

**CALIFORNIA ENERGY COMMISSION**1516 NINTH STREET  
SACRAMENTO, CA 95814-5512

# **ALLIANCE COLTON CENTURY SUBSTATION PROJECT STAFF ASSESSMENT FOR EMERGENCY PERMIT**

## **SUMMARY**

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The Energy Commission staff has performed a fatal flaw analysis of the Alliance Colton Century Substation Project (Century) and recommends that the Energy Commission approve the project with the Conditions of Certification proposed by staff. Staff further recommends that the certification be for the life of the project if at the end of the power purchase agreement with 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 the Energy Commission's emergency permitting authority provided by Emergency Executive Orders by the Governor.

On March 21, 2001 Alliance Colton, LLC. (Alliance) filed an emergency permitting application for the Century project. Alliance submitted supplemental application information March 30 and April 6. Alliance's application was deemed complete on April 6, 2001. The application is available in Adobe PDF format at the documents portion of the project website, at <http://www.energy.ca.gov/sitingcases/peakers/century>.

The Century project is a proposed 42 MW simple-cycle power plant on the Century substation site owned by the City of Colton. The substation is located at 661 South Cooley Drive (APN #027613174) in the City of Colton in San Bernardino County. Although portions of the site have not been previously developed, on-site disturbances include utility easement access and evidence of off-road vehicle use. The site, approximately 0.67-acres, is located south of Interstate 10, east of Mount Vernon Avenue, and west of Interstate 215. Surrounding land uses include the Santa Ana River to west and north, a railroad line and facility to the north, a motorcycle training facility immediately adjacent the site to the south, and an industrial/office complex located to the immediate southeast of the existing substation. In addition, a concrete flood control channel that drains to the river is located on the east side of South Cooley Drive. However, much of the surrounding area is developed, although the nearest residential developments are located approximately 0.5-mile to both the south and the east, beyond Interstate 215.

The proposed project consists of four General Electric model 10B1 simple-cycle gas turbines rated at 10.5 MW each, along with associated equipment. The proposed permits from the air district will require the project to meet air emission limits set by the Best Available Control Technology (BACT). For a simple-cycle gas turbine, these limits are 5 ppm for oxides of nitrogen (NOx) and 6 ppm for carbon monoxide (CO). Due to the critical need for electricity this summer, the turbines will initially operate under a Compliance Order Alliance will obtain from the South Coast Air Quality Management District

(SCAQMD) for the first few months without air pollution control technology capable of meeting BACT emission levels. The project will initially use dry low-NOx technology capable of limiting NOx emissions to 25 ppm. Alliance will install either Selective Catalytic Reduction (SCR) emissions control or XONON combustion technology to reduce emissions to 5 ppm NOx following the schedule set in the SCAQMD Compliance Order.

The project will use water only for evaporative inlet air cooling. A maximum of 25 gallons per minute of water will be required and will be supplied by the City of Colton through an existing water line serving the substation. No wastewater will be generated by normal operation of this facility. Wastewater from periodic turbine cleaning will be collected and removed from the site for disposal. The SCR emission control technology, if used, will require the storage and use of aqueous ammonia. If the XONON combustion technology is used to limit air emissions, no aqueous ammonia will be used at the site. A location map, site plan, and air photo of the project site from Alliance's application are available for download along with this staff assessment at the project web site.

Electrical interconnections for the project will be made at the substation via a generator step-up transformer. Natural gas will be supplied to the project by SoCal Gas via an underground pipeline extending approximately one and a quarter miles. The pipeline will run southwest from the project site along an existing utility right-of-way to Mt. Vernon. The pipeline will be hung from the Mt. Vernon Street bridge over the Santa Ana River, and then run along M Street to connect with an existing SoCal Gas supply pipeline.

Alliance anticipates construction to require approximately three months, and to be complete in time to allow the power plant to go online by August. The peak construction workforce will be 42 workers and supervisors.

