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CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512



LARKSPUR ENERGY FACILITY STAFF ASSESSMENT FOR EMERGENCY PERMIT

EXECUTIVE SUMMARY

The Energy Commission staff has performed a fatal flaw analysis of the Larkspur Energy Facility and recommends that the project be approved by the Energy Commission with the Conditions of Certification proposed by staff. Staff further recommends that the certification be for the life of the project proposed that at the end of the power purchase agreement with either the California Independent System Operator or the California Department of Water Resources the project owner can verify that the project meets certain continuation criteria. These recommendations are based on the Energy Commission staff's independent assessment of the emergency permit application, independent studies and site evaluation, and consultation with agencies that would normally have permitting authority over the project except for the Energy Commission's emergency permitting authority provided by the Emergency Executive Orders of the Governor.

On March 8, 2001, the Wildflower Energy, LP (Wildflower) filed an emergency permitting application for the Larkspur Energy Facility (Larkspur). Wildflower submitted supplemental application information on March 15. Wildflower's application was deemed complete on March 16, 2001. The application is available in Adobe PDF format at the documents portion of the project website, at www.energy.ca.gov/sitingcases/peakers/larkspur.

Wildflower proposes to construct a simple-cycle dual-fueled peaking electric generation facility consisting of two GE LM6000 gas turbine engines generating approximately 90 MW. The Larkspur Energy Facility will be located at the corner of Harvest Road and Otay Mesa Road in the City of San Diego, San Diego County.

A PDF file showing the regional location of this facility is included as Figure 1 in the files for this staff assessment. The project vicinity map, Figure 2, as well as a site plan for the proposed facility are also available. These files may be downloaded from the project's web site at:http://www.energy.ca.gov/sitingcases/peakers/larkspur/documents.

The facility will connect to the existing San Diego Gas & Electric Border substation adjacent to the site via a new 500 foot 69 kV overhead transmission line. Natural gas will be supplied to the facility via a new 500 foot 12-inch diameter interconnection to the existing SDG&E 36-inch natural gas line adjacent to the site. During periods of natural gas curtailment, the facility will operate on low sulfur diesel fuel oil.

The Larkspur project will incorporate selective catalytic reduction (SCR) to reduce project emissions. NOx emissions, when operating with natural gas, are 5 ppm. NOx emissions during curtailment periods are 42 ppm.

The facility will consume approximately 320 gallons/minute (gpm) of water, on peak, supplied via an interconection with the existing Otay Water District line adjacent to the project. Waste water from the project will be discharged to the existing San Diego Metropolitan Wastewater District system sewer lines adjacent to the site.

Hazardous materials required and stored onsite for the project are aqueous ammonia and diesel fuel oil. During normal operation the facility will be fueled by natural gas. Diesel fuel oil will be used at the facility only during periods of natural gas curtailment.

The project is expected to begin commercial operation on July 5, 2001. The construction will take approximately 2 to 3 months and will begin upon Commission approval of the project.

EMERGENCY PERMITTING AUTHORITY

This project is being considered outside of the Energy Commission's normal power plant permitting process. Under Public Resources Code Section 25705, if the legislature or the Governor declares a state of energy emergency, the Commission has emergency authority to order the construction and use of generating facilities under terms and conditions it specifies to protect the public interest. This authority can be invoked only if the Legislature or Governor declares a state of emergency and the Commission determines that all reasonable conservation, allocation, and service restriction measures may not alleviate an energy supply emergency.

Governor Gray Davis declared a state of emergency on January 17, 2001. On February 8 and March 7, 2001, the Governor issued several executive orders and declared that all reasonable conservation, allocation, and service restriction measures may not alleviate an energy supply emergency.

In Executive Order D-26-01, and Executive Order D-28-01 the Governor ordered the Energy Commission to expedite the processing of applications for peaking and renewable power plants that can be on line by September 30, 2001. The Governor also declared that these projects are emergency projects under Public Resources Code section 21080(b)(4), and are thereby exempt from the requirements of the California Environmental Quality Act (CEQA). A summary of the emergency permitting process, including the proposed schedule, and a checklist showing the information required in an application, can be found on the web at:

http://www.energy.ca.gov/sitingcases/peakers/documents/index.html.

NEED FOR EMERGENCY PERMITTING

SUPPLY

The electric generation system must have sufficient operating generating capacity to supply the peak demand for electricity by consumers (including the transmission and distribution losses associated with power delivery). Also, an additional amount of

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reserve power plant capacity must be operational to act as instantaneous back-up supplies should some power plants or transmission lines unexpectedly fail. According to the Western Systems Coordinating Council (WSCC), to reliably deliver power, control area operators should maintain operating reserves of seven percent of their peak demand (including losses). If operating reserves decline below that level, customers that have agreed to be interrupted in exchange for reduced rates may be disconnected. If operating reserves get as low as one and a half percent, firm load will likely be shed locally, resulting in rotating blackouts, to avoid system-wide blackouts.

Current estimates by Energy Commission staff of consumer peak demand for electricity and reserve requirements, and of the expected availability of electricity capacity supplies for the summer of 2001, indicate that existing capacity supplies are not adequate to maintain a seven percent operating reserve margin particularly if summer temperatures rise above levels that have as much as a 10 percent chance of occurring. Therefore, additional capacity resources or demand reductions are needed now and by next summer to maintain a seven percent operating reserve margin under temperature conditions that have about a 10 percent chance of occurring.

Many efforts to reduce peak demand and supply new capacity are currently under way. More than 2,500 MW of new generation may be operational by July 2001. These projects include power plants already certified by the Energy Commission that are currently under construction; various upgrades, rerates and returns-to-service of existing power facilities; and new renewable generation responding to Energy Commission incentive programs. The emergency approval of new simple-cycle power plants at numerous locations throughout the state is also important to respond to peak summer demand and provide local electricity system reliability.

Staff assumes that power plant outages of about 3,000 MW will occur throughout the summer. If power plant outages this summer turn out to be greater than assumed, new capacity resources, such as peaking power plants, can help maintain an adequate reserve margin, and help avoid or shorten the duration of rotating blackouts.

PUBLIC HEALTH AND SAFETY

There is a reliability benefit associated with locating generation resources near the significant load centers. When load and generation are seriously out of balance, as they are in most service areas, the potential for system separation, islanding and cascading outages are significantly increased (U.S. Congress, Office of Technology Assessment, June 1990). If additional simple-cycle projects are not licensed and built, this reliability benefit will be foregone until additional larger baseload generation is built in such areas. Although it is impossible to accurately calculate the likelihood of system outages, such outages are certainly plausible and are much greater without new generation resources in most California service areas. Power outages frequently occur during, and are often precipitated by, periods of extreme heat. Extreme summer heat creates extreme demand primarily from air conditioning loads. In fact, it has been demonstrated that demand in California is particularly sensitive to small increases in maximum summer temperature (CEC 1999). In the summer of 1998 the system demand in California

increased by 4,000 MW as a result of a five-degree increase in temperature as compared to more typical maximums.

When major outages occur, there is an increased risk of significant public health and safety impacts. Fatalities and injuries associated with many types of accidents may result from outages, such as traffic accidents from signal and lighting failures, falls down unlighted stairways, fires caused by use of candles for lighting and unconventional open-flame cooking, loss of life support equipment in medical clinics, and electrical shock from improper use of portable electric generators. However, a much more serious risk is the potential morbidity and mortality associated with summer heat waves. Behind major epidemics, heat waves in California rank among the worst of all other natural disasters in the history of California for excess mortality. Heat waves have caused more fatalities in individual events than the 1906 earthquake (452 deaths), the San Francisquito Dam collapse of 1928 (450 deaths) and the Port Chicago explosion in 1944 (322 deaths) (Oechsli and Buechley 1970). The mortality associated with one California heat wave in 1955 resulted in 946 deaths (before air conditioning was in common use). Fortunately the mortality associated with such events is completely preventable (Semenza 1995). One of the most effective ways of avoiding mortality during heat waves is to spend time in air conditioned environments during the hottest parts of the day (CDC 2000). However, artificial climate control (air conditioning) may be mandatory to avoid fatalities when temperatures change abruptly (Bridger and Helfand 1968).

The availability of air conditioning has significantly reduced the mortality associated with heat waves in California and throughout the nation. It was estimated that increased use of air conditioning during the 1963 Los Angeles heat wave saved over 800 lives (Oechsli and Buechley 1970). Sensitive populations are often dependent on air conditioning to avoid aggravation of chronic health conditions such as chronic obstructive pulmonary disease or acute health effects such as heat stroke. It is widely recognized that hot weather conditions can significantly increase both morbidity and mortality, particularly among sensitive populations such as the very young, the elderly, and those with chronic diseases (Bridgerand and Heland 1968) (Schickele1947) (Oechsli and Buechley 1970) (Kalkstein et al 1989, 1993, 1997, 1998). Thus, shortages of electricity can impose risk of very serious impacts on the public, potentially increasing the risk of deaths due to heat waves. The vast majority of those who die in heat waves are at home without air conditioning and are elderly. Based on evaluation of the public health and safety risks associated with new projects, staff concludes that new generating projects are much more likely to reduce public health and safety risks than increase them.

AIR EMISSIONS OF BACK UP GENERATORS COMPARED WITH EMERGENCY PERMIT POWER PLANTS

California generation is among the cleanest in the country. This is due to negligible coal and oil use as generation fuel, the BARCT and Best Available Control Technology (BACT) rules, and a robust mix of geothermal, renewable, nuclear and hydroelectric generation. With the generation shortfalls California has experienced in recent months

due to abnormal forced and unforced outage rates and shortages of instate and out of state generation capacity, several options have been considered to supply additional generation without compromising public health and safety.

One option is to utilitze the existing fleet of diesel engines that are used as backup or standby generators for facilities such as hospitals, businesses, and essential services such as telephone, water, sewer, police and fire. Most of these generators are exempt from permitting as they are designed to only run when the grid fails to deliver electricity. That fleet is older and uncontrolled. It could represent 11,500 units, producing as much as 5,000 MW. However, as little as 1,200 MW may be compatible with operating in parallel with the grid. Most units are designed to only operate when isolated from the grid, and only with enough power for essential load at the facility.

Another option is to rely on a small number of diesel or natural gas engines that are permitted with emission control equipment as prime engines. Their emissions are in the range of 10 lb NOx/MWhr. However, they may not be tied to a generator (e.g., they may operate a pump or compressor) or are already operating at or near baseload, so they may not be able to supply much electricity to the grid. Other California generation options are less than 1.0 lb NOx/MWhr, but few are cleaner than the system NOx averages with the exception of demand reduction, solar, wind, and expensive fuel cells. The generation system emission averages will continue to decrease as the BARCT rules are fully implemented and the new generation with BACT installed comes online. The generation system emission average should approach 0.1 lb NOx/MWhr by 2005.

DIFFERENCES IN AIR EMISSIONS

Emission rates, rather than the sheer number of generators of any one type, are key to comparing emissions from different generation sources. For example, if there is a need for 1000 MW over 10 hours, or 10,000 MWhrs, then the NOx emissions are simply a product of the emission rate multiplied by 10,000. Diesel standby engine use would result in 150 tons of NOx over 10 hours, versus 1.5 tons from 1000 MW of natural gasfired generation over the same period of time. A new simple cycle power plant, such as the 5 ppm General Electric LM6000 combustion turbine equipped with emission controls proposed for the Larkspur facility, would produce 0.9 tons of NOx during 10 hours of operation.

