<b>Docket Number:</b>	11-AFC-03		
Project Title:	Cogentrix Quail Brush Generation Project		
TN #:	202137		
<b>Document Title:</b>	Opposition to Second Request for Suspension by Intervenors		
Description:	N/A		
Filer:	System		
Organization:	Preserve Wild Santee and Center for Biological Diversity		
<b>Submitter Role:</b>	Intervenor		
Submission Date:	4/21/2014 10:03:29 AM		
<b>Docketed Date:</b>	4/21/2014		

Comment Received From: Van Collinsworth

Submitted On: 4/21/2014 Docket Number: 11-AFC-03

### Opposition to 2nd Request for Suspension by Intervenors CBD / PWS

Additional submitted attachment is included below.

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STATE OF CALIFORNIA State Energy Resources

5	tate Ene	ergy Resources
Conservation	on and D	Development Commission
In the Matter of:	)	11-AFC-03
	)	
	)	MEMORANDUM OF OPPOSITION TO
	)	APPLICANT'S SECOND REQUEST FOR
	)	SUSPENSION BY
	)	JOINT INTERVENORS
QUAIL BRUSH GENERATION	)	PRESERVE WILD SANTEE &
PROJECT	)	CENTER FOR BIOLOGICAL DIVERSITY
		Santee and Center for Biological Diversity dum in opposition to the applicant's Second
April 21, 2014		/s/ Van Collinsworth
Date		Signature

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#### **INTRODUCTION**

Good cause exists to dismiss the Application for Certification (AFC). **The Quail Brush Generation Project is not needed for the public convenience and necessity**<sup>1</sup> **and even if it was, there are more prudent and feasible**<sup>2</sup> **alternatives.**<sup>3</sup> Ouail Brush would be sited upon a highly valuable "Greenfield"

The commission may not certify a facility contained in the application when it finds, pursuant to subdivision (d) of Section 25523, that the facility does not conform with any applicable state, local, or regional standards, ordinances, or laws, unless the commission determines that the facility is required for public convenience and necessity and that there are not more prudent and feasible means of achieving public convenience and necessity. In making the determination, the commission shall consider the entire record of the proceeding, including, but not limited to, the impacts of the facility on the environment, consumer benefits, and electric system reliability. The commission may not make a finding in conflict with applicable federal law or regulation. The basis for these findings shall be reduced to writing and submitted as part of the record pursuant to Section 25523.

**25527**. The following *areas* of the state *shall not be approved as a site* for a facility, *unless* the commission finds that *such use is not inconsistent with the primary uses of such lands and that there will be no substantial adverse environmental effects* and the approval of any public agency having ownership or control of such lands is obtained:

- (a) State, regional, county and city *parks*; wilderness, scenic or *natural reserves*; *areas for wildlife protection*, recreation, historic preservation; or *natural preservation areas in existence on the effective date of this division*.
- (b) Estuaries in an essentially natural and undeveloped state. In considering applications for certification, *the commission shall give the greatest consideration to the need for protecting areas of critical environmental concern*, including, **but not limited** *to*, unique and *irreplaceable* scientific, *scenic*, and educational *wildlife habitats*; unique historical, archaelogical, and cultural

<sup>&</sup>lt;sup>1</sup> "... any improvement which is highly important to the public convenience and desirable for the public welfare may be regarded as necessary." (San Diego Ferry, 292 P. at p. 643 (quoting Wabash, C. & W. Ry. Co. v. Commerce Commission, 309 lll. 412, 418- 419,141 N.E. 212, 214.) From Staff's Brief on Override Issues, Docket No. 06-AFC-6, December 7, 2007.

<sup>&</sup>lt;sup>2</sup> "Feasible" means "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors." (Pub. Resources Code § 21061.1)

<sup>&</sup>lt;sup>3</sup> Applicable **Public Resources Code § 25525.** 

within the Mission Trails Regional Park expansion area despite the availability of "Brownfields" that were not considered.

I. Quail Brush is detrimental to public convenience and contrary to public necessity. In sum, Quail Brush lacks public benefit and damages public welfare.

