

The Burney Resource Group
22092 Widgeon Court
Burney, CA 96013

DOCKET
97-AFC-1 C

DATE JUN 20 2000
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STATE OF CALIFORNIA

Energy Resources Conservation
and Development Commission

In the Matter of the Application
for Certification of the High
Desert Power Project

DOCKET NO. 97-AFC-1

Re: Use of fresh, inland water for
cooling of the High Desert
Power Project

USE OF FRESH, INLAND WATERS TO COOL POWER PLANTS:

California faces water shortages that have already required reduction of water allotments to agriculture, pumping of grey water back into ground water storage to prevent subsidence (destruction of ground water storage capacity). There are increased demands for water flow to protect fish such as our salmon, water for delta flows and an ever growing population.

Daily, there are alarming articles in the newspaper alerting the citizens of the growing water shortage:

Record Searchlight: March 14, 2000

'Gloomy' future for our water: by Lee Bowman

"With less than 1 percent of the water on Earth available for humans to drink, flush, process and irrigate, drastic changes are needed in the way water is managed, according to a new international report on global water policy issued Monday."

"The report stresses what it terms "gloomy arithmetic" for the world's water needs. In the next two decades, it is estimated that water use by humans will increase by 40 percent, and that 17 percent more water will be needed to grow food for the growing population of humans than is available," the panel said."

Record Searchlight: April, 2000

Water Sought for south state:

"The administrations of Gov. Gray Davis and President Clinton are expected to unveil a final CALFED plan in about a month.

The plan would not be legally binding, but it is viewed as a blueprint for consensus on how to share limited water supplies to meet demands of wildlife, farms and thirsty cities."

"The agencies want to ensure that their water shares are never cut below those agreed to in a 1994 pact. And, they want quick construction of a five-mile canal to divert water from the Sacramento River to another river."

Record Searchlight: April 30, 2000

New definition of groundwater will bring an upstream battle: by Tom Philp

"Back in 1899 the state's high court ruled that there were two distinct categories of groundwater: that which percolates underground, and that which moves as part of rivers, known as subterranean streams. This much, more or less is true.

Then the court advanced a legal definition intended to distinguish molecules of percolating groundwater from the flowing variety. This is where things drifted into fantasy land."

"What an absolute, complete and total mess.

Obviously it makes sense for legal principles to match scientific ones. The dilemma is what to do when law and science have drifted so far apart. Such is the case with groundwater".

Record Searchlight: May 24, 2000

Scientists predict long drought in south state:

"Everything from rainfall totals to tree-ring records to the migration patterns of salmon show that Southern California is in store for as many as two to three decades of diminished rainfall, scientists told the Metropolitan Water District's board of directors at a workshop called "Is the Climate Changing?"

It's a feature of the climate we're going to have to learn to live with," said Glen M. MacDonald, a geography professor with the University of California at Los Angeles who has conducted studies of tree rings that show a pattern of precipitation in Southern California over the past seven centuries."

"The tree rings and other signs show is that the Pacific region is entering into a period of roughly 50 years called Pacific Decadal Oscillation, scientist say. It's a weather cycle driven by alternating patches of cold and warm water in the ocean southwest of North America".

Record Searchlight: May 26, 2000

Six States plan deadline for California water use:

"LOS ANGELES (AP)-For decades, Southern California has used more than its share of Colorado River water to fill swimming pools, supply thirsty suburbs and grow crops in the desert. Now its upstream neighbors are threatening to turn off the tap.

Representatives of California and six other states, meeting behind closed doors in Phoenix, were on the verge of a historic agreement that would give California a 15-year deadline to cut its

use of water -- the West's most prized natural resource.

If California failed to follow through with a series of interim water-saving steps, the 15-year grace period would end immediately and upriver states could start withholding water."

Of special note:

[On June 15, 2000, Mr. Nicholas Stern, from the Attorney General's Office, representing California Parks and Recreation Department in the Three Mountain Power Project and Mr. Mark Wolfe, representing CURE, discussed Resolution 75-58 with the Regional Water Quality Control Board. The Burney Resource Group, as intervenors, represented by Marcy Crockett, and Mr. Claude Evans, another intervenor - in the Three Mountain Power Project presented information on local issues and consumptive use of the Three Mountain Power Project. The presentations were during regularly scheduled meetings with a court recorder present. The full context of the presentations are available in the records of that day's proceedings. Because of those presentations, the Central Valley Regional Water Quality Control Board has agreed to submit to the State Water Resources Control Board the question whether to use fresh inland water to cool the Three Mountain Project is barred or restricted by Resolution 75-58.]

The total consumption of high quality, potable water used for the cooling of power plants in the face of ongoing water shortages and potential drought conditions is in no way beneficial to the citizens of California, and is in fact, detrimental to the growth and economy of California.

