From: Lindh, Frank

Sent: 7/9/2012 8:56:41 AM

To: Cherry, Brian K (/O=PG&E/OU=CORPORATE/CN=RECIPIENTS/CN=BKC7);

Clanon, Paul (paul.clanon@cpuc.ca.gov)

Cc:

Subject: RE: Dynegy possibly closing Morro Bay Power Plant - Lack of power purchase

contract, cooling water dilemma

Yes, Brian and I are very nimble atheletes. Please pick up our used towels, would you?

From: Clanon, Paul

Sent: Monday, July 09, 2012 8:55 AM

**To:** Cherry, Brian K **Cc:** Lindh, Frank

Subject: Re: Dynegy possibly closing Morro Bay Power Plant - Lack of power purchase contract,

cooling water dilemma

Jesus Christ you two. Nine serves and volleys in eight minutes. I thought Wimbledon was over.

Morro Bay is an OTC plant. A bunch of those will be shutting down this decade.

On Jul 9, 2012, at 8:50 AM, "Cherry, Brian K" <BKC7@pge.com> wrote:

Sutter is ten years old. The turbines that they bought for Russell City are 8 years old and been sitting in boxes for that long.

From: Lindh, Frank [mailto:frank.lindh@cpuc.ca.gov]

**Sent:** Monday, July 09, 2012 8:50 AM **To:** Cherry, Brian K; Clanon, Paul

**Subject:** RE: Dynegy possibly closing Morro Bay Power Plant - Lack of power

purchase contract, cooling water dilemma

Russell City rocks the nation. It's Sutter that's 10 years old, right?

From: Cherry, Brian K [mailto:BKC7@pge.com]

**Sent:** Monday, July 09, 2012 8:48 AM

To: Lindh, Frank; Clanon, Paul

Subject: RE: Dynegy possibly closing Morro Bay Power Plant - Lack of power

purchase contract, cooling water dilemma

State of the art ramping and load following that is unlike any in CA. Russell City's technology is 9 years old.

From: Lindh, Frank [mailto:frank.lindh@cpuc.ca.gov]

**Sent:** Monday, July 09, 2012 8:47 AM **To:** Cherry, Brian K; Clanon, Paul

Subject: RE: Dynegy possibly closing Morro Bay Power Plant - Lack of power

purchase contract, cooling water dilemma

Oakley?

From: Cherry, Brian K [mailto:BKC7@pge.com]

Sent: Monday, July 09, 2012 8:47 AM

To: Lindh, Frank; Clanon, Paul

Subject: RE: Dynegy possibly closing Morro Bay Power Plant - Lack of power

purchase contract, cooling water dilemma

Yes, the technology and facilities are older, but given the shaky condition of the grid, one wonders.

From: Lindh, Frank [mailto:frank.lindh@cpuc.ca.gov]

**Sent:** Monday, July 09, 2012 8:45 AM **To:** Cherry, Brian K; Clanon, Paul

Subject: RE: Dynegy possibly closing Morro Bay Power Plant - Lack of power

purchase contract, cooling water dilemma

Interesting news, but isn't this old clunker radically different from Sutter?

From: Cherry, Brian K [mailto:BKC7@pge.com]

Sent: Monday, July 09, 2012 8:43 AM

To: Lindh, Frank; Clanon, Paul

Subject: FW: Dynegy possibly closing Morro Bay Power Plant - Lack of power

purchase contract, cooling water dilemma

Another Sutter?

Morro Bay Power Plant might be switched off in a few years

The Morro Bay Power Plant, with its three towering smokestacks, has been a landmark in the city since the 1950s, but the future of the plant is very much in doubt.

In May, plant owner Dynegy formally notified the California Energy Commission that it will not modernize the antiquated plant. The company also announced that it plans to operate the existing facility for as long as possible.

"Dynegy has no plans to retire the facility at this time, and as long as the plant is economically viable, Dynegy will continue to operate it," the company said in a statement.

However, the plant faces several severe challenges that call into question its long-term viability.