## A. Quail Brush's Conflicts with Laws, Ordinances, Regulations, and Standards (LORS) are Not Resolvable

Upon appeal, the San Diego City Council unanimously upheld (8-0) the San Diego Planning Commission denial of the Quail Brush application to initiate a community plan amendment. Furthermore, the unanimously approved motion on 9/24/2012 included a request to "urge the applicant to withdraw their application".<sup>4</sup> Reversal would have begun the process of exempting the Quail Brush AFC from multiple current LORS conflicts. LORS conflicts include the following.

The site is located within the residential RS-1-8 Zone, Mission Trails Design District Subarea 2, and the East Elliot Community Plan with a Multiple Habitat Planning Area (MHPA) open space designation overlay that limits use of the parcel to 25%. The site

sites; lands of hazardous concern; and <u>areas under consideration</u> by the *state* or the United States for wilderness, or *wildlife* and game reserves.

**25529.** When a facility is proposed to be located in the coastal zone or any other area with recreational, scenic, or historic value, the commission *shall require*, as a condition of certification of any facility contained in the application, that *an area be established* for public use, as determined by the commission. Lands within such area shall be acquired and maintained by the applicant and shall be available for public access and use, subject to restrictions required for security and public safety. The applicant may dedicate such public use zone to any local agency agreeing to operate or maintain it for the benefit of the public. *If no local agency agrees to* operate or maintain the public use zone for the benefit of the public, the applicant may dedicate such zone to the state. The commission shall also require that any facility to be located along the coast or shoreline of any major body of water be set back from the shoreline to permit reasonable public use and to protect scenic and aesthetic values. (bold italic emphasis added) <sup>4</sup> San Diego City Council Meeting Minutes, September 24, 2012. MOTION BY LORI

APPLICATION. Second by Marti Emerald, Passed by the following vote: Yea: Sherri Lightner, Kevin Faulconer, Todd Gloria, Tony Young, Carl DeMaio, Lorie Zapf, Marti Emerald, David Alvarez; Nay: (None); Recused: (None); Not Present: (None).

is located within the MHPA Subarea 2 and contains environmentally sensitive lands in the form of sensitive biological resources with steep hillsides. The project requires a rezone and a land use plan amendment. The project requires a MHPA boundary line adjustment. The project requires a Site Development Permit for the Mission Trails Design District. The site is located within the Very High Fire Hazard Severity Zone without including 100-foot of brush management around the entire development (and including such buffers would exacerbate conflicts with environmentally sensitive lands regulations). Project smoke stacks of 70-100 feet would violate requirements to not exceed 50-feet and grading of approximately 500,000 cubic yards would conflict with visual requirements within the Mission Trails Design District.

The City of San Diego Preliminary Review Letter found 27 MHPA issues the project needed to resolve.<sup>5</sup> The applicant has failed to provide detailed evidence that noise and other project impacts upon the adjacent MHPA can be avoided or mitigated below a level of significance. The applicant has failed to provide detailed evidence why there is not a feasible less environmentally damaging location or alternative to avoid impacts. Unavoidable impacts require deviation from the City's Environmentally Sensitive Lands Ordinance (ESLO). The project has not prepared a Habitat Conservation Plan for impacts to species such as the endangered Quino checkerspot butterfly that are not covered for incidental take by the Multiple Species Conservation Plan (MSCP).

"A Mission Trails Regional Park Master Plan Update is currently in process and is proposing inclusion of the entire E. Elliott community within the park boundaries. Public Workshops were conducted and trails within the E. Elliott community have been identified for inclusion within the Update... For this particular parcel, there is the potential for a trail in the north east corner."

The project is within the San Diego River State Conservancy watershed located approximately ½-mile from the San Diego River. The SD River has been identified as an impaired water body.

# B. <u>Environmental Damage from Production and Combustion of Natural Gas is Significant</u>

Quail Brush would be a 100MW natural gas fired power plant. Natural gas combustion produces Greenhouse Gases (GHGs) along with other toxic air emissions. The process of procuring the natural gas fuel requires the emission of additional GHGs and the new drilling method called "hydraulic fracturing" or "fracking" releases large and un-quantified amounts of GHGs, permanently destroys groundwater supplies (when drill casings fail and allow escape into aquifers) and results in the industrialization of thousands of acres of public and private natural

5

<sup>&</sup>lt;sup>5</sup> Quail Brush Preliminary Review Assessment Letter; Project No. 242668; IO No. 24001923; East Elliot Community Planning Area with Cycle Issues Attachment, Morris E. Dye, 8/3/2011

lands.<sup>6</sup> Fracking could not meet the requirements of the Clean Air and Clean Water Acts and thus operates through exemptions authorized during the Bush Administration. Many experts have concluded that natural gas extraction and use is equivalent in its environmental damage to coal.