Currently there are 13 power plants requesting certification in California and to our knowledge, not one has presented an alternative design to wet cooling as their original choice. A 500 MW power plant will consume, completely, a minimum of 3500 acre feet of water annually with no recharge, water the State of California cannot afford to allocate to an industry that is specifically charged with trying to use other means of cooling and fresh inland water must be the last alternative to be considered - a last resort. If this amount of water is hard to translate into an amount that is easily understood, let me state that 3500 acre feet will supply the needs of over 10,000 people annually! Yet every one of the current plants applying for certification are adhering to a wet cooling design, stating the other alternatives "are too costly".

The water that flows from the Burney basin and the Hat Creek flow are enormous, yet not enough water for the North State as demonstrated by newspaper items of shortages, reduced allocations, etc. Water used in power plants for cooling is a huge issue, contested by local citizens as soon as they realize the amount of water that will be used for cooling, especially, since there are alternatives to wet cooling as it is called, but capital outlay for initial construction is more costly by using either wet/dry cooling or our most preferred - dry cooling.

Dry cooling uses fans to cool the steam exiting the power plant, BUT, dry cooling must use some of the power produced by the power island to run those same fans. Yet data shows 0.96% (less than 1%) average during different loads levels, as submitted by Three Mountain Power Project to the CEC in various data responses. The Burney Resource Group believes that it is a "bottom line" attitude that generates resistance to the use of dry cooling without *apparent* thought or care to the environment that

the power plant impacts by their use of water for cooling towers.

Currently, the Burney Resource Group is trying to make dry cooling a condition of certification for the Three Mountain Power Project and is working towards achieving that goal. There are many unknowns about the ground water flow within the Burney basin and the impacts of pumping on current well users and agricultural irrigation, biological communities in our local springs and impacts to McArthur Burney Falls State Park, whose interests and concerns in this issue are represented by the Attorney General's Office.

During any of the workshops or other exchange of information in data requests there has not been any discussion on downstream impacts such as agricultural allotments or delta flow requirements that must be met - and the flows from this area contribute to the Sacramento River, hence to all of the above existing contractual surface water flows of California.

The arena of overall water impacts to the State of California is not one that the Energy Commission appears willing to step into, but their final certification does impact the overall availability of water to the rest of the state's citizens.

It is the position of the Burney Resource Group that no fresh inland waters should ever be used for power plant cooling when there are other alternatives available to cool power plants. The economic disadvantages of dry/air cooled power plants are no longer a reasonable argument in the face of water shortages that will not supply domestic and agricultural needs. There are no 'alternative' choices for agriculture, waterways for our wildlife and for us, the people who are constantly reminded by the State of California to "conserve water". Water is a precious commodity in our state and not one to be squandered for power plant cooling when technology has provided an answer for the cooling issue.

The California Energy Commission must understand that because a merchant plant submits a business offer to the State of California saying that they - the merchant plant - cannot afford to use dry cooling and must use water, it is the State of California that cannot afford that merchant plant. Merchant plants are exactly what they say they are, merchant power plants, they are in the business of making money and will fight for every penny of profit available. Before deregulation, these same companies were not interested in providing power to the State of California, but with deregulation comes the merchant plant - and they will come in as cheaply as they can, for bigger profits, which is fine as long as they do three things:

1. Do not use the finite resources of state water for power plant cooling.
2. Use the best available control technology (BACT) to prevent any additional air pollution, or zero impact on California air quality.
3. Place their project where the additional generating capacity of the project is available to the state's citizens during peak power needs, near the load centers.

If the Energy Commission sets minimum requirements for all power plants wishing to build in the State of California and one of those requirements was dry cooling you would 'level the playing field' for all companies in the area of cooling.

Resources of staff time and taxpayers money would not be wasted over whether or not each and every project should or should not use dry cooling if there are intervenors available to speak to the issue of dry cooling. With the advent of the internet, the current "networking" between groups wishing to intervene in the process of power plant siting is on the rise. This networking is also allowing groups to share information and procedures effectively - so the Energy Commission could expect the percentage of informed and therefore, effective, intervenors will rise.

The time line to certification would be shortened considerably, not to mention the avoidance of appeals by citizens groups who are determined to prevent the use of water for cooling power plants! I would estimate that as much as 4-6 months of time within the certification process could be eliminated by the use of dry cooling as a requirement of siting a power plant within California.

And, one of the major issues of environmental impacts to an area, and the State has been accomplished by avoidance of impacts, which CEQA advocates before mitigation of impacts as was just recently clarified at a workshop for the Three Mountain Power Project!

The Burney Resource Group appreciates this opportunity to address the issue of fresh, inland water use for cooling power plants in the State of California.

Respectfully Submitted,



Marcy Crockett, Burney Resource Group

June 20, 2000

*Please destroy earlier
transmission, this
transmission contains
corrections & additions.*

Marcy Crockett



**BURNEY RESOURCE
GROUP**

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