## **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 will not alleviate an energy supply emergency.

In Executive Orders D-26-01 and 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**

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### **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 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 (Bridger and Helfand 1968) (Schickele 1947) (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**

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California generation is among the cleanest in the country. This is due to negligible coal and oil use as generation fuel, the Best Available Retrofit Control Technology (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 in-state 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 utilize 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 NO<sub>x</sub>/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 NO<sub>x</sub>/MWhr, but few are cleaner than the system NO<sub>x</sub> 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 NO<sub>x</sub>/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 NO<sub>x</sub> emissions are simply a product of the emission rate multiplied by 10,000. Diesel standby engine use would result in 150 tons of NO<sub>x</sub> over 10 hours, versus 1.5 tons from 1000 MW of natural gas-fired generation over the same period of time. With NO<sub>x</sub> emissions controlled to 5 ppm,

the GE10B1 turbines proposed in this project would produce approximately 1.2 tons per 10,000 MWhrs of generation.

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 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 be an effective means to offset peaking power plant emissions as an interim measure.

# STAFF ANALYSIS OF THE ALLIANCE COLTON CENTURY SUBSTATION

The following sections briefly describe staff's fatal flaw analysis of the Century project. Conditions of certification for the project are included at the end of this report.

## ENGINEERING

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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** below). 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.

The standard Facility Design condition of certification, **GEN-1**, is required. No additional Facility Design conditions are proposed.

## AIR QUALITY

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The analysis of the air quality impacts of this emergency permit application was performed by the South Coast Air Quality Management District (SCAQMD). On March 29, 2001, the SCAQMD issued a notice of intent to issue an Authority to Construct for this facility. This notice initiates a 30-day public comment period. SCAQMD intends to issue the Authority to Construct for this facility after the close of that comment period. A copy of the notice is included in Appendix A of this report. Staff has incorporated the Authority to Construct by reference (see Appendix B) and proposed conditions of certification that require the project owner to limit fugitive dust emissions during construction and to comply with the Authority to Construct issued by the South Coast Air Quality Management District.

The proposed permits from SCQAMD will require these turbines to be equipped with air pollution control equipment that will meet the following emission levels: 5 ppmv NO<sub>x</sub> @ 15%O<sub>2</sub>, 6 ppmv CO @ 15%O<sub>2</sub>, and 2 ppmv ROG @ 15%O<sub>2</sub>. The air pollution control equipment will consist of either Selective Catalytic Reduction (SCR) with oxidation catalyst, XONON™ combustor technology with oxidation catalyst. If the SCR is utilized as the air pollution control equipment, ammonia will be used to react with NO<sub>x</sub> emissions in the exhaust gases; therefore, an ammonia storage tank is also being proposed for the SCR control option.

Due to the critical need for electricity this summer and because the construction schedule does not allow for full installation of air pollution control equipment prior to September 2001, in implementing the Governor's Executive Orders, the turbines will be

operated for the first few months without air pollution control equipment and under a Compliance Order that Alliance Colton LLC will obtain from the AQMD.

## **NOISE**

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Existing noise sources in the vicinity of the project area include traffic from Interstate 10 and Interstate 215, noise generated by the adjacent industrial/office complex to the south, a motorcycle training facility to the southwest, and intermittent noise from the existing railroad line to the north of the project site.

Noise impact information supplied by the applicant indicates that project noise levels at the property line at the adjacent southern development, assuming use of sound deadeners on each turbine and a 20-foot block wall, would be 65 dBA. These levels are consistent with the City of Colton noise ordinance standard of 65 dBA at six feet above grade on the south side of the project, where the 20-foot block wall would shield project noise from the adjacent industrial/ office complex. However, the applicant has not proposed a similar block wall around the entire project; thus, noise levels to the west, north, and east of the project would exceed the 65 dBA standard. Additional impacts are not expected to result from noise levels in excess of this standard, including any potential impacts to sensitive species within the project area. Further discussion of potential project-related impacts sensitive species can be found in the **BIOLOGY** section of this report.