The location and configuration of a source are also significant factors in assessing the effect on air quality. If the 1000 MW is concentrated in one location (e.g., a 1000 MW combustion turbine or combined cycle project), then the emission will be of relatively low concentration, will be buoyant, and will be emitted at a relatively high elevation from a stack. If the 1000 MW consists of 1,000 one-MW diesel standby generators, the emissions will be emitted near ground level, at relatively high concentrations, and probably over a wide region or even throughout the state. Similarly, a dispersed set of peakers (e.g., twenty 50MW General Electric LM6000s) could be located throughout the state. Without knowing their exact locations, their effects on air quality are not entirely known. A peaking power plant located next to a hill or mountain, because of the terrain or topography, or in an area that is already heavily polluted could result in violations whereas the other 1000 MW "configuration" might not.

EMISSION REDUCTION CREDIT BANK

The Governor's Executive Order D-24-01, charges the California Air Resources Board with the responsibility of creating a state emission reduction credit bank for the purpose of providing offsets for new or expanded peaking facilities that could add new power by this summer. This bank was initially funded with recent NOx reductions generated through the CARB's Carl Moyer Program, an incentive program. The incentives are grants that cover the incremental cost of cleaner on-road, off-road, marine, locomotive and stationary agricultural pump engines, as well as forklifts and airport ground support equipment. Because the new or expanded peaking facilities will operate under short term entitlements, for the purpose of responding to the energy crisis, the use of these mobile emission reductions are intended to provide NOx and particulate matter offsets for these peaking facilities.

These emission reduction credits (ERCs) are available through the Board to peaking power plants that need emission offsets in order to add new or expanded peaking capacity that will be on-line by September 30, 2001. These credits are intended to fully satisfy offset requirements of these power plants. The ERCs available from this bank are nitrogen oxides (NOx) and particulate matter less than 10 microns (PM10). Where needed, these ERCs will be issued to qualified power plant applicants for a three-year period. These ERCs will expire on November 1, 2003, to ensure that these credits will be available for three full summer peak seasons. The amount of Nox ERCs needed for this project is directly related to the emission control level of 5 parts per million Nox and the number of hours of operation. The CARB bank will make up to 21 tons per year available for purchase for each 50 MW power plant up to 100 MW total. Prior to the expiration of the CARB short term ERCs, applicants who use these credits will be required to secure permanent emission reductions for the remaining life of the power plant peaking units if the applicant desires to continue to operate the unit.

Heavy-duty engines are a significant source of smog-forming pollutants. About 525,000 heavy-duty diesel trucks are driven throughout the state, with another 680,000 diesel-fueled engines used in construction and agriculture. Together, diesel engines contribute about 40 percent of all NOx emissions from mobile sources. NOx is one of the main contributors to ground-level ozone, one of the most health-damaging components of smog. In addition, the fine particulate matter exhaust from heavy-duty diesel engines is a toxic air contaminant. The Carl Moyer incentive program focuses on reducing emissions of smog-forming oxides of nitrogen (NOx), but will also reduce particulate emissions.

Particulate matter includes many carbon particles (also called soot) as well as other gases that become visible as they cool. In 1998, California identified diesel particulate matter (diesel PM) as a toxic air contaminant based on its potential to cause cancer and other adverse health effects. In addition to PM, emissions from diesel-fueled engines include over 40 other cancer causing substances. Overall, emissions from diesel engines are responsible for the majority of the potential airborne cancer risk in California. Several studies have confirmed that the cancer risk from diesel particulates is greater than the risk from all other identified toxic air contaminants combined. Given

these findings, using the proposed emission reduction credit strategy will means to offset peaking power plant emissions as an interim measure.	be an e	effective

STAFF ANALYSIS OF THE LARKSPUR ENERGY FACILITY

AIR QUALITY

The analysis of the air quality impacts of emergency permit applications is performed by the California Air Resources Board and the local air pollution control district. Staff has proposed conditions of certification which require the applicant to limit fugitive dust emissions during construction and to comply with the authority to construct issued by the San Diego Air Pollution Control District. (Please see **Appendix A**).

On March 21, 2001, the San Diego Air Pollution Control District issued the following notice:

NOTICE OF PRELIMINARY DECISION TO APPROVE A SOURCE OF AIR POLLUTION BY THE SAN DIEGO AIR POLLUTION CONTROL DISTRICT

The San Diego Air Pollution Control District (District) hereby gives notice that in accordance with Rule 20.2 (New Source Review Non-Major Stationary Sources) of the District's Rules and Regulations, the Air Pollution Control Officer is proposing to issue an Authority to Construct for Application No. 976138 to Wildflower Energy LP for the Larkspur (Otay Mesa) simple cycle, nominal 90 MW, dual-fueled gas turbine power generating plant to be located at Harvest Road and Otay Mesa Road in San Diego, CA.

An evaluation of the air pollution impacts of this proposal was performed by the applicant and reviewed by the District. An air quality impact analysis was conducted pursuant to District Rule 20.2. Results indicate that the operations of this gas turbine power generating plant will not result in violation of, nor interfere with the attainment or maintenance of, any State or Federal ambient air quality standard. It is expected that all applicable District Rules and Regulations will be met when the equipment complies with conditions prescribed by the District.

Written comments concerning the District's proposed action may be submitted for a period of 30 days, commencing on March 21, 2001, and ending on April 20, 2001, to the Air Pollution Control District, 9150 Chesapeake Drive, San Diego, CA 92123.

Questions regarding this notice may be directed to Earnie Davis at (858) 650-4612 or Dan Speer at (858) 650-4607.

BIOLOGICAL RESOURCES

The site is an 8-acre parcel that has an extensive history of agricultural use. The land has been fallow for the past five years and is dominated by non-native, weedy vegetation (*Brassica sp., Salsola sp., Amaranthus sp., Bromus sp.*, etc.). The site also has four non-native tree species (*Schinus sp., Eucalyptus sp., Olea sp.*, and Arecaceae). Surveys by URS Biologists on January 24, 2001, found no Threatened, Endangered or Sensitive (TES) species on site or adjacent to the site. There is no

historical record of TES species occurrence on site or adjacent to the site (California Natural Diversity Database (CNDDB), CDFG 2001)(San Diego Association of Governments; (SANDAG) vegetation and sensitive species database). No TES species habitat is present on or adjacent to the site.

The site and adjacent areas do not contain designated critical habitat.

No mitigation is required based on the present knowledge of the site.

In response to comments from the California Department of Fish and Game, staff has added three additional conditions for the Larkspur Energy Facility.

BIO-7 requires the applicant to survey the site, and habitat within 300 feet of the project, to determine whether any active nests of sensitive bird species, including raptors, are present on the site.

BIO-8 requires the applicant, when landscaping the facility, to refrain from using any plant species considered invasive by the California Exotic Pest Plant Council.

BIO-9 requires the applicant, prior to ground disturbance, if the project is within the City of San Diego Subarea Plan for the Multiple Species Conservation Program, to purchase mitigation credits for the loss of non-native grasslands.

SOILS AND WATER

WATER

The Larkspur facility will use approximately 320-gpm of water at peak use. The water will be obtained from an existing Otay Water District (OWD) 24-inch water main located under Otay Mesa road. The water is potable, but will be treated by reverse osmosis membrane filtration and offsite trailer mounted demineralizers before utilization. Irrigation water will be from the same source but will not be treated prior to use. The OWD has sent an ability to serve letter and the applicant anticipates having a water supply agreement in time to support construction and operation.

The plant will produce three sources of wastewater: water from the reverse osmosis process, cooling tower blowdown and water from the Oil Water Separators (OWS). Total discharge will be approximately 53 gpm. The bulk of the wastewater (40.2 gpm) will be from the reverse osmosis process. This wastewater typically has solute concentrations 3 to 4 times that of the freshwater used. The remaining 12.8 gpm of wastewater will be from cooling tower blowdown. Two cooling towers will be used to provide cooling water for both the intake chilling systems and the lube oil system. Wastewater volume from the OWS process will not be significant.

The only wastewater treatment that will occur will be the OWS process. Water from specific plant drains around the combustion turbine generators will be routed to a separation sump with provisions for oil collection by an OWS.

Wastewater discharge from the site will be to the City of San Diego Metropolitan Wastewater District (MWD) industrial sewer system and will meet all of the requirements of the MWD for temperature, total dissolved solids and total organics. As of March 21, 2001 the application to discharge (NPDES permit) has not been filed.

SOILS

During project construction and operation, wind and water action can erode unprotected surfaces. An increase in the number of impervious surfaces (paved, compacted, etc.) can increase runoff, leading to the erosion of unprotected surfaces. Applicant has provided a draft Erosion and Sediment Control Plan, which identifies potential temporary and permanent erosion, and storm water runoff control measures. Storm water will be directed offsite to a riprap pad for flow velocity dissipation. The final plan will include specific best management practices (BMPs) to control storm water related pollution and minimize erosion and is subject to approval by the CPM.

No additional mitigation is required based on the present knowledge of the site.

No additional conditions of certification are required.

Spill Prevention/ Water Quality Protection

The site will have three main sources of potential spills; lubricating and hydraulic oil, diesel fuel and aqueous ammonia.

The oils that will be onsite will be 500 gallons of lubricating oil, 150 gallons of turbine oil and 40 gallons of hydraulic oil. In the event of natural gas curtailment 220,000 gallons of diesel fuel will be stored on site for use as an alternative fuel source. Secondary containment is a steel structure designed to hold 100% of the contents of the storage tank plus 10% for rainwater accumulation. The total quantity of oil exceeds the threshold quantity for Spill Prevention Control and Countermeasures Plan (SPCC) per Title 40, Code of Federal Regulations 112. Therefore a SPCC plan for the operating facility will be in place prior to introduction of diesel fuel at the facility. Applicant has supplied a draft plan for review.

Ammonia will be used on site for air pollution control using a Selective Catalytic Reduction (SCR) unit. The purposed aqueous ammonia concentration is approximately 19.5 percent and onsite storage will be in a 10,000-gallon tank. The onsite storage and handling will be regulated under the California Accidental Release Program (CalARP) requirements (California Health and Safety Code, Section 2770.1).

The construction site is less than 5 acres, so a National Pollution Discharge Elimination System (NPDES) permit for Storm Water Discharge from construction activities will not need to be submitted to the local Regional Water Quality Control Board (RWQCB). The

Storm Water Pollution Prevention Plan (SWPPP) is part of the NPDES permit application. During construction, the applicant will adhere to Best Management Practices (BMPs) for storm water pollution prevention.

The operating facility will require a NPDES permit. A Notice of Intent (NOI) will be submitted by the applicant to the RWQCB before the start of industrial activities per their requirements. A SWPPP and Storm Water Monitoring Plan will then be prepared for the site. All chemicals stored onsite will be in closed containers and will include secondary containment to prevent the flow of chemicals into storm sewers.

CULTURAL RESOURCES

As stated in the application the proposed Larkspur facility contains two cultural resources. The first, site CA-SDI-12337/5352, has been previously tested and identified as not significant and not eligible to be listed in the National Register of Historic Places. The great majority of this large scattered site is not inside the APE. The second is a historic homestead present within the project area. This is the McCool Homestead and it is shown on the 1903 Cuyamaca Quadrangle and testing was proposed in order to determine site significance.

Fieldwork was completed on March 13, 2001 by Gallegos & Associates, a cultural resource management firm with experience in the Otay Mesa area. The focus of the fieldwork was to locate and remove materials from the privies and dumps and to document the cistern.