Quail Brush nitrogen deposition would stimulate invasive species adversely impacting host plants for the endangered Quino Checkerspot butterfly and impact vernal pool species in the project vicinity.

## C. <u>Precedent Setting Decision finds that Benefits of Natural Gas Power Plants are Limited</u>

The Commission found in a 2009 <u>precedent setting decision</u> that there are "**Limited Benefits of Natural Gas Power Plants**" and that "all agree that we cannot and should not continue adding gas-fired plants ad infinitum... First, of course, we **must** ensure that **all feasible, cost-effective efficiency and demand response, and other priority resources in the loading order, are implemented**. Then, to the extent that new gas-fired plants are proposed, we **must** ensure that they **support the goals and policies of AB 32 and the related parts of California's GHG framework**.<sup>7</sup> (bold emphasis added)

<sup>6</sup> Documentation of environmental damage from hydraulic fracturing is vast. Some of those sources include the following: "Impact Assessment of Natural Gas Production in the New York City Water Supply Watershed Final Impact Assessment Report", New York City Department of Environmental Protection, Hazen And Sawyer Environmental Engineers & Scientists, December 22, 2009, which concludes "Development of natural gas resources using current technologies thus presents potential risks to public health and would be expected to compromise the City's ability to protect the watershed and the continued, cost-effective provision of a high-purity water supply." Page ES-3

<sup>7</sup> d. The Limited Benefits of Natural Gas Power Plants

The previous discussion reflects a basic fact about the California electricity system at this time: it needs new efficient gas-fired generation to displace and replace less efficient generation, and to help integrate additional intermittent renewable generation. But as new gas plants are built to meet those needs, the system will of course change; moreover, the specific location, type, operation, and timing of each plant will be different. As a result, each plant will have somewhat different impacts. Furthermore, future implementation of efficiency and demand response measures, and new technologies such as storage, smart grid, and distributed generation, may also significantly change the physical needs and operation of the electrical system.

Therefore, although the parties disagree about the extent to which new gas-fired generation is appropriate, they all agree that we cannot and should not continue adding gas-fired plants ad infinitum. (See, e.g., 7/7/09 RT 187-188.) First, of course, we must ensure that all feasible, cost-effective efficiency and demand response, and other priority resources in the loading order, are implemented. Then, to the extent that new gas-fired plants are proposed, we must ensure that

### D. Eliminating Alternative Fuel Sources by Requiring Natural Gas as a Project Objective is Inappropriate

In the Chula Vista Energy Upgrade Project Decision, the Commission found that "requiring the use of natural gas as a project objective eliminates consideration of alternative fuel sources" and is an "example of a too-narrow project objective artificially limiting the range of potential alternatives."8

they support the goals and policies of AB 32 and the related parts of California's GHG framework. To do so, we intend to require that any new natural-gas-fired plant certified by the Energy Commission will likely:

- (1) not increase the overall system heat rate for natural gas plants;
- (2) not interfere with generation from existing renewable facilities nor with the integration of new renewable generation; and
- (3) take into account the factors listed in (1) and (2), reduce system-wide GHG emissions and support the goals and policies of AB 32.

This part of the Decision (section A.4.d. of this chapter) is a "precedent decision" under section 11425.60 of the Government Code Avenal Energy Final Commission Decision, AFC-01-08, page 110, <a href="http://www.energy.ca.gov/2009publications/CEC-800-2009-006/CEC-800-2009-006-CMF.PDF">http://www.energy.ca.gov/2009publications/CEC-800-2009-006/CEC-800-2009-006-CMF.PDF</a>

<sup>8</sup> Chula Vista Energy Upgrade Project Final Commission Decision, (07-AFC-4) June 2009, CEC-800-2009-001-CMF. "modifications.

"The Applicant effectively eliminated photovoltaic (PV) generation from its alternatives analysis when it stated that it did "not meet the project objective of utilizing natural gas available from the existing transmission system." (Ex. 1, p. 6-13.) This is another example of a too-narrow project objective artificially limiting the range of potential alternatives. Requiring the use of natural gas as a project objective eliminates consideration of alternative fuel sources. Bill Powers, P.E., an engineer with over 25 years of experience in the energy field, testified that it may be feasible to install PV on rooftops and over parking lots in a quantity sufficient to meet or exceed the project's incremental increase in output. (Ex. 616, pp. 11- 14.) According to the FSA, rooftop PV would consume 4 acres per MW and for that reason is infeasible. (Ex. 200, p. 6-13.) We are unpersuaded by this evidence. Photovoltaic arrays mounted on existing flat warehouse roofs or on top of vehicle shelters in parking lots do not consume any acreage. The warehouses and parking lots continue to perform those functions with the PV in place. (Ex. 616, p. 11.) Mr. Powers provided detailed analysis of the costs of such PV, concluding that there was little or no difference between the cost of energy provided by a project such as the CVEUP compared with the cost of energy provided by PV. (Ex. 616, pp. 13 – 14.) In addition, while PV is not a guick-start technology which can be dispatched on ten minutes' notice any time of the day or night, PV does provide power at a time when demand is likely to be high—on hot, sunny days. Mr. Powers acknowledged on cross-examination that the solar peak does not match the demand peak, but testified that storage technologies exist which could be used to manage this. The essential points in Mr. Powers' testimony about the costs and practicality of PV were uncontroverted."

## E. Quail Brush is an Obstacle to Meeting California Clean Renewable Energy Standard Targets and Numeric Objectives

California has set a "Renewable Energy Standard" (RES) of 33% production from clean renewable sources by 2020 with significant interim requirements of 24% by 2015 and 28% by 2018.9 Building a Quail Brush gas-fired plant is an obstacle to meeting the immediate renewable energy target of 24% by 2015 and all subsequent targets.

San Diego must contribute GHG reductions for the State to meet RES targets and overall GHG reduction goals. Quail Brush would add 220,000 tons of CO2 emissions/yr. A GHG compensation equivalent would require San Diego to remove 39,000 passenger cars from circulation and retrofit 33,000 more homes than is already in the GHG reduction plan. Neither measure is in any City or SANDAG regional transportation plan.

The consequences of not meeting State targets and goals include increasing the probability of permanent climate change coupled with greater frequency of extreme and catastrophic weather events. All are highly detrimental to public welfare.

#### II. Quail Brush is not Needed for the Public Convenience and Necessity

#### A. Solar Power is More Reliable than Gas

Solar power is completely available on hot, higher demand days, as there is little or no cloud cover. The solar resource is just as reliable as gas-fired generation when it counts, on those hot days with higher electricity demand. Hourly, the local solar resource is 98 percent available during the top 100 hours of demand. By comparison, reciprocating engine plants like Quail Brush are projected to have 94 to 98 percent availability. San Diego County has a solar rooftop and parking lot potential of approximately 7,000 MW, far outstripping the 450 MW of gas-fired peaking units that SDG&E proposes to build by 2020. 10

#### B. Quail Brush is High Cost

Quail Brush would result in higher energy bills and fewer local jobs than investing in solar. The \$150 million capital investment required for Quail Brush would cost ratepayers \$600 million over 20 years while only creating 11 permanent jobs. In contrast, rooftop solar lowers bills and has already resulted in over 1,000 local jobs tied to the solar industry. Current State estimates conclude there are 150 permanent jobs created for every 100MW of local solar added.

<sup>&</sup>lt;sup>9</sup> CARB Release #: 10-51, 9/23/2010, RES based upon requirements of AB32 (which requires reduction of GHG emissions to 1990 levels by 2020) and the Governor's Renewable Energy Standard Executive Order September 15, 2009.

<sup>&</sup>lt;sup>10</sup> "Fact Sheet: Why Quail Brush is Not Needed", San Diego Sierra Club "Run with the Sun" Campaign, September 20, 2012.

SDG&E is attempting to force the retirement of fully functional local power plants to create a need for the new peaking units that doesn't exist. These plants include NRG's 964 MW Encina Power Plant (Carlsbad), and nearly 200 MW of existing NRG peaker gas turbines. Encina can be retrofit at 1/10<sup>th</sup> the cost of a new peaker plant.

The California Energy Commission (CEC) has already approved 850 MW of new gasfired power plants for San Diego County in 2012, 550 MW Carlsbad Energy Center (June 2012) and 300 MW Pio Pico (September 2012).

#### C. Quail Brush is not Positioned to Substitute for Encina

CAISO testimony stated that neither Pio Pico nor Quail Brush can substitute for Encina (in Carlsbad) because neither project is located at a critical point in the San Onofre-to-San Diego transmission pathway like the Encina plant. Therefore, even if there was a need for Quail or Pio Pico to replace Encina, their proposed locations would not allow the plants to do so. (CEC Evidentiary Hearing 07-AFC-6, December 12, 2011, pages 58-61)

**D.** There is Substantial Excess of Generation and Peak Demand is Falling SDG&E's peak load demand has been static for seven years, reaching peaks of 4,601 in 2006 and 4,643 MW in 2010. Peak demand fell to 4,619 MW in 2012. In other years the peak load has been well below 4,600 MW. Claims that peak load is rising are wrong.

SDG&E has ample power generation reserves without San Onofre. SDG&E is required to maintain some reserve generation to assure grid reliability at peak demand. The requirement is 15 to 17 percent. SDG&E had reserves of about 24 percent during the hottest hour of the year on Sept.14, 2012.

San Diego's two large round-the-clock gas-fired plants, 540 MW Palomar Energy and 600 MW Otay Mesa, can still operate as peaking units if necessary when part of their operations are down for repair. This is not recognized by the state grid planning agency (CAISO). Simple recognition of this fact, as already requested by SDG&E and acknowledged by FERC, would add about 350 MW of local generation capacity at peak demand. Elected officials and stakeholder groups should assist SDG&E in its effort to persuade CAISO to change its position.

Trying to justify new power plants, SDG&E is attempting to force the retirement of completely functional local power plants owned by a third party: NRG's 964 MW Encina Power Plant, NRG's 14 MW Encina Gas Turbine, and NRG's 173 MW Cabrillo II Gas Turbines.

SDGE's first criteria responsibility when evaluating bid responses is to determine if it is on "greenfield" or "brownfield" land and to choose brownfield options first. This was disregarded and a greenfield was chosen even though brownfields (Carlsbad, re-leasing the NRG Escondido wellheads, among others) were available.

Generation located in the San Diego service area is not created equal. Generation has to be in the right sub area to meet reliability needs. Quail Brush is not in the right load pocket. The only load pocket where need might be found if SONGS remains offline is the Encina sub area near Carlsbad in North County San Diego -- just south of SONGS. Quail Brush is far away. Testimony in the SDGE LTPP from SDG&E states that they do not yet know how they will connect QB to LCR, nor do they know how much that would cost. Both technically and financially, it's a boondoggle.

#### III. There are more Prudent and Feasible Alternatives to Quail Brush

#### A. Distributed Generation is More Efficient

Distributed rooftop solar reduces the need for expensive new transmission lines, reduces transmission losses, and reduces the vulnerability associated with centralized facilities. Demand response programs are capable of further reducing demand peaks.

#### B. Utility Scale Energy Storage is Feasible and Effective

Utility scale and smaller energy storage technologies are efficient alternatives to effectively provide grid stability. Flywheels, compressed air and battery technologies are advancing rapidly and have already proven effective along with smaller or more traditional methods of energy storage.

Beacon Power has operated a 20MW flywheel plant in Stephentown, New York since 2011 and operates a 10MW flywheel plant in Hazle Township, Pennsylvania that is scheduled to reach 20MW in the second quarter of 2014. Beacon's Flywheels rapidly recycle stored surplus energy back into the grid when needed without negative impacts associated with gas peaker plants. There is no fuel or water use, no toxic emissions, noise levels are low and it can react more quickly than traditional peaker plants. Importantly, they also avoid the explosive risks of gas lines and facilities.

#### Conclusion

The California Public Utilities Commission has denied the application for a purchase power tolling agreement between Quail Brush and San Diego Gas & Electric. Quail Brush has failed to gain approval for its project from any elected body or planning group despite its powerful corporate influence because its project is weighted so heavily against the public interest. Therefore, we urge the application to be vacated, which will justifiably relieve the public from the burden of avoiding its long, ongoing shadow.

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<sup>11</sup> http://beaconpower.com/