On April 11, 2001 the City of Colton Planning Commission found that the proposed project would be "...consistent with the intent and guidelines of the General Plan" and "...consistent with the guidelines for granting a Major Variance, as outlined in Section 18.58.040 of the Zoning Ordinance." A Major Variance to exceed height and noise restrictions was approved by the Planning Commission at that time; therefore, the project as proposed would be in compliance with local standards.

Standard Conditions of Certification **NOISE-2, NOISE-3, NOISE-4** are required to ensure that project-related noise impacts will be reduced to a less than significant level. No additional Noise conditions are required.

## **HAZARDOUS MATERIALS**

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The proposed project may involve use of aqueous ammonia and will involve use of natural gas. Ammonia may be used for control of NOx emission in an SCR system. However, this option will be an alternative to the use of the XONON process that is the Alliance Power's preferred approach for NOx control. The XONON system would not require use of ammonia. In the event that ammonia is used, Alliance has chosen to use a form of ammonia that inherently safe. The choice of a 19 percent aqueous solution would result in a very low emission rate in the event of accidental release of ammonia. In addition to proposing this form of ammonia, Alliance has also chosen to incorporate spill containment facilities around the storage tank and delivery areas. These measures

will reduce the potential for impact on the public as a result of ammonia handling at the facility to less than significant levels.

Natural gas will not be stored at the site but will be handled in significant quantities. However, the systems used to handle natural gas at the facility will comply with all applicable engineering design codes and fire protection codes. These measures will reduce the potential for impact on the public as a result of natural gas handling at the facility to less than significant levels.

The proposed project will require the installation and operation of a natural gas pipeline, which will be designed and operated in compliance with all applicable codes. These measures will reduce the potential for impact on the public as a result of accidental release to less than significant levels. Staff has reviewed potential external hazards posed by numerous rail lines in the vicinity of the pipeline and has concluded that train traffic near the pipeline would be at relatively slow speeds and at distances that are not likely to pose threats to the pipeline.

Implementation of standard Conditions of Certification **HAZ-1** and **HAZ-2** will ensure that potential project-related hazardous material impacts will be reduced to less than significant levels.

## **RESPONSE TO PUBLIC COMMENT ON HAZARDOUS MATERIALS MANAGEMENT**

### **Comment:**

Camilla Herrera spoke at the public hearing held in Colton on April 11, and followed with a comment via e-mail because she felt her concerns were not adequately addressed. At the hearing she asked how far the underground gas lines would be installed from residents in the area. In her follow-up comment, she noted that the pipeline for this project would run immediately in front of homes along M Street. She expressed concern about the heavy truck traffic, nearby rail lines, and the proximity of an earthquake fault as potential problems for a natural gas line along a residential area. She referred both to the damage in the Mission District of San Francisco from the Loma Prieta earthquake in 1989 and to the Duffy Street explosions in San Bernardino in 1989 as examples of potential problems.

### **Response:**

As noted above, staff believes that current pipeline safety standards are adequate to ensure the safety of an underground natural gas pipeline running along a residential street. Staff has reviewed the seismic risk to pipelines associated with many power plants. Existing pipeline design codes require that pipelines be designed to address site-specific seismic hazards. The performance of modern natural gas pipelines in major earthquakes demonstrates the adequacy of these design codes in reducing the risk of releases to levels that are less than significant.

In addition, the accidental release that resulted in the Duffy Street explosion in San Bernardino was the result of an extraordinarily violent train derailment (California State

Fire Marshal 1993). The train involved reached a speed of over 100 miles per hour after it lost brakes coming down the steep Cajon grade. The derailment was so violent that the entire train literally tumbled into several homes, killing two children. All sixty-nine rail cars and five locomotive engines were destroyed in the derailment. Approximately two weeks later, after removal of the train wreckage with heavy equipment, a nearby high-pressure gasoline line ruptured, releasing 300,000 gallons of flaming gasoline. This release caused two additional deaths and resulted in the destruction of an additional 11 homes. Staff does not believe that an accident of this nature is plausible in the project area. The train tracks in the project area pass through switchyards and a populated area where train speeds are limited. There is no grade in the immediate area that could accelerate a train to the speeds associated with the San Bernardino event.