A backhoe with a 12 inch bucket excavated four trenches across the location of the house and potential privy and dump areas. These areas were selected on the basis of early maps and through personnel communication with Wally Wetmore, a 70+year-old resident. Few artifacts were collected and no privies or dumps were encountered. Given the size of the area and the focus of work (to locate privies and dumps), monitoring of grading/construction is recommended to locate these features. The potential for privies or dumps to be revealed in the excavation of footings and the grading of the site will necessitate that a monitor be present during these activities.

Gallegos & Associates are presently completing a review of historical records to provide a background history of the property to the extent possible. The final report will include a regional history for Otay, a specific history for the property, research orientation, field methods and results, monitoring results and a report summary.

Adequate monitoring by a cultural resource specialist will allow for the protection of any subsurface archaeological and/or historic features that might be encountered.

LAND USE (INCLUDES SITE DESCRIPTION, NOISE, LAND USE, TRAFFIC, AND VISUAL)

SITE DESCRIPTION

The proposed site, located at the southeast corner of the intersection of Harvest Road and Otay Mesa Road in the City of San Diego, is an undeveloped parcel surrounded primarily by undeveloped land. The San Diego Gas and Electric Border substation is located immediately adjacent to the project site.

NOISE

Traffic and the existing adjacent sub-station generate noise in the vicinity of the project site. Noise impact information supplied in the application indicates that at the project boundary noise will be in the range of 65dBA to 76 dBA. However, the proposed mitigation, a 10-foot sound wall, will reduce this level of noise by at least 10 dBA at the property line. City of San Diego noise standards, Sec. 59.5.04.01, require noise less than 75 dBA. As noise dissipates over distance and the nearest noise receptors are three residences about one mile away, noise impacts from the project should be less than significant. Analysis provided by the applicant indicates that noise generated by the proposed project would dissipate to 39 dBA at the nearest residence. This is in conformance with the 50 dBA noise standard for night time noise in a City of San Diego residential area.

Specific requirements are included as conditions of certification to ensure that the project will minimize noise impacts. These include: a 25-hour community noise survey conducted within 30 days of project start-up (Noise-1); investigation, documentation and resolution of all project-related noise complaints (Noise-3); and, other practices as necessary to minimize noise-related impacts (Noise 2, Noise 4). These measures would reduce noise impacts to a less than significant level. However, the applicant will be required to implement additional engineering solutions, should the mitigated noise level exceed local standards.

LAND USE

Presently, the area surrounding the project site is undeveloped flat grassland and contains an existing electrical sub-station. According to the Otay Mesa Community Plan, (1981), the project is located within an area designated for Industrial Park use. The proposed use is compatible with this land use designation. The project would not have significant impacts on any existing land uses in the vicinity because the project is compatible with existing land use.

The project is a compatible land use in the Brown Field Land Use plan, which is located to the north of the proposed project. The project lies outside the Brown Field Airport Influence Area, the airport's "Approach Zone" and "Flight Activity Sub-district". The proposed 60-foot exhaust stack height would not exceed the height of adjacent

transmission power poles (i.e. 61 feet). The proposed project would not likely penetrate the airport imaginary surface associated with safe flight operations.

The applicant has not provided information on the specific off-site location of any administrative and warehousing facility to be used during construction. The applicant has indicated this facility will be nearby the project site. Appropriate information will be provided to the Compliance Project Manager regarding the location of the necessary off-site facilities prior to their use to insure that no significant impacts occur at the off-site location. There is an existing dirt road adjacent to the project site that could be used for lay down and office purposes during construction. An encroachment permit and a construction traffic control plan would be necessary to ensure that use of the roadway will not result in any significant impacts. To ensure that the applicant does not select a site for warehousing and office facilities that could result in any environmental impacts a condition of approval has been added (Land-2). Land-2 requires the applicant to use the existing disturbed right-of-way adjacent to the site for warehousing and office space during construction and to obtain the necessary encroachment permit from the City of San Diego and to submit a traffic control plan to the CEC for review and approval.

A pre-existing homestead may have been located on the project site. A discussion of **cultural resource** impacts is provided in the section on **Cultural Resources**. No sensitive biological resources have been located on the project site. A discussion of biological impacts is provided in the section on **Biological Resources**. Project impacts from traffic were identified as less-than-significant. A discussion of traffic impacts is provided in the section on **Traffic and Transportation**. The project visual impacts would be less than significant. A discussion of visual impacts is provided in the section on **Visual Resources**. The project noise impacts would be less than significant. A discussion of noise impacts is provided in the section on **Noise**.

Implementation of **Land-1** would ensure that the proposed project complies with all applicable LORS including landscaping and setback requirements.

TRAFFIC AND TRANSPORTATION

Site access is provided by State Route 905 then east to Otay Mesa Road and then to Harvest Road. Proposed access routes to the site are currently operating at a satisfactory level.

Data submitted by the applicant indicates a less than satisfactory operating condition (LOS E) at one point on Otay Mesa Boulevard, which is a primary access route to the project site. This traffic data is outdated because Otay Mesa Boulevard has been widened in this area, and the current traffic operating condition is satisfactory according to information provided by the City of San Diego.

The project will not generate significant traffic during operation. However, emergency tanker truck supply to the diesel storage tank on-site in the event of natural gas curtailment may temporarily increase traffic volumes. This will occur only in an upset situation and will not occur on a routine basis. Data supplied by the applicant indicates

that local roads have adequate carrying capacity for such emergencies. Normal project operation will not result in significant traffic impacts.

During construction of the natural gas and sewer line construction along Harvest Road, temporary disruption of traffic may occur. Implementation of a Transportation Control Plan (TCP) would reduce this impact to a less than significant level.

Construction traffic will be of a temporary nature, (2-3 months) and highly variable. No specific TCP for roads during project construction has been provided, but a list of safety measures to be included in the required TCP is provided which would be adequate. A TCP would be required prior to any road disruption. The project would be required to comply with Caltrans and City/County limitations on vehicle sizes and weights, and limitations for encroachment into public right-of-way by the conditions of certification, (Trans-1 and Trans-2, respectively).

With implementation of the above mitigation measures the project's impact on traffic and transportation would not be significant.

VISUAL RESOURCES

The project site is characterized by flat and rolling grassland with sparse vegetation and undeveloped parcels. An existing electrical sub-station and associated transmission lines are located adjacent to the project site. There are no important aesthetic resources in or near the project area, and the nearest residences are located approximately one mile away. Therefore, the majority of existing public views of the site are pre-dominantly long distance. The location of an existing electrical sub-station and transmission line adjacent to the site has already resulted in reduced visual quality of the area.

The project site will be surrounded with a 10-foot sound wall and will include a 60-foot exhaust stack. The applicant has proposed landscaping in compliance with the requirements of the City of San Diego's Otay Mesa Development District Guidelines. Landscaping would reduce aesthetic impacts of the sound wall. The distance of the project from the existing residences and the use of landscaping to soften views of the wall will serve to ensure that the project visual impacts would be less than significant.

The project is subject to specific conditions of certification that require steps to ensure mitigation of potential visual impacts, (**Vis-1** and **Vis-2**), and a landscaping plan for the project (**Vis-3**). These measures will reduce aesthetic impacts to a less than significant level.

ENVIRONMENTAL JUSTICE

For all siting cases, including the emergency permitting process, Energy Commission staff follows the federal guidelines' two-step screening process. The process assesses:

- whether the potentially affected community includes minority and/or low-income populations; and
- whether the environmental impacts are likely to fall disproportionately on minority and/or low-income members of the community.

Based on the screening process for the subject facility, there are no minority or low-income populations within the project area. Therefore, there are no environmental justice issues associated with the Larkspur Energy Facility project.

ENGINEERING

FACILITY DESIGN

The project, including its linear facilities, such as water and natural gas pipelines, will be designed and constructed in compliance with the California Building Code (CBC) and all other applicable engineering LORS (see Condition of Certification **GEN-1**). This will be assured by the Commission's delegate Chief Building Official (CBO), whose duties are prescribed under the CBC. These duties include the review of project designs by qualified engineers and the inspection of project construction by qualified inspectors. The CBO's performance, in turn, will be ensured through monitoring by the Commission's Compliance Project Manager.

TRANSMISSION SYSTEM ENGINEERING

The facility will connect to the SDG&E border substation via a 500 foot 69 kV transmission line. There are no significant transmission issues. Based on the results of the interconnection study the operation of Larkspur facility will not require significant downstream electric facilities and will comply with safety standards¹. However, the interconnection of the plant does result in the off-peak overload of one transmission line under normal conditions, the overload of several lines under n-1² contingency conditions and the overstress of two 69 kV circuit breakers. These overloads will require the mitigation measures discussed in the California Integrated System Operators preliminary approval³ for the Larkspur plant. No new or modified facilities will be located outside existing substation fencelines.

- The off-peak overload conditions will require either reinforcing the overloaded lines or the implementation of a generator tripping scheme that trips the Larkspur facility under certain conditions.
- The n-1 overloads will require the Larkspur facility to participate in a remedial action scheme that will trip the generator when the specified contingencies occur.
- The short circuit analysis found two 69 kV circuit breakers at the South Bay power
 plant that overload and will require either replacement of the breakers or the
 installation of current limiting fuses at the Larkspur plant. Because the short-circuit
 analysis did not include projects ahead of Larkspur in the SDG&E interconnection

¹ CPUC General Order 95, CPUC Rule 21, Title 8, Articlies 35, 36 and 37, Title 8 CCR, Sections 2700-2974, CPUC Decision 93-11-013, Federal Communications Commission Part 15, Public Resources Code 4292-4296, and the National Electric Code.

² An N-1 is the outage of a single facility.

³ Letter from Jeff Miller of the Cal-ISO to David Korinek, March 16, 2001.

queue but with online dates after 2001, other circuit breaker overloads may be identified in future studies. The environmental impacts of such breaker installation will be analyzed, but is likely to have no environmental impacts, and likely exempt under CEQA.

Thus, the interconnection of the Larkspur power plant will not require the construction of downstream facilities and there are no significant transmission issues.

STAFF CHECKLIST

The following Emergency Permit Evaluation Checklist is designed to provide an easy-to-follow guide to the application and staff's analysis of project impacts. Included in the Checklist are the Application Requirements, a determination by staff of whether or not the material was provided, and the location of the information in the applicant's document. The checklist then shows staff's analysis of significant issues, any special conditions needed to resolve those issues, and any required comments or references.

LARKSPUR ENERGY FACILITY EMERGENCY PERMIT EVALUATION CHECKLIST CALIFORNIA ENERGY COMMISSION

4	Application Requirement	Y/N	Application pages	Significant Issues	Special Conditions	Comments
		Yes or no, if in app.	Where in application is it.	Either leave blank; or provide a short summary or reference to a note to be inserted below.	Flag any special condition if included; Also flag any standard condition that is not being included. Otherwise, leave blank.	If necessary, include a short note of explanation, or reference to a note to be inserted below.
1	Project Description					
1.1	Project owner/operator (Name, title, address, phone)	Yes	1			
1.2	Overview of power plant and linear facilities	Yes	1			
1.3	Structure demensions (size and height), plan and profile	Yes	3			
1.4	Full size color photo of the site and rendering of proposed facility if available	Yes/ No	3; Attach.16			
1.5	Maximum foundation depth, cut and fill quantities	Yes	Pages 3-4	Reinforced concrete mat foundations, approximately three feet thick, will rest on a site graded with balanced cut and fill.		