- --As of May 19, the plant no longer has a third-party contract to sell its electricity to a utility and must sell the power to the state electrical grid on the daily market. The company is trying to sign a sales contract with a new utility, but the state has classified the plant as not needed for maintaining local grid reliability, reducing the likelihood that a utility would be willing to sign such a contract.
- --Several crucial lease agreements with the city of Morro Bay expire at the end of the year and have not yet been renewed. Without a long-term sales contract with a utility, the company may not be able to afford the leases.
- --By the end of 2015, the plant must either eliminate or drastically reduce the amount of seawater it uses for cooling. Upgrades to the plant that would reduce ocean impacts could cost millions of dollars.

"I don't know how they go past 2015," said Rob Schultz, Morro Bay city attorney. "It doesn't seem to be in the cards, but you never know. They could limp along for a couple of years and hope that a new technology comes along."

In yet another challenge for Dynegy, on Friday it filed for bankruptcy protection as part of a plan to reorganize after years of struggling with falling electricity prices. Its debts surpassed \$5 billion last year.

In recent years, the aged and inefficient Morro Bay plant has operated intermittently, typically only during times of peak power demand. The plant offers its electricity on a daily basis to the state Independent System Operator, which manages the state's electrical grid, and if the price is right, the plant operates, said Katy Sullivan, Dynegy spokeswoman.

In order to be more competitive in the power market, the plant would have to be rebuilt with new natural gas-powered generators. The previous owner, Duke Energy, proposed modernizing the plant in 2000 at a cost of about \$800 million, but the rebuild was never done because of uncertainties in the power market and local opposition.

The intermittent operation of the plant has meant a significant loss of revenue to Morro Bay. The city collects a surcharge on the amount of natural gas the plant uses as well as two lease fees.

This year, the city should collect about \$150,000 in surcharge fees, Schultz said. This is only about 5 percent of the fees collected when the plant was operating at full power.

Since 2004, the city has also collected \$750,000 a year in fees for two leases to the power plant: one for the plant site and one for the cooling water outfall. It is unclear whether Dynegy will be able to renew those leases when they expire at the end of the year.

"Without a third-party contract (to sell the plant's power), Dynegy has stated they cannot make those payments," Schultz said. It is unclear what would happen to the plant if Dynegy decides to shut it down. The company would have 15 years to tear it down, a job that is estimated to cost \$150 million. After that time, the city could buy the plant for \$1, Schultz said.

"It's going to be tough for the city to prevent a situation where Dynegy says, 'Here are the keys,' and just walks away," he said.

## Cooling dilemma

Looming in the future are new state rules that drastically curtail the amount of ocean water that coastal power plants may use in their cooling systems. So-called once-through cooling systems draw in large amounts of seawater, killing fish and crab larvae.

The Morro Bay plant draws seawater in from the Morro Bay estuary through an intake structure along the city's waterfront. The cooling water is discharged back into the ocean through an outlet next to Morro Rock.

Impacts of once-through cooling on the ocean are one of the reasons a group -- called Coastal Alliance on Plant Expansion -- formed to oppose the plant modernization. The group wants to see the plant shut down.

"We think that, purely logically, there is no justification for running the plant given the minimal production the plant is generating," spokesman Jack McCurdy said.

Under new state rules, the Morro Bay plant has until the end of 2015 to reduce its damage to microscopic ocean life to 93 percent of historic levels, said Peter von Langen of the Central Coast Regional Water Quality Control Board. Dynegy has informed state water officials that it plans to meet that requirement through a combination of its current reduced operating schedule and possibly installing filters that prevent larvae from entering the cooling system.

A number of filtering technologies are available, but installing one of them could cost Dynegy up to tens of millions of dollars, von Langen said. Like Schultz, he thinks it is unlikely the plant will be able to operate past the 2015 once-through cooling deadline.

"Not only would it cost a lot of money, but they would need to do studies to show that it would work," he said, referring to using new filters.

Dynegy spokeswoman Sullivan said the company has not decided exactly how it will deal with the pending once-through cooling rules.

"Whatever we do needs to make economic sense," she said. "The new rules are part of a dynamic system, and we will continue to operate the plant as needed."

Morro Bay Power Plant

Current owner: Dynegy, a Houston-based energy company

Year opened: 1955

Number of current employees: 42

Generating capacity: 1,002 megawatts but two of the plant's four generators are mothballed, reducing generating capacity to 650 megawatts.