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Association of Irritated Residents

January 12, 2016

California Energy Commission

Re: docket # 08-AFC-08A

Final comments before the January 16, 2016 deadline on the motion by staff to terminate the HECA application.

The January 6 declaration of Jim Croyle, representing HECA and SCS, does not change the basis for the motion put forward by staff for termination of the HECA application. Croyle's declaration describes future activity HECA proposes to accomplish but does nothing to change staff's description of the current lack of progress towards a data sufficient application. Also, as staff describes, the application process for permitting the injection of CO2 will not be a slam dunk, one-year process. On top of lengthy EPA requirements, including a public process, there are also very difficult local land-use issues to be resolved. Kern County has already mentioned that this property is not zoned for injection of CO2. Neighboring land owners could also refuse permission for CO2 to be injected and spread into pore space under their properties. This land-use controversy alone may cause the project to be tied up in court for several years and needs to be resolved before a feasible project can be presented.

The Association of Irritated Residents therefore supports the staff motion for termination of the application and welcomes SCS to submit a new application when they are ready to demonstrate a viable project with real facts on the ground (and underneath).

Mr. Croyle, in his affidavit, tries to convince the CEC and the public of the importance of HECA in reducing green house gases in our atmosphere through carbon capture and sequestration. Unfortunately, it looks like HECA will give CCS a bad name rather than demonstrate its potential. Just look at the following list of negatives associated with the HECA project:

- Coal mining and dirty coal transportation with associated methane releases
- Disappearing and compromised prime farmland
- Massive amounts of irrigation water wasted
- Huge amounts of waste generated
- A fertilizer product causing millions of tons of CO2e emissions
- An extremely expensive way to generate electricity
- No net energy to the grid on an annual basis
- Hundreds of tons of criteria air pollutants into the worst air in the nation
- Danger from storage of explosive fertilizer products
- Danger from leakage of injected CO2 into good water supplies
- Several hundred thousand pounds annually of CO2 emissions not captured

In contrast, Kern County is known for renewable energy projects such as wind and solar which have a near zero carbon footprint. The Maricopa Solar Complex, just a few miles south of HECA, has been approved for 700MW of photovoltaic installations. The approval includes a comprehensive habitat protection plan. This multiple phase project will ultimately be supplying 150MW average to the grid on a 100% annual basis. The minimum price of selling electricity from this renewable energy source is less than a new natural gas power plant and much less than HECA on a MWH basis. See the excerpt below from an article describing the low cost PPA for recent solar installations.

http://www.eenews.net/stories/1060023749

ELECTRICITY:

Solar power crosses threshold, gets cheaper than natural gas <u>David Ferris</u>, E&E reporter EnergyWire: Friday, August 21, 2015

Several large solar power plants under construction in the United States have in the past few months promised to do something that none has done before: offer prices equal to or lesser than that of a natural gas-fired power plant, even as gas is abundant and cheap.

The latest to flirt with that threshold is a 156-megawatt Comanche Solar project in Pueblo, Colo., that broke ground yesterday and will be the largest solar-power generating station east of the Rockies. It is being built by solar developer SunEdison Inc. on behalf of Xcel Energy Inc., one of Colorado's largest electric utilities, through a power-purchase agreement that lasts 25 years.

That photovoltaic power station follows the example of other projects across the sunny West. Last month, NV Energy Inc., the principal utility for the state of Nevada, owned by billionaire investor Warren Buffett, signed a deal with solar developer SunPower Corp. for a 100 MW plant at a price of 4.6 cents per kilowatt-hour. Also last month, NV Energy fixed a price with First Solar Inc. for 3.87 cents per kWh from a 100 MW plant that could be the cheapest electricity in the United States <u>according to</u> PV Magazine. Also, in May, Austin Energy in Texas signed a 20-year, 150-MW deal with Recurrent Energy for 5 cents per kWh, Utility Dive <u>reported</u>.

As recently as 2014, solar power plants were costing nearly 14 cents per kWh, according to PV Magazine. By comparison, the benchmark 2014 price of electricity from an advanced combined-cycle natural gas plant was 6.4 cents per kWh, according to data from the Energy Information Administration.

In comparison to HECA, the contrasting benefits of the Maricopa Solar Complex, besides lower price, are the following:

- No prime farmland is being taken
- No irrigation water will be used
- No criteria air pollutants will be emitted
- No toxic or hazardous waste will be created
- No massive transportation network of trucks is required

- No methane is released from coal mining
- No product is created which increases GHG emissions elsewhere
- No GHG gases released in the operation of the plant

These clear benefits of renewable energy over HECA's proposed CCS, have come about very recently as the price of solar panels have plummeted the last couple years. Mr. Croyle is behind the times in thinking that CCS is going to save the planet or even play a significant role in helping California meet its GHG goals.

HECA simply does not fit with California's goal and the world's goal of zero carbon electricity by 2050 which also includes a doubling of electrical production. HECA's climate warming emissions from mining coal, the hundreds of thousands of tons of CO2 from the proposed project which are not captured or sequestered, plus the creation of a fertilizer that will cause several million tons of CO2e to enter the atmosphere, does not jive with the world's pressing need to dramatically lower GHG emissions over the next few years.

Regarding the proposed mitigation measures from Mr. Croyle, they are without substance making them nearly meaningless. They are insufficient because of a lack of details although they are important for future discussion if the project ever gets going again. For now, these mitigation proposals are simply another area of incomplete information and data analysis proving the project is not ready to move forward.

Regarding the proposal to mitigate water loss, it cannot be based on net water loss where a credit is given for water saved from farmland taken out of production. The current water situation in the San Joaquin Valley has caused over 500,000 acres of farmland to be removed from production. Every drop of water proposed to be used by HECA represents a loss of irrigation water and must be mitigated. It is obvious that the only way to do that is to take truly unusable water, such as the produced water from the oilfields or the groundwater under the oilfields, which is above 10,000 TDS, and clean it until it is suitable for HECA's own use.

In conclusion, we repeat the recommendation of CEC staff that the HECA project application be terminated at this time.

Tom Frantz President, Association of Irritated Residents