## BIOLOGY

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Alliance proposes to construct the Century project within the walls of the existing substation and expand out from the existing substation approximately 360 feet on the southwest side. The expansion area is highly disturbed from vehicle use, with vegetation composed of weedy non-native species. The facility and gas pipeline will utilize the existing substation, the additional highly disturbed areas, and existing roads. Equipment will be staged in the substation, on existing access roads or in disturbed areas, all of which will require approval by the Compliance Project Manager (CPM).

The Santa Ana River floodplain contains a number of sensitive and listed species: Santa Ana River woollystar (*Eriastrum densifolium sanctorum*), Santa Ana sucker (*Catostomus santaanae*), San Diego horned lizard (*Phrynosoma coronatum blainvillei*), Los Angeles pocket mouse (*Perognathus longimembris brevinasus*), Delhi Sands Flower-loving fly (*Rhaphiomidas terminatus abdominalis*), San Bernardino kangaroo rat (*Dipodomys merriami parvus*) and burrowing owl (*Athene cunicularia*) (Moore 2001 & CNDD). These species are described below.

- The Santa Ana River woollystar (*Eriastrum densifolium sanctorum*) is federally and state endangered. This plant is found in sandy soils on the river floodplain or terraced fluvial deposits (CNDD 2001).
- The Santa Ana sucker (*Catostomus santaanae*) is a federally threatened fish that prefers sand-rubble-boulder stream bottoms with cool, clear water and algae (CNDD).
- San Diego horned lizard (*Phrynosoma coronatum blainvillei*) prefers friable, rocky, or shallow sandy soils in sage scrub and chaparral communities with arid and semi-arid climates (CNDD).
- The Los Angeles pocket mouse is a federal candidate-category 2 species. This species is found in grasslands, desert and coastal sage communities with fine sandy soils in the Los Angeles basin (CNDD).
- The Delhi sands flower-loving fly (DSF) is a federally endangered species. It requires fine, sandy soils classified as Delhi fine sand with sparse native vegetation (57FR54547).

- The San Bernardino kangaroo rat (*Dipodomys merriami parvus*) is a federally endangered species. It is found in alluvial scrub vegetation on sandy loam substrates characteristic of alluvial fans and flood plains (CNDD 2001).
- Burrowing owls (*Athene cunicularia*) are a California Department of Fish and Game (CDFG) species of concern. They are found in open dry grasslands, deserts, and scrublands characterized by low-growing vegetation.

No biological surveys were conducted by the applicant for this facility. The California Department of Fish and Game recommended that protocol surveys be completed for the undeveloped areas to be affected by this project. Staff biologist visited the site and observed no threatened or endangered plant or animal species. The facility site, pipeline route, and surrounding areas are highly disturbed with little native vegetation. After further discussion with CDFG, staff recommends that a clearance survey be conducted prior to ground disturbance. This is reflected in Condition of Certification BIO-8. No threatened or endangered species are expected to be found during surveys or to be impacted by construction or operation of the Century facility.

## **CRITICAL HABITAT**

A number of sensitive and listed species are associated with the Santa Ana River floodplain, however none of these species are expected to occur on-site or to be impacted as a result of the construction or operation of the Century facility. Critical habitat for southwestern willow flycatcher (*Empidonax traillii extimus*) and least Bell's vireo (*Vireo bellii pusillus*) is located approximately 15 miles downstream from the project site.

## **MITIGATION**

### **NOISE**

Excessive noise can affect nesting birds. The open field to the northeast of the substation is potential habitat for burrowing owl. The area of the Santa Ana River adjacent to the facility lacks nesting habitat for southwestern willow flycatcher (*Empidonax traillii extimus*) and least Bell's vireo (*Vireo bellii pusillus