Citizens' Oversight Projects (COPs)

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May 30, 2018



To: San Onofre "Move the waste" Expert Team

Fm: Ray Lutz

Re: My comments on Holtec Eddy-Lea site & California Location Idea.

Please accept the following information:

- 1. Citizens Oversight submitted comments regarding the Holtec Eddy-Lea site. That document is attached.
- 2. During the settlement negotiations period, I made numerous presentations to the community, and asked for feedback and ideas. One idea may have some merit, so I will provide it to you now.

In our initial press release to the settlement, we suggested that the Expert Team consider, in addition to the Palo Verde nuclear plant location and eastern NM or west TX location (which appears to be coalescing around the Eddy-Lea site), we suggested two more options 1) in Camp Pendleton, but about three miles inland and much higher in elevation (which would move the SNF away from the coast, any tsunami threat, coastal inundation, and reduce many risks, and not require rail transportation, and could be transported using the transfer cask rather than the transportation overpack), and 2) "Somewhere along the rail line between San Onofre and Yucca Mountain."

Regarding #2, a member of the public suggested Eagle Mountain, which is an abandoned iron mine. The location is north of I-10, just east of Joshua Tree National Park.



A close up view shows that the area has already been disturbed due to the mining operation there. What looks like what might be a town is unoccupied.



I understand there is some interest in making the mining pits into a pumped storage project at this time.

QUOTE: The Eagle Mountain mine is currently the location of a proposed 1300 MW hydroelectric plant by Eagle Crest Energy. The company agreed to buy the land from CIL&D (the new name of Kaiser Ventures) in July 2015. The Eagle Mountain Pumped Storage Project would pump groundwater from the Chuckwalla Valley aquifer into two reservoirs comprising former mining pits, where water would be pumped from the lower reservoir to the upper reservoir during low electricity demand, and pumped back down through turbines during high electricity demand. In November 2016, NextEra Energy announced their partnership with Eagle Crest in the project. The project is praised by supporters for the purpose of bringing more renewable energy in California, while also being criticized by environmentalists for potential damages to plant and animal life in and around Joshua Tree National Park.

There is a railroad track that runs from about the middle of the Salton Sea up to this location that used to be used for transporting ore to the mill in Fontana. Although it likely needs repair, and the connection at the Salton Sea would need to be re-established, that would provide the transportation to the site.

The wikipedia page has some interesting background: https://en.wikipedia.org/wiki/Eagle Mountain, California

The rail has a decent bed and right-of-way. There are some problems, such as a number of culvert bridges that appear to be washed out. As this is a pretty old railroad, I have no idea how much work it would need.

Given that the weight of the rail cars with nuclear waste on them are at the very top end of the scale, this railroad may be worthless.







Looking north from I-10 where the rail goes under the freeway



And looking south at from the same location:



Further south, the rail line appears to be in even worse condition. For example, here the rails are lost completely.



Again here, but I think it is just covered by sand as it runs "in a deep cut".



Just after this horseshoe curve, the rail line goes over "the railroad's longest bridge. The "Salt Creek Wash Bridge" is 500 feet (150 m) long and 40 feet (12 m) high. The original bridge located here was a wooden trestle, but after a fire destroyed that bridge an all-steel bridge was constructed. "



Although there is a bridge over the rebuilt Coachella Canal, the dirt roads just cover it over. Just to the right of the rebuilt canal, the track crosses the now abandoned original channel of the Coachella Canal on a three span steel bridge. While the bridge remains, water no longer flows underneath.



This wooden trestle bridge over Dos Palmas Wash may actually still be in good shape. The curve up and down is an artifact from the Google Sat-view.



Wooden trestle bridge still looks viable.



And the final connector to the rail line next to the Salton Sea has been deprecated. Wikipedia says: "Ferrum was the location of a five track yard that was used to interchange with the Southern Pacific Railroad. Also located at Ferrum is a wye (not disconnected) and maintenance equipment shed. The interchange yard parallels the present-day Union Pacific Railroad Yuma Subdivision main line, the main transcontinental railroad line between California and Texas. The main track heading to Eagle Mountain starts at the east end of the yard.



Crow-flies distance from the intersection above to the Eagle Mountain site is over 35 miles, but the actual route is 51 miles:



QUOTE The **Eagle Mountain Railroad** (EMRR) was a private railroad in California, owned by the Kaiser Steel Corporation, and is owned today by Kaiser Steel's successor, Kaiser Ventures, Inc. of Ontario, California.

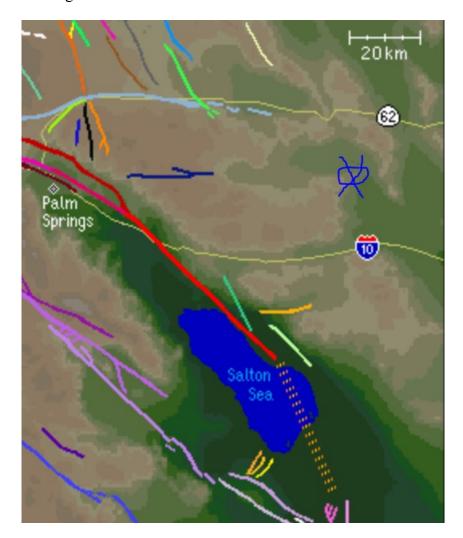
The EMRR is 51 miles (82 km) long and is located in Riverside County, California. Constructed in 1947–1948, it was used until 1986 to haul iron ore from Kaiser's Eagle Mountain Mine in the Colorado Desert to an interchange with the Southern Pacific Transportation Company in the Coachella Valley. The last revenue train to operate over the line was on March 24, 1986.

https://en.wikipedia.org/wiki/Eagle Mountain Railroad

Instead of going all the way to the Eagle Mountain location, another area that has been mentioned is the Chocolate Mountains.



All of these areas are on the "stationary" North American Plate and not the moving Pacific Plate. But the San Andreas fault does run right along the north/east shoreline of the Salton Sea. I marked the approximate location of Eagle Mountain.



I will let the experts team do with this information as you see fit. As I promised that I would forward this to you, I now have completed my duty in this regard. Enjoy!

Sincerely,

Raymond Lutz

National Coordinator, Citizens' Oversight Projects