec vs AREVA given that both systems will safely store the fuel and meet the site seismic and other site and NRC criteria for dry cask storage. The stated value of the Holtec contract is about 370 million. If the contract with AREVA had been continued, fuel could have been started to be loaded in late 2015 vs 2018. In addition, the AREVA design is sitting about 20 feet above the water table and its design meets all the NRC postulated event scenarios as does Holtecs. The Holtec design will dig a hole to 11 feet below grade (20' el.) and 2 feet above water table. The storage modules (~25' tall) will be placed on the unreinforced basemat which is ½ on and ½ off the existing old Unit 1 basemat, and the modules will be encapsulated in a mound built up above grade (20'el.) only be half buried in order to ensure that the buried part is 2 feet above the water table. The top of the Holtec storage modules will only be about 4-5 feet below the top of the AREVA storage modules. As proposed, the Holtec design does not appear to be technically superior to the existing already licensed AREVA design.

So what is going on?

Issue 2

The spent nuclear fuel inspection effort underway at SONGS is being currently performed to characterize all the remaining fuel stored in the spent fuel pools (~2700 fuel assemblies) as "intact" or "failed/damaged" (i.e. each fuel pin cladding does not have any breaches in it) per NRC ISG-1 criteria. This is accomplished by visually examining each fuel assembly with underwater cameras for damage and debris along with "canned sipping" each fuel assembly by placing it in a can and drawing a vacuum on the fuel assembly. If there is a breach in the fuel pin cladding, radioactive fission product gases will escape and are counted by detectors. The fuel assembly is then classified as failed and is required to be "canned' in a damaged fuel can in the dry storage container when placed in ISFSI.

During the inspection effort, somewhere around 10 fuel assemblies out of ~2000 which had not been previously sipped were determined to be failed. The other ~ 700 fuel assemblies in the spent fuel pools were to only visually inspected as they had previously been sipped when the fuel assembly was being removed from the reactor during a refueling outage. However, at the end of the visual only effort bubbles were observed coming from a fuel assembly. This assembly was sipped and determined to be failed. A sample ~50 fuel assemblies of the ~700 to be only visually examined were sipped and ~5 of these were determined to be failed. I believe the remaining ~650 fuel assemblies will be sipped to ensure they have been characterized correctly.

Everything I have ever read in industry and government literature/regulations about storage of spent nuclear fuel in spent fuel pools and in dry cask storage does not postulate further damage to spent nuclear fuel in those environments for up to 100 years. Storage of fuel in spent fuel pools is the most benevolent environment the fuel will see during the rest of its existence. During vacuum drying of the dry storage container in preparation for dry cask storage the fuel pin cladding is stressed as the fuel pellet temperature rises significantly (to ~900 degrees) due to no cooling during vacuum drying and fuel pin internal pressures are higher. While in dry cask storage, the temperature of the fuel pellet is significantly higher than when in stored in the spent fuel pool, so internal pressures in the fuel pin are higher also. I recall there was a fuel pin failure in a dry cask container during vacuum drying at a plant in the Midwest recently. Not sure of the resolution to the failure.

Additionally, if the fuel is not considered damaged/failed, it is not placed in a damaged fuel can in the dry storage container prior to being stored in the ISFSI. The real issue is that fuel is experiencing additional damage/degradation while in spent fuel pool storage and potentially in dry cask storage. I do not believe that this has been seen previously. This is not a criticality issue during this time, but when it becomes one is during transportation of the dry storage containers to interim storage sites or ultimate burial or reprocessing. The purpose of the damaged fuel cans in the dry storage containers is to prevent the migration of fuel within the dry storage container during a transportation accident such that a criticality accident cannot occur.