<u>A</u>	pplication Requirement	<u>Y/N</u>	Application	Significant Issues	Special Conditions	<u>Comments</u>
			pages			
1.6	Conformance with California Building Code	Yes	Page 4			All engineering design and construction work will be performed to the applicable LORS, including the California Building Code.
1.7	Proposed operation (hours per year)	Yes	4			
1.8	Expected on-line date	Yes	4			
1.9	Proposed duration of operation (years)	Yes	4			
1.10	Identify transmission interconnection facilities	Y	2 & 4			Approximately 500 foot line to Border substation
1.11	Transmission interconnection application	Y	Attachment 2 is study			
1.12	"Down-stream" transmission facilities, if known	Y	Attachment 2	No significant downstream facilities. However, additional circuit breakers beyond those identified in study may need to be replaced.		Several projects that are in San Diego Gas and Electric's service territory, but with online dates after the Larkspur facility were not modeled in service for the short circuit study. Further studies may identify other breakers that will need to be replaced.
1.13	Fuel interconnection facilities	Yes	5; Attach. 3			

<u>A</u>	pplication Requirement	<u>Y/N</u>	Application pages	Significant Issues	Special Conditions	Comments
1.14	Fuel interconnection application	Yes	5; Attach. 3			
1.15	Water requirements and treatment	Yes	5			
1.16	Water interconnection facilities (supply/discharge)	Yes	5			
1.17	Source and quality of water supply	Yes	6; Attach. 4			
1.18	Water supply agreement/ proof of water supply	Yes	6; Attach. 5			Confimation of ability to serve included. Water supply agreement to be executed.
2	Site Description					
2.1	Site address (street, city, county)	Yes	6			
2.2	Assessor's parcel number	Yes	6			
2.3	Names and addresses of all property owners within 500 feet of the project site or related facilities in both hard copy and electronic mail merge format.	Yes	6: Attachment 12			
2.4	Existing site use	Yes	7			
2.5	Existing site characteristics (paved, graded, etc.)	Yes	7			
2.6	Layout of site (include plot plan)	Yes	7; Figure 3			

<u> </u>	pplication Requirement	<u>Y/N</u>	Application pages	Significant Issues	Special Conditions	Comments
2.7	Zoning and general plan designations of site and linear facilities	Yes	7			
2.8	Ownership of site (Name, address, phone)	Yes	7			
2.9	Status of site control	Yes	7			
2.10	Equipment laydown area – size and location	Yes	8			Laydown area specified, but administrative and warehousing facilities has not yet been determined" but will be exisiting facilities.
3	Construction Description					
3.1	Construction schedule	Yes	8			Construction schedule calls for 2-3 months construction and on-line 7/5/01.
3.2	Workforce requirements (peak, average)	Yes	8			Workforce requirements spread work over 4 months.
	Power Purchase Contract (DWR, ISO, other)					
4.1	Status of negotiations and expected signing date	Yes	8-9			

4	Application Requirement	Y/N	Application pages	Significant Issues	Special Conditions	Comments
5	Air Emissions					
5.1	Nearest monitoring station (location, distance)	Yes	9			
5.2	Provide complete self certification air permit checklist	Yes	9;Attach. 6			
5.3	Provide complete air permit application	Yes	9: Attach. 7			
5.4	Status of air permit application with air district	Yes	9			
5.5	Status of offsets and/or mitigation fees, as required	Yes	9			
6	Noise					
6.1	Local noise requirements	Yes	9-10			
6.2	Nearest sensitive receptor (type, distance)	Yes	10	Nearest receptor one mile to the east.		Mitigation will reduce level at nearest receptor to 30 dBA.
6.3	Project noise level at nearest property line	Yes	10	Without mitigation, 65 dBA to 76 dBA at the property line		Mitigation required will reduce to below San Diego sound level limit
6.4	Proposed mitigation if required	Yes	10	Without mitigation, 65 dBA to 76 dBA at the property line	Sound wall required	Sound wall will reduce to 55 dBA to 66 dBA.

:	Application Requirement	Y/N	Application pages	Significant Issues	Special Conditions	Comments
7	Hazardous Materials					
7.1	Type and volume of hazardous materials on-site	Y	Section 7	none	HAZ-1	HAZ-1 has been changed to clarify that approved materials include those that were identified by type and quantity in the Application for Certification.
7.2	Storage facilities and containment	Y	Section 7	none		
8	Biological resources					
8.1	Legally protected species* and their habitat on site, adjacent to site and along right of way for linear facilities (*threatened or endangered species on State or federal lists, State fully protected species)	Yes	12; Attach. 8		ADD BIO-7-9	
8.2	Designated critical habitat on site or adjacent to site (wetlands, vernal pools, riparian habitat, preserves)	Yes	12; Attach. 8			
8.3	Proposed mitigation as required	Yes	12			

<u> </u>	Application Requirement	<u>Y/N</u>	Application	Significant Issues	Special Conditions	<u>Comments</u>
			pages			
9	Land Use					
9.1	Local land use restrictions (height, use, etc.)	Yes	12			
9.2	Use of adjacent parcels (include map)	Yes	13			All adjacent parcels except one are vacant.
9.3	Ownership of adjacent parcels – site and linears	Yes	13; Attachment 12			
9.4	Demographics of census tract where project is located (most current available)	Yes	13	Census tract demographics unknown.		Demographic data supplied in application satisfies requirement.
10	Public Services					
10.1	Ability to serve letter from Fire District	Yes	14; Attach. 15			
10.2	Nearest fire station	Yes	14			
11	Traffic and Transportation					
11.1	Level of Service (LOS) measurements on surrounding roads – a.m. and p.m. peaks	Yes	15	San Diego data indicates that access routes to the site are operating at acceptable levels.		All proposed access routes are satisfactory.
11.2	Traffic Control Plan for roads during construction period	Yes	15	Specific TCP not provided in application		List of safety measures to be included in TCP
11.3	Traffic impact of linear facility construction	Yes	16			
11.4	Equipment transport route	Yes	16			

Application Requirement	Y/N	Application pages	Significant Issues	Special Conditions	Comments
11.5 Parking requirements – workforce and equipment	Yes	17			
12 Soil and Water Resources					
12.1 Wastewater volume, quality,	Yes	17		Omit SOIL&WATER-1	
treatment				ADD SOIL&WATER-5,6	
12.2 Status of permits for wastewater discharge or draft permit (WDR/NPDES)	Yes	17			
12.3 Draft Erosion Prevention and Sedimentation Control Plan or Mitigation Strategy	Yes	18; Attach.13			
12.4 Spill Prevention/Water Quality Protection Plans	Yes	18-19; Attach. 18			
13 Cultural Resources					
13.1 Identification of known historic/prehistoric sites	yes	Pg. 20	Presence of historic McCool Homestead noted in application.	Testing of homestead area for privies and dumps was recommended. Cistern should be documented.	

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Application Requirement	<u>Y/N</u>	Application pages	Significant Issues	Special Conditions	Comments
13.2 Proposed mitigation if required	yes	Pg. 20	Subsurface testing performed March 13, 2001 by Gallegos & Associates. No privies or dumps located during testing. Cistern was documented.	Standard condition of certification CUL-1 does not apply due to slight possibility that cultural resources could be encountered in project. Cultural Resource monitoring shall be required during earth moving operations.	Cultural Resource monitoring shall be required during earth moving operations.
14 Paleontological Resources					
14.1 Identification of known paleontologic sites	Yes	21; Attach. 11			
14.2 Proposed mitigation if required	Yes	21		Standard condition of certification PALEO-1 does not apply due to slight possibility that cultural resources could be encountered in project	No mitigation is required.
15 Visual resources					
15.1 Plan for landscaping and screening to meet local requirements	Yes	p. 21; Attach. 14			
15.2 Full size color photo of the site and rendering of proposed facility with any proposed visual mitigation if available	Yes/ No	p. 21; Attach. 16			Rendering was not provided during review.

Application Requirement	<u>Y/N</u>	Application pages	Significant Issues	Special Conditions	Comments
16 Transmission System Engineering		pagoo			
16.1 Conformance with Title 8, High Voltage Electrical Safety Orders, CPUC General Order 95 (or NESC), CPUC Rule 21, PTO Interconnection Requirements, and National Electric Code	Yes	21			

LARKSPUR ENERGY FACILITY GENERAL CONDITIONS INCLUDING COMPLIANCE MONITORING AND CLOSURE PLAN

INTRODUCTION

General conditions (and the Compliance Plan) have been established as required by Public Resources Code section 25532. The plan provides a means for assuring that the facility is constructed, operated and closed in accordance with applicable environmental and public health and safety laws, ordinances, regulations, and standards, and with conditions of certification as approved by the California Energy Commission (Energy Commission).

The Compliance Plan is comprised of general conditions and technical (environmental and engineering) conditions as follows:

General conditions that set forth the duties and responsibilities of the Compliance Project Manager (CPM), the project owner, and delegate agencies; the requirements for handling confidential information and maintaining the compliance record; procedures for settling disputes and making post-certification changes; administrative procedures to verify the compliance status; and requirements for facility closure plans.

Specific conditions for each technical area contain the measures required to mitigate potential adverse impacts associated with construction, operation and closure to an insignificant level. Specific conditions may also include a verification provision that describes the method of verifying that the condition has been satisfied.

DEFINITIONS

To ensure consistency, continuity and efficiency, the following terms, as defined, apply to all technical areas, including Conditions of Certification:

Site Mobilization

Moving trailers and related equipment onto the site, usually accompanied by minor ground disturbance, grading for the trailers and limited vehicle parking, trenching for utilities, installing utilities, grading for an access corridor, and other related activities. Ground disturbance, grading, etc. for site mobilization are limited to the portion of the site necessary for placing the trailers and providing access and parking for the occupants. Site mobilization is for temporary facilities and is therefore not considered construction.

Ground Disturbance

Onsite activity that results in the removal of soil or vegetation, boring, trenching or alteration of the site surface. This does not include driving or parking a passenger vehicle, pickup truck, or other light vehicle, or walking on the site.

Grading

Onsite activity conducted with earth-moving equipment that results in alteration of the topographical features of the site such as leveling, removal of hills or high spots, or moving of soil from one area to another.

Construction

[From Public Resources Code section 25105.] Onsite work to install permanent equipment or structures for any facility. Construction does **not** include the following:

- a. The installation of environmental monitoring equipment.
- b. A soil or geological investigation.
- c. A topographical survey.
- d. Any other study or investigation to determine the environmental acceptability or feasibility of the use of the site for any particular facility.
- e. Any work to provide access to the site for any of the purposes specified in a, b, c, or d.

TERM OF CERTIFICATION

Certification is for the life of the project if, at the end of the power purchase agreement with either the California Independent System Operator or the California Department of Water Resources, the project owner can verify that the project meets the following continuation criteria:

- the project meets BACT and has permanent air emission offsets for the projected hours of operation;
- the project is in compliance with all Energy Commission conditions specified in the Decision;
- the project will continue to have control of the site; and
- the project is a permanent facility.

COMPLIANCE PROJECT MANAGER (CPM) RESPONSIBILITIES

A CPM will oversee the compliance monitoring and shall be responsible for:

1. ensuring that the design, construction, operation, and closure of the project facilities is in compliance with the terms and conditions of the Commission Decision;

- 2. resolving complaints;
- 3. processing post-certification changes to the conditions of certification, project description, and ownership or operational control;
- 4. documenting and tracking compliance filings; and
- 5. ensuring that the compliance files are maintained and accessible.

The CPM is the contact person for the Energy Commission and will consult with appropriate responsible agencies and the Energy Commission when handling disputes, complaints and amendments.

The Commission has established a toll free compliance telephone number of **1-800-858-0784** for the public to contact the Commission about power plant construction or operation-related questions, complaints or concerns.

Pre-Construction and Pre-Operation Compliance Meeting

The CPM may schedule pre-construction and pre-operation compliance meetings prior to the projected start-dates of construction, plant operation, or both. The purpose of these meetings will be to assemble both the Energy Commission's and the project owner's technical staff to review the status of all pre-construction or pre-operation requirements contained in the Energy Commission's conditions of certification to confirm that they have been met, or if they have not been met, to ensure that the proper action is taken.

Energy Commission Record

The Energy Commission shall maintain as a public record, in either the Compliance file or Docket file, for the life of the project (or other period as required):

- 1. All documents demonstrating compliance with any legal requirements relating to the construction and operation of the facility;
- 2. All complaints of noncompliance filed with the Energy Commission; and
- 3. All petitions for project modifications and the resulting staff or Energy Commission action taken.

PROJECT OWNER RESPONSIBILITIES

It is the responsibility of the project owner to ensure that the general compliance conditions and the conditions of certification are satisfied. The general compliance conditions regarding post-certification changes specify measures that the project owner must take when requesting changes in the project design, compliance conditions, or ownership. Failure to comply with any of the conditions of certification or the general compliance conditions may result in reopening of the case and revocation of Energy Commission certification, an administrative fine, or other action as appropriate.

Access

The CPM, responsible Energy Commission staff, and delegate agencies or consultants, shall be guaranteed and granted unrestricted access to the power plant site, related facilities, project-related staff, and the records maintained on site, for the purpose of conducting audits, surveys, inspections, or general site visits. Although the CPM will normally schedule site visits on dates and times agreeable to the project owner, the CPM reserves the right to make unannounced visits at any time.

Compliance Record

The project owner shall maintain project files on-site or at an alternative site approved by the CPM, for the life of the project. The files shall contain copies of all "as-built" drawings, all documents submitted as verification for conditions, and all other project-related documents for the life of the project, unless a lesser period is specified by the conditions of certification.

Energy Commission staff and delegate agencies shall, upon request to the project owner, be given unrestricted access to the files.

Compliance Verifications

Conditions of certification may have appropriate means of "verification". The verification describes the Energy Commission's procedure(s) to ensure post-certification compliance with adopted conditions. The verification procedures, unlike the conditions, may be modified, as necessary by the CPM, without full Energy Commission approval.

Verification of compliance with the conditions of certification can be accomplished by:

- reporting on the work done and providing the pertinent documentation in monthly and/or annual compliance reports filed by the project owner or authorized agent as required by the specific conditions of certification;
- appropriate letters from delegate agencies verifying compliance;
- Energy Commission staff audits of project records; and/or
- Energy Commission staff inspections of mitigation and/or other evidence of mitigation.

A cover letter from the project owner or authorized agent is required for all compliance submittals and correspondence pertaining to compliance matters. The cover letter subject line shall identify the involved condition(s) of certification by condition number and include a brief description of the subject of the submittal.

All submittals shall be addressed as follows:

Compliance Project Manager California Energy Commission 1516 Ninth Street (MS-2000) Sacramento, CA 95814

Confidential Information

Any information, which the project owner deems confidential shall be submitted to the Energy Commission's Docket with an application for confidentiality pursuant to Title 20, California Code of Regulations, section 2505(a). Any information, which is determined to be confidential, shall be kept confidential as provided for in Title 20, California Code of Regulations, section 2501 et. seq.

Reporting of Complaints, Notices, and Citations

Prior to the start of construction, the project owner must send a letter to property owners living within 500 feet of the project notifying them of a telephone number to contact project representatives with questions, complaints or concerns. If the telephone is not staffed 24 hours per day, it shall include automatic answering, with date and time stamp recording. The telephone number shall be posted at the project site and easily visible to passersby during construction and operation.

The project owner shall report and provide copies of all complaint forms, notices of violation, notices of fines, official warnings, and citations, within 10 days of receipt, to the CPM.

GENERAL CONDITIONS FOR FACILITY CLOSURE

In order to ensure that a planned facility closure does not create adverse impacts, plant closure must be consistent with all applicable laws, ordinances, regulations, standards (LORS), and local/regional plans in existence at the time of closure. To ensure adequate review of a planned project closure, the project owner shall submit a proposed facility closure plan to the Energy Commission for review and approval at least three months prior to commencement of closure activities (or other period of time agreed to by the CPM).

DELEGATE AGENCIES

To the extent permitted by law, the Energy Commission may delegate authority for compliance verification and enforcement to various state and local agencies that have expertise in subject areas where specific requirements have been established as a condition of certification. If a delegate agency does not participate in this program, the Energy Commission staff will establish an alternative method of verification and enforcement. Energy Commission staff reserves the right to independently verify compliance.

In performing construction and operation monitoring of the project, the Energy Commission staff acts as, and has the authority of, the Chief Building Official (CBO). The Commission staff retains this authority when delegating to a local CBO. Delegation of authority for compliance verification includes the authority for enforcing codes, the responsibility for code interpretation where required, and the authority to use discretion, as necessary, in implementing the various codes and standards.

ENFORCEMENT

The Energy Commission's legal authority to enforce the terms and conditions of its Decision is specified in Public Resources Code sections 25534 and 25900. The Energy Commission may amend or revoke the certification for any facility, and may impose a civil penalty for any significant failure to comply with the terms or conditions of the Commission Decision. The specific action and amount of any fines the Commission may impose would take into account the specific circumstances of the incident(s). This would include such factors as the previous compliance history, whether the cause of the incident involves willful disregard of LORS, inadvertence, unforeseeable events, and other factors the Commission may consider.

Moreover, to ensure compliance with the terms and conditions of certification and applicable laws, ordinances, regulations, and standards, delegate agencies are authorized to take any action allowed by law in accordance with their statutory authority, regulations, and administrative procedures.

NONCOMPLIANCE COMPLAINT PROCEDURES

Any person or agency may file a complaint alleging noncompliance with the conditions of certification. Such a complaint will be subject to review by the Energy Commission pursuant to Title 20, California Code of Regulations, section 1230 et. seq., but in many instances the noncompliance can be resolved by using the informal dispute resolution process. Both the informal and formal complaint procedures, as described in current State law and regulations, are described below. They shall be followed unless superseded by current law or regulations.

INFORMAL DISPUTE RESOLUTION PROCEDURE

The following procedure is designed to informally resolve disputes concerning interpretation of compliance with the requirements of this compliance plan. The project owner, the Energy Commission, or any other party, including members of the public, may initiate this procedure for resolving a dispute. Disputes may pertain to actions or decisions made by any party including the Energy Commission's delegate agents.

This procedure may precede the more formal complaint and investigation procedure specified in Title 20, California Code of Regulations, section 1230 et. seq., but is not intended to be a substitute for, or prerequisite to it. This informal procedure may not be used to change the terms and conditions of certification as approved by the Energy Commission, although the agreed upon resolution may result in a project owner proposing an amendment.

The procedure encourages all parties involved in a dispute to discuss the matter and to reach an agreement resolving the dispute. If a dispute cannot be resolved, then the matter must be referred to the full Energy Commission for consideration via the complaint and investigation process. The procedure for informal dispute resolution is as follows:

Request for Informal Investigation

Any individual, group, or agency may request the Energy Commission to conduct an informal investigation of alleged noncompliance with the Energy Commission's terms and conditions of certification. All requests for informal investigations shall be made to the designated CPM.

Upon receipt of a request for informal investigation, the CPM shall promptly notify the project owner of the allegation by telephone and letter. All known and relevant information of the alleged noncompliance shall be provided to the project owner and to the Energy Commission staff. The CPM will evaluate the request and the information to determine if further investigation is necessary. If the CPM finds that further investigation is necessary, the project owner will be asked to promptly investigate the matter and within seven (7) working days of the CPM's request, provide a written report of the results of the investigation, including corrective measures proposed or undertaken, to the CPM. Depending on the urgency of the noncompliance matter, the CPM may conduct a site visit and/or request the project owner to provide an initial report, within forty-eight (48) hours, followed by a written report filed within seven (7) days.

Request for Informal Meeting

In the event that either the party requesting an investigation or the Energy Commission staff is not satisfied with the project owner's report, investigation of the event, or corrective measures undertaken, either party may submit a written request to the CPM for a meeting with the project owner. Such request shall be made within fourteen (14) days of the project owner's filing of its written report. Upon receipt of such a request, the CPM shall:

- Immediately schedule a meeting with the requesting party and the project owner, to be held at a mutually convenient time and place and secure the attendance of appropriate Energy Commission staff and staff of any other agency with expertise in the subject area of concern as necessary;
- 2. Conduct such meeting in an informal and objective manner; and,
- 3. After the conclusion of such a meeting, promptly prepare and distribute copies to all in attendance and to the project file, a summary memorandum which fairly and accurately identifies the positions of all parties and any conclusions reached.

FORMAL DISPUTE RESOLUTION PROCEDURE-COMPLAINTS AND INVESTIGATIONS

If either the project owner, Energy Commission staff, or the party requesting an investigation is not satisfied with the results of the informal dispute resolution process, such party may file a complaint or a request for an investigation with the Energy Commission's General Counsel. Disputes may pertain to actions or decisions made by any party including the Energy Commission's delegate agents. Requirements for complaint filings and a description of how complaints are processed are in Title 20, California Code of Regulations, section 1230 et. seq.

The Chairman, upon receipt of a written request stating the basis of the dispute, may grant a hearing on the matter, consistent with the requirements of noticing provisions. The Commission shall have the authority to consider all relevant facts involved and make any appropriate orders consistent with its jurisdiction (Title 20, California Code of Regulations, sections 1232 - 1236).

POST CERTIFICATION CHANGES TO THE COMMISSION DECISION: AMENDMENTS, INSIGNIFICANT PROJECT CHANGES

The project owner must petition the Energy Commission, pursuant to Title 20, California Code of Regulations, section 1769, to 1) delete or change a condition of certification; 2) modify the project design or operational requirements; and 3) transfer ownership or operational control of the facility.

A petition is required for **amendments** and for **insignificant project changes**. In all cases, the petition or letter requesting a change should be submitted to the Commission's Docket in accordance with Title 20, California Code of Regulations, section 1209. The criteria that determine which type of change process applies are explained below.

EXECUTIVE ORDER

Executive Order D-25-01 issued by the Governor of the State of California, which accelerates processing of certain project modifications, will be applied to all qualifying project modifications requested until December 31, 2001.

AMENDMENT

A proposed project modification will be processed as an amendment if it involves a change to a condition of certification, an ownership or operator change, or a potential significant environmental impact.

INSIGNIFICANT PROJECT CHANGE

The proposed modification will be processed as an insignificant project change if it does not require changing the language in a condition of certification, have a potential for

significant environmental impact, and cause the project to violate laws, ordinances, regulations or standards.

VERIFICATION CHANGE

Changes to condition verifications require CPM approval and may require either a written or oral request by the project owner. The CPM will provide written authorization of verification changes.

TECHNICAL AREA CONDITIONS OF CERTIFICATION

NOISE

NOISE-1 The project permitted under this emergency process shall be required to comply with applicable community noise standards.

<u>Verification:</u> Within 30 days of the project first achieving a sustained output of 80 percent or greater of rated capacity, the project owner shall conduct a 25-hour community noise survey, utilizing the same monitoring sites employed in the pre-project ambient noise survey as a minimum. No single piece of equipment shall be allowed to stand out as a source of noise that draws legitimate complaints. Steam relief valves shall be adequately muffled to preclude noise that draws legitimate complaints. If the results from the survey indicate that the project noise levels at the closest sensitive receptor are in excess of 50 dBA between the hours of 10 PM and 7 AM, additional mitigation measures shall be implemented to reduce noise to a level of compliance with this limit.

NOISE-2 Prior to the start of rough grading, the project owner shall notify all residents within one mile of the site of the start of construction and will provide a complaint resolution process.

<u>Verification:</u> The project owner shall provide the CPM with a statement, attesting that the above notification has been performed.

NOISE-3 Throughout the construction and operation of the project, the project owner shall document, investigate, evaluate, and attempt to resolve all project related noise complaints.

<u>Verification:</u> Within 30 days of receiving a noise complaint, the project owner shall file a copy of the Noise Complaint Resolution Form, or similar instrument approved by the CPM, with the County Environmental Health Department, and with the CPM, documenting the resolution of the complaint. If mitigation is required to resolve a complaint, and the complaint is not resolved within a 30-day period, the project owner shall submit an updated Noise Complaint Resolution Form when the mitigation is finally implemented.

NOISE-4 Night construction activities may be authorized by the CPM if they are consistent with local noise ordinances. Night construction, or specific night construction activities may be disallowed by the CPM if it results in significant impact to the surrounding community.

<u>Verification:</u> Noise monitoring and surveys may be conducted if complaints are reported by residence in the surrounding area of the project site.

HAZARDOUS MATERIALS MANAGEMENT

HAZ-1 The project owner shall not use any hazardous material in reportable quantities except those identified by type and quantity in the Application for Certification unless approved by the CPM.

<u>Verification:</u> The project owner shall provide in the Annual Compliance Report a list of hazardous materials used at the facility in reportable quantities.

HAZ-2 The project owner shall submit both the Business Plan and Risk Management Plan to the CPM for review and comment, and shall also submit these plans and/or procedures to the County Fire Department for approval.

<u>Verification:</u> 30 days (or a CPM-approved alternative timeframe) prior to the initial delivery of any hazardous materials in reportable quantities to the facility, the project owner shall submit the Business and Risk Management Plan to the CPM for review and comment. At the same time, the project owner shall submit these plans to the County Fire Department for approval. The project owner shall also submit evidence to the CPM that the County Fire Department approved of these plans, when available.

WASTE

WASTE-1 The project owner shall obtain a hazardous waste generator identification number from the Department of Toxic Substances Control prior to producing any hazardous waste.

<u>Verification:</u> The project owner shall keep its copy of the identification number on file at the project site.

WASTE-2 The project owner shall have an environmental professional available for consultation during soil excavation and grading activities. The environmental professional shall be given full authority to oversee any earth moving activities that have the potential to disturb contaminated soil. The environmental professional shall meet the qualifications of such as defined by the American Society for Testing and Materials designation E 1527-97 Standard Practice for Phase I Environmental Site Assessments.

<u>Verification:</u> If potentially contaminated soil is unearthed during excavation at either the proposed site or linear facilities, the environmental professional shall inspect the site, determine the need for sampling to confirm the nature and extent of contamination, and make a recommended course of action. The environmental professional shall have the authority to suspend construction activity at that location. If, in the opinion of the environmental professional, remediation is to be required, the project owner shall consult with the CPM and a decision will be made by the CPM within 24 hours as to how to proceed.

BIOLOGICAL RESOURCES

- BIO-1 The project permitted under this emergency process will avoid all impacts to legally protected species and their habitat on site, adjacent to the site and along the right of way for linear facilities.
- BIO-2 The project permitted under this emergency process will avoid all impacts to designated critical habitat (wetlands, vernal pools, riparian habitat, preserves) on site or adjacent to the site.
- BIO-3 The project permitted under this emergency process will avoid all impacts to locally designated sensitive species and protected areas.
- BIO-4 The project permitted under this emergency process will reduce risk of large bird electrocution by electric transmission lines and any interconnection between structures, substations and transmission lines by using construction methods identified in "Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 1996" (APLIC 1996).
- BIO-5 The project biologist, a person knowledgeable of the local/regional biological resources, and CPM will have access to the site and linear rights-of-way at any time prior to and during construction and have the authority to halt construction in an area necessary to protect a sensitive biological resource at any time.
- BIO-6 Upon decommissioning the site, the biological resource values will be reestablished at preconstruction levels or better.

<u>Verification</u>: If the Designated Biologist halts construction, the action will be reported immediately to the CPM along with the recommended implementation actions to resolve the situation or decide that additional consultation is needed. Throughout construction, the project owner shall report on items one through six above if identified resources are found or impacted.

BIO-7 Prior to site disturbance, a qualified biologist will survey the project site and the surrounding habitat within 300 feet of the project site during the breeding season (March 15-August 15) to determine whether there are active nests of any sensitive bird species, including all raptors, within that area. If there are active nests, direct take of nests, eggs, or birds must be avoided and measures taken to ensure that noise levels do not exceed 60 dBA as measured at the nest.

<u>Verification:</u> The designated Biologist shall submit a report to the CPM along with the recommended implementation actions to resolve the situation or decide that additional consultation is needed.

BIO-8 The project permitted under this emergency process will not use any species considered invasive by the California Exotic Pest Plant Council (CalEPPC,

1999) in their landscaping design. A landscaping plan including a species list will be submitted to the CPM for approval prior to landscaping activities.

<u>Verification:</u> The landscaping plan for the project shall be submitted to the CPM prior to landscaping activities.

Prior to ground disturbance, if the project is determined to be within the boundary of the City of San Diego Subarea Plan for the Multiple Species Conservation Program (MSCP), the applicant shall provide documentation of the appropriate purchase of mitigation credits for the loss of non-native grassland.

<u>Verification:</u> Prior to ground disturbance, the project owner will provide the CPM with documentation of MSCP mitigation for the loss of non-native grasslands.

LAND USE

LAND-1 The project permitted under this emergency process will conform to all applicable local, state and federal land use requirements, including general plan policies, zoning regulations, local development standards, easement requirements, encroachment permits, truck and vehicle circulation plan requirements, Federal Aviation Administration approval, and the Federal Emergency Management Agency National Flood Insurance Program.

<u>Verification:</u> Prior to start of construction, the project owner will submit to the CPM documentation verifying compliance with the above referenced land use requirements.

LAND-2 Prior to occupying any off-site lay-down or storage facilities the applicant shall provide detailed plans indicating the location of existing and proposed use of the sites to the CPM. Such sites shall be previously disturbed and shall not require any clearing or grading to accommodate the proposed use. To prevent possible impacts to sensitive resources the applicant shall coordinate with the CPM to determine if biological or cultural surveys are required. This submission shall include written landowner approval and must comply with all local land use requirements. If the proposed site is located within public rights-of-way appropriate traffic control plans and encroachments permits will be provided to the CPM.

<u>Verification</u>: Prior to the start of construction, the project owner will submit to the CPM documentation verifying compliance with the above referenced land use requirements.

TRAFFIC AND TRANSPORTATION

TRANS-1 The project permitted under this emergency process shall comply with Caltrans and City/County limitations on vehicle sizes and weights. In addition, the project owner or its contractor shall obtain necessary

transportation permits from Caltrans and all relevant jurisdictions for roadway use.

<u>Verification:</u> The project owner shall keep copies of any oversize and overweight transportation permits received at the project site.

TRANS-2 The project permitted under this emergency process shall comply with Caltrans and City/County limitations for encroachment into public rights-ofway and shall obtain necessary encroachment permits from Caltrans and all relevant jurisdictions.

<u>Verification:</u> The project owner shall keep copies of any encroachment permits received at the project site.

TRANS-3 The project permitted under this emergency process shall ensure that permits and/or licenses are secured from the California Highway Patrol and Caltrans for the transport of hazardous materials.

<u>Verification:</u> The project owner shall keep copies of all permits/licenses acquired by the project owner and/or subcontractors concerning the transport of hazardous substances at the project site.

TRANS-4 Following completion of construction of the power plant and all related facilities, the project owner shall return all roadways to original or as near original condition as possible.

SOIL & WATER RESOURCE

SOIL&WATER-1 Standard condition is not applicable to this project.

SOIL&WATER-2 Prior to ground disturbance, the project owner shall obtain CPM approval of an Erosion Prevention and Sedimentation Control Plan.

<u>Verification:</u> The Erosion Control and Storm Water Management Plan for the project shall be submitted to the CPM prior to ground disturbance.

SOIL&WATER-3 Prior to site mobilization, the project owner shall submit to the CPM, a copy of a valid water service agreement for water supplies for the project from an authorized water purveyor, or a copy of a valid well permit for the project from the appropriate licensing agency.

<u>Verification:</u> The water service agreement or well permit shall be submitted to the CPM prior to site mobilization.

SOIL& WATER-4 Prior to operation, the project owner shall submit to the CPM a copy of a valid permit or agreement from the appropriate approving agency for wastewater discharge.

<u>Verification:</u> The permit or agreement for wastewater discharge shall be submitted to the CPM prior to operation.

SOIL& WATER-5 Prior to construction, the project owner shall submit to the CPM, a copy of the completed geo technical report.

<u>Verification:</u> The geo-technical report for the project shall be submitted to the CPM prior to ground disturbance.

SOIL&WATER-6 During construction and plant operation the project owner will adhere to all applicable Federal, State and Local Laws, Ordinances, Regulations and Standards concerning stormwater management and discharge.

Verification: Prior to ground disturbance, the project owner will submit a copy of the Storm Water Pollution Prevention Plan for the project to the CPM.

CULTURAL RESOURCES

- **CUL-1** This standard condition does not apply to this project.
- CUL-2 The project has been determined to have the potential to adversely affect significant cultural resources and the project owner shall ensure the completion of the following actions/activities:
 - 1. Provide a cultural specialist who will have access to the site and linear rights-of-way at any time prior to and during ground disturbance.
 - 2. The cultural specialist will provide training to appropriate construction personnel at the site, will install avoidance measures (as necessary), and will be present during appropriate ground disturbing activities. The cultural specialist has the authority to halt construction at a location if a significant cultural resource is found. If resources are discovered and the cultural specialist is not present, the project owner will halt construction at that location and will contact the specialist immediately. The specialist will consult with the CPM and a decision will be made by the CPM within 24-hours as to how to proceed.
 - 3. The project owner shall allow time for the cultural specialist to recover significant resource finds, and pay all fees necessary to curate recovered significant resources.

<u>Verification:</u> Throughout construction, the project owner shall inform the CPM concerning any substantive activity related to items 1 through 3 above. Should curation be necessary, the project owner shall inform the CPM as to how and where the resources were curated.

VISUAL

VIS-1 Project structures treated during manufacture and all structures treated in the field, that are visible to the public, shall be painted in a neutral color consistent with the surrounding environment.

<u>Verification:</u> Prior to painting exposed services, the project owner shall identify the selected color for CPM approval.

VIS-2 The project owner shall design and install all lighting such that light bulbs and reflectors are not visible from public viewing areas and illumination of the vicinity and the nighttime sky is minimized. Lighting must also be installed consistent with any local requirements.

<u>Verification:</u> The project owner shall inform the CPM of any complaints concerning lighting and when measures have been taken to correct the problem.

VIS-3 The project owner shall prepare and submit to the local planning department for review and comment, and to the CPM for review and approval a landscaping plan which provides for any or all of the following, as appropriate, to screen the project from view: berms, vegetation and trees, and slats in fencing.

<u>Verification:</u> Within 30 days of certification, the project owner shall submit the landscaping plan to the local planning department and the CPM.

FACILITY DESIGN

GEN-1 The project owner shall design, construct and inspect the project in accordance with the 1998 California Building Code (CBC) and all other applicable LORS in effect at the time initial design plans are submitted to the CBO for review and approval.

<u>Verification:</u> Within 30 days (or a lesser number of days mutually agreed to by the project owner and the CBO) after receipt of the Certificate of Occupancy, the project owner shall submit to the CPM a statement of verification, signed by the responsible design engineer, attesting that all designs, construction, installation and inspection requirements of the applicable LORS and the Energy Commission's Decision have been met. The project owner shall provide the CPM a copy of the Certificate of Occupancy within 30 days of receipt from the CBO [1998 CBC, Section 109 – Certificate of Occupancy.] The project owner shall keep copies of plan checks and CBO inspection approvals at the project site.

PALEONTOLOGICAL

PALEO-1 This standard condition does not apply to this project.

- **PALEO-2** The project has been determined to have the potential to adversely affect significant paleontological resources and the project owner shall ensure the completion of the following actions/activities:
 - 1. Provide a paleontological specialist who will have access to the site and linear rights-of way at any time prior to and during ground disturbance.
 - 2. The paleontological specialist will provide training to appropriate construction personnel at the site, will install avoidance measures (as necessary), and will be present during appropriate ground disturbing activities. The cultural specialist has the authority to halt construction at a location if a significant paleontological resource is found. If resources are discovered and the specialist is not present, the project owner will halt construction at that location and will contact the specialist immediately. The specialist will consult with the CPM and a decision will be made by the CPM within 24-hours as to how to proceed.
 - 3. The project owner shall allow time for the paleontological specialist to protect significant resource finds, and pay all fees necessary to protect any significant resources.

<u>Verification:</u> Throughout construction, the project owner shall inform the CPM concerning any substantive activity related to items 1 through 3 above.

TRANSMISSION SYSTEM ENGINEERING, SAFETY AND RELIABILITY

TSE-1 The project owner shall ensure that the design, construction and operation of the proposed transmission facilities will conform to requirements listed below:

The power plant switchyard, outlet line and termination shall meet or exceed the electrical, mechanical, civil and structural requirements of CPUC General Order 95, CPUC Rule 21, Title 8, California Code of Regulations, Articles 35, 36 and 37 of the, "High Voltage Electric Safety Orders", Title 8 CCR, Sections 2700-2974, CPUC Decision 93-11-013, Federal Communications Commission Part 15, Public Resources Code 4292-4296, and National Electric Code (NEC).

<u>Verification:</u> Within 15 days after cessation of construction the project owner shall provide a statement to the CPM from the registered engineer in responsible charge (signed and sealed) that the switchyard and transmission facilities conform to the above listed requirements.

WORKER AND FIRE SAFETY

WORKER SAFETY-1 The project owner must comply with all requirements in Title 8 of the California Code of Regulations, beginning with Part 450 (8 CCR Part 450 et seg).

<u>Verification:</u> The project owner shall submit to the CPM a letter attesting to compliance with the above and shall report any violations to the CPM.

AIR QUALITY

AQ-1 Prior to the commencement of project construction, the project owner shall prepare a Construction Fugitive Dust Mitigation Plan that will specifically identify fugitive dust mitigation measures that will be employed for the construction of the project and related facilities.

Measures that should be addressed include the following:

- the identification of the employee parking area(s) and surface of the parking area(s);
- the frequency of watering of unpaved roads and disturbed areas;
- the application of chemical dust suppressants;
- the stabilization of storage piles and disturbed areas;
- the use of gravel in high traffic areas;
- the use of paved access aprons;
- the use of posted speed limit signs;
- the use of wheel washing areas prior to large trucks leaving the project site;
- the methods that will be used to clean tracked-out mud and dirt from the project site onto public roads; and
- for any transportation of borrowed fill material, the use of covers on vehicles, wetting of the material, and insuring appropriate freeboard of material in the vehicles.

<u>Verification:</u> The project owner shall submit to the CPM a letter attesting to compliance with the above and shall report any violations to the CPM.

AQ-2 The project owner shall comply with the terms and conditions of the Authority to Construct and the Permit to Operate issued by San Diego Air Quality Management District.

<u>Verification:</u> In the event that the air district finds the project to be out of compliance with the terms and conditions of the Authority to Construct, the project owner shall notify the CPM of the violation, and the measures taken to return to compliance, within five (5) days.

APPENDIX A

PROPOSED AUTHORITY TO CONSTRUCT Wildflower Energy-Larkspur Project March 30, 2001

JOHN D JONES
VICE PRESIDENT
WILDFLOWER ENERGY LP
4320 LA JOLLA VILLAGE DRIVE SUITE 250
SAN DIEGO CA 92122

After examination of your Application Nos. 976094 and 976138 (Larkspur Power Plant, San Diego) for an Air Pollution Control District Authority to Construct for two (2) simple cycle gas turbines, located at the corner of Harvest Road and Otay Mesa Road in the Otay Mesa area in the City of San Diego, California, the District has decided on the following action:

<u>Authority to Construct is granted</u> pursuant to Rule 20 of the Air Pollution Control District Rules and Regulations for the dual-fueled Larkspur Power Plant consisting of:

Two (2) General Electric 45 MW nominally rated Model LM6000 PC Sprint simple cycle gas turbines, each with heat input ratings of 395 MM Btu/hr (LHV) when operated on natural gas and 398 MM Btu/hr (LHV) when operated on liquid fuel, each equipped with a water injection system and a Turner Company Selective Catalytic Reduction (SCR) system including an automatic ammonia injection control system for control of NOx, Continuous Emissions Monitoring System (CEMS), data acquisition and recording systems and oxidation catalyst system, providing a combined total electrical nominal power output of 90 MW.

This Authority to Construct is granted with the following conditions:

(General Requirements)

- 1. The applicant shall provide access, facilities, utilities, and any necessary safety equipment for source testing and inspection upon the request of the Air Pollution Control District.
- 2. When operating on natural gas, both turbines shall be fired on Public Utility Commission (PUC) quality natural gas only. The applicant shall maintain, on-site, quarterly records of the natural gas sulfur content (grains of sulfur compounds per 100 dscf of natural gas) and the higher and lower heating values (Btu/scf) of the natural gas; and provide such records to District personnel upon request.
- 3. Permittee shall submit a complete Acid Rain permit application (including a monitoring plan) prior to commencement of construction in accordance with 40 CFR Part 72 to the District and submit a copy to EPA, Region IX.

- 4. Sufficient SO2 trading allowances will be purchased by the permittee to offset potential SO2 emissions in accordance with the requirements of 40 CFR 73. Permittee shall hold allowances, as of the allowance transfer deadline, in the facility's (Department of Energy's Office of Regulatory Information System "ORIS" code for each unit, both turbines is a "unit") compliance sub-account (after deductions under 40 CFR 73.34 (c)) for an amount not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit.
- 5. All records required by this permit shall be kept on site for a minimum of five years and made available to District personnel upon request.
- 6. Within one year of commencing commercial operation at the site, the plant operator shall submit a 40 CFR 70 permit application (Title V) to the District pursuant to District Regulation XIV. (Pursuant to 40CFR72.2., commencing commercial operation means to have begun to generate electricity for sale, including the sale of test generation.)
- 7. Liquid fuel shall be used as fuel in each of the turbines only during force majeure natural gas curtailments conducted in accordance with the California Public Utilities Commission (CPUC) approved procedures or unforeseen failure in the supply of natural gas, and to test the emergency back-up fuel system. Testing of the back up fuel system in each turbine shall be limited to 24 hours per calendar year. For each turbine, the total cumulative operation on liquid back up fuel during natural gas curtailment periods, and for testing or emergencies shall not exceed 225 hours per calendar year.
- 8. Except during startups, shutdowns and fuel changes, the water injection systems and SCR and oxidation catalyst (if required) control systems, including the automatic ammonia injection systems serving both turbines, shall be in full operation at all times when their respective turbines are in operation.
- 9. The turbine exhausts shall not bypass their respective emission control SCR systems except for the first 10 minutes of a startup when operating on liquid fuel.
- 10. In the event of a breakdown in an automatic ammonia injection control system, a trained operator shall operate the system manually and the breakdown shall be reported to the District Compliance section pursuant to Rule 98.
- 11. A schematic for the SCR systems with final SCR design criteria, and a vendor NOx emission guarantee of 5 parts per million volume on a dry basis (ppmvd) corrected to 15 % oxygen, shall be submitted to the District prior to commencing installation of the SCR systems.
- 12. An application for modification of District permits for this equipment shall be required for any proposed physical or operational modification to the equipment described herein, such as a modification to convert these simple cycle turbines to combined cycle units. Applicable BACT requirements for the proposed equipment modification shall be re-evaluated at that time.

(Emission limits)

- 13. The NOx, CO and VOC limits defined in the following conditions (Nos. 15 through 21) shall not apply during the first continuous 30 minutes immediately following a cold start-up or during the 30 continuous minutes immediately preceding a shutdown. Startup is defined as the time when fuel flow begins. Shutdown is defined as the moment fuel flow ceases. These events shall be recorded by the Data Acquisition System (DAS), as required by 40CFR75. This condition may be modified by the District based on field performance of the equipment.
- 14. When operating on natural gas, emissions of oxides of nitrogen (NOx), calculated as nitrogen dioxide, from each turbine exhaust stack shall not exceed 5 parts per million volume on a dry basis (ppmvd) corrected to 15 % oxygen and averaged over each clock hour. When operating on liquid fuel, emissions of oxides of nitrogen (NOx), calculated as nitrogen dioxide, from each turbine exhaust stack shall not exceed 13 parts per million volume on a dry basis (ppmvd) corrected to 15 % oxygen and averaged over each clock hour. Compliance with this limit shall be demonstrated at the time of the initial compliance test and continuously thereafter.
- 15. When operating on natural gas, the NOx mass emission rate from each turbine shall not exceed 7.7 pounds per hour of nitrogen oxides (NOx) calculated as NO2 averaged over each clock hour period. When operating on liquid fuel, the NOx mass emission rate from each turbine shall not exceed 16.3 pounds per hour of nitrogen oxides (NOx) calculated as NO2 and averaged over each clock hour. Compliance with these limits shall be demonstrated at the time of the initial compliance test and continuously thereafter.
- 16. When operating on either natural gas or liquid fuel, emissions of carbon monoxide (CO) from each turbine exhaust stack shall not exceed 6 parts per million volume on a dry basis (ppmvd) corrected to 15 % oxygen and averaged over each continuous rolling 3-hour period. Compliance with this limit shall be demonstrated at the time of the initial compliance test and continuously thereafter.
- 17. When operating on either natural gas or liquid fuel, emissions of carbon monoxide (CO) from each turbine exhaust stack shall not exceed 5.6 pounds per hour, averaged over each continuous rolling 3-hour period. Compliance with this limit shall be demonstrated at the time of the initial compliance test and continuously thereafter.
- 18. When operating on either natural gas or liquid fuel, emissions of volatile organic compounds (VOCs), calculated as methane, from each turbine exhaust stack shall not exceed 2 parts per million volume on a dry basis (ppmvd) corrected to 15 % oxygen (3-hour average). Compliance with this limit shall be demonstrated at the time of the initial compliance test and annually thereafter.
- 19. Prior to the initial source test and installation of the oxidation catalyst emission control system(s), the applicant may conduct a non-methane hydrocarbons (NMHC) emissions source test to demonstrate compliance with the above VOC emission

standard of 2 ppmvd, as methane. If the test demonstrates compliance with the standard, the applicant may elect to forgo installation of the oxidation catalyst. If the initial or subsequent emission test fails to demonstrate compliance with this VOC emission standard, the applicant shall install the required oxidation catalyst emission control system(s) and demonstrate compliance with the 2 ppmvd (as methane) VOC emission standard within 60 days after the VOC emission source test.

- 20. Ammonia emissions from the gas turbine shall not exceed 10 ppmvd @ 15 % oxygen. Compliance with this limit shall be demonstrated at the initial compliance test and at least annually thereafter.
- 21. The discharge of particulate matter from the exhaust stacks of each turbine shall not exceed 0.10 grain per dry standard cubic foot (0.23 grams/ dscf). Compliance with this limit shall be demonstrated at the initial compliance test, when operating on liquid fuel. The District may require periodic testing to verify compliance with this standard.
- 22. Total combined oxides of nitrogen emissions from of both turbines shall not exceed the major source threshold of 50 tons per calendar year. Total combined carbon monoxide emissions generated from both turbines shall not exceed the Prevention of Significant Deterioration (PSD) major source threshold of 100 tons per calendar year. In the event that an annual major stationary source threshold is projected to be triggered, the applicant shall submit a complete application to modify this permit at least 6 months prior to the projected date of exceedance demonstrating how compliance with all applicable requirements will be achieved.
- 23. Visible emissions from the lube oil vents and the exhaust stacks of both turbines shall not exceed 20% opacity for more than three (3) minutes in any period of 60 consecutive minutes.
- 24. Only CARB certified California diesel fuel with a sulfur content equal to or less than 0.05% by weight may be used as a backup fuel for these turbines. Within 60 days, the applicant shall submit an analysis of the feasibility, costs and emissions impacts of alternative backup fuels, as possible BACT for sulfur and particulate emissions. The District may further reduce the sulfur content limit and other characteristics of backup fuel used in the turbines.

(Monitoring and recordkeeping)

- 25. An operating log or Data Acquisition System (DAS) records shall be maintained on site to record actual times and durations of all startups, shutdowns, quantity of each fuel used, hours of daily operation, and total cumulative hours of operation during each calendar year.
- 26. A Continuous Emission Monitoring System (CEMS) shall be installed and calibrated to measure and record the concentrations of oxides of nitrogen (NOx), volatile organic compounds (VOCs), carbon monoxide (CO) in the exhaust gas on a dry

basis (ppmvd) corrected to 15% oxygen, and oxygen (O2) in the exhaust gas. Upon initial firing and prior to final approval of the permanent CEMS system, a portable properly calibrated CEMS shall be used to continuously measure and record these conditions. The portable CEMS shall remain in full operation at all times when the turbine is in operation until the permanent CEMS has been properly installed and certified. The permanent CEMS shall thereafter be in full operation at all times when both turbines are in operation.

- 27. All CEMs shall be installed, certified and maintained in accordance with applicable federal regulations including the requirements of Sections 75.10 and 75.12 of Title 40, Code of Federal Regulations Part 75 (40 CFR 75), the performance specifications of Appendix A of 40 CFR 75, the quality assurance procedures of Appendix B of 40 CFR 75, and a CEMS protocol approved by the District. At least 60 days prior to the operation of both the portable and permanent CEMS, the applicant shall submit a CEMs operating protocol to the District for written approval.
- 28. The District shall be notified in writing at least two (2) weeks prior to any changes made in the CEMs software that affects the measurement, calculation or correction of data displayed and/or recorded by the CEMs.
- 29. On and after initial startup, both turbines shall be equipped with continuous parametric monitors to measure (or calculate) and to record the following operational characteristics:
 - a. hours of operation (hours),
 - b. natural gas flow rate (scfh),
 - c. exhaust gas temperature (F),
 - c. ammonia injection rate (lbs/hr),
 - d. water injection rate (gal/hr),
 - e. ratio of water injection to fuel consumption (lb of water to lb of fuel)
 - f. molar ratio of ammonia injection rate to turbine NOx emission rate at SCR inlet (instantaneous),
 - g. stack opacity (%),
 - h. inlet temperature of the SCR and oxidation catalyst beds (F), and
 - i. power output (MW).

These monitors shall be installed, calibrated, and maintained in accordance with the manufacturer's recommended procedures and a protocol approved by the District. Such protocol shall be submitted to the District for written approval at least 60 days prior to initial startup. This protocol shall include, at a minimum, a description of the equipment used for direct measurement of operating characteristics and the methodology used to calculate the remaining operating characteristics. All monitors shall be in full operation at all times when each respective turbine is in operation.

- 30. Non-resettable totalizing meters with an accuracy of at least +/-5% shall be installed in each natural gas fuel line to measure volumetric flow rate corrected for temperature and pressure of natural gas. Non-resettable totalizing meters with an accuracy of at least +/-5% shall be installed in each liquid fuel line to measure volumetric flow rate of liquid fuel.
 - Monthly and annual records of fuel usage shall be maintained and made available to the District upon request. These records shall indicate actual times and duration of all startups, shutdowns, fuel changes, quantify of fuel used, and the purpose of fuel switches or changes to or from combined usage.
- 31. Water flow meters or other means of measuring the rate of water injection shall be installed in the combustion turbine water injection systems and shall be calibrated and maintained to be accurate to at least +/- 5%.
- 32. The ammonia injection flow rate shall be continuously monitored, recorded and controlled. Records of ammonia injection rate and flow rate device calibration shall be maintained and made available to the District.
- 33. Access and facilities for fuel samples from fuel tanks or fuel lines shall be provided to District personnel for obtaining samples for analysis. Records of fuel specifications, including the Material Safety Data Sheets (MSDS) and the sulfur content guarantee, shall be made readily available to the District upon request.
- 34. A monitoring plan in conformance with 40 CFR 75.53 shall be submitted to EPA Region 9 and the District at least 45 days prior to the initial source test, as required in 40 CFR 75.62.

(Source Test Requirements)

- 35. The exhaust stacks of both turbines shall be equipped with source test ports and platforms to allow for the measurement and collection of stack gas samples consistent with all approved test protocols. The ports and platforms shall be constructed in accordance with San Diego Air Pollution Control District Method 3A, Appendix Figure 2, and approved by the District.
- 36. No later than 90 days after both turbines commences commercial operation (40CFR70.4(b)(2)), a Relative Accuracy Test Audit (RATA) and all other required certification tests shall be performed and completed on the permanent CEMs in accordance with 40 CFR Part 75 Appendix A performance specifications. At least 45 days prior to the test date, the applicant shall submit a test protocol to the District for approval. Additionally, the District shall be notified a minimum of 45 days prior to the test so that observers may be present. Within 30 days of completion of this test, a written test report shall be submitted to the District for approval.
- 37. Within 60 days after the initial startup of each turbine, an initial source test shall be conducted by an independent, ARB approved tester or the District, at the

applicant's expense, to determine initial compliance with the emission standards of this Authority to Construct. A source test protocol shall be submitted to the District for approval prior to the issuance of a Startup Authorization. The source test protocol shall comply with the following requirements:

- a. Measurements of outlet oxides of nitrogen (NOx), carbon monoxide (CO), and stack gas oxygen content (O2%) shall be conducted in accordance with the District Source test method 100, or the Air Resources Board (ARB) Test Method 100 as approved by the U.S. Environmental Protection Agency (EPA).
- Measurements of outlet non-methane hydrocarbon (NMHC) emissions shall be conducted in accordance with the San Diego Air Pollution Control District Methods 18 and 25A.
- c. Measurements of outlet ammonia shall be conducted in accordance with Bay Area Air Quality Management District (BAAQMD) test method ST-1B.
- d. When operating on liquid fuel, measurements of outlet particulate matter emissions shall be conducted in accordance with the San Diego Air Pollution Control District Method 5.
- e. Source testing shall be performed at no less than 80% of the turbine rated load.
- 38. Within 30 days after completion of the initial source test, a final test report shall be submitted to the District for review and approval.
- 39. In the event the initial source test results do not demonstrate compliance with District Rules and Regulations and emissions standards specified herein, to the satisfaction of the District, the applicant shall take corrective action to meet these standards. Any proposed corrective action that would result in a modification to the equipment shall require an application for a District Authority to Construct for such modification.
- 40. This equipment shall be source tested during natural gas fired operations at least once per permit year, before the Permit To Operate renewal date, to demonstrate compliance with the outlet NOx, outlet CO, outlet VOC, and outlet ammonia emission standards of this Authority to Construct, using District approved methods, unless otherwise directed in writing by the District.
- 41. This equipment shall be source tested during oil fired operations at least once per permit year, before the Permit To Operate renewal date, or at least once every 300 hours of liquid fuel operation, whichever is less frequent, to demonstrate compliance with the outlet NOx, outlet CO, outlet VOC, and outlet ammonia emission standards of this Authority to Construct, using District approved methods, unless otherwise directed in writing by the District.
- 42. Based on source testing, additional monitoring parameters may be established to ensure compliance. Operating characteristics monitored by continuous parametric monitors may also be restricted to specified ranges or limits, as determined by the

District, based upon manufacturer's recommended operating procedures and initial compliance source test results.

(Construction Completion Notice)

- 43. This Authority to Construct authorizes temporary operation of the above-specified equipment. This temporary permit to operate shall take effect upon written notification to the District that construction has been completed in accordance with this Authority to Construct. This temporary permit to operate will remain in effect, unless withdrawn or modified by the District, until the equipment is inspected by the District and a revised temporary permit (Startup Authorization) is issued or a Permit to Operate is granted or denied.
- 44. Upon completion of construction in accordance with this Authority to Construct and prior to commencing operation, the applicant must complete and mail, deliver, or fax the enclosed Construction Completion Notice to the District. After mailing, delivering, or faxing the Notice, the applicant may commence operation of the equipment. Operation must be in compliance with all of the conditions of this Authority to Construct and applicable District rules.

This Authority to Construct shall be posted on or within 25 feet of the above described equipment, or maintained readily available at all times on the operating premises.

This Air Pollution Control District Authority to Construct does not relieve the holder from obtaining permits or authorizations, which may be required by other governmental agencies.

Within thirty (30) days after receipt of this Authority to Construct, the applicant may petition the Hearing Board for a hearing on any conditions imposed herein in accordance with Rule 25.

This Authority to Construct is not transferable and will expire on *Month/Day*, 2002 (year from the date issued).

If you have any questions regarding this action, please contact the undersigned at (858) 650-4611.

EARNEST A. DAVIS, P.E. Associate Air Pollution Control Engineer

EAD:jl

Enclosure

cc: Compliance Division

I.D.# 07630A

LARKSPUR ENERGY FACILITY EMERGENCY PERMIT EVALUATION PREPARATION TEAM CALIFORNIA ENERGY COMMISSION

Bob Eller	Project Manager
Mary Dyas	Project Assistant
Jeff Ogata	Legal Counsel
Christian Huntley	Compliance Manager
Paul Shattuck	Cultural Resources
Bob Anderson	Paleontologic Resources
Nick Kautzman	Biological Resources
Steve Baker	Facility Design
Mark Hesters	Transmission Engineering
Michael Berman	Land Use, Noise, Transportation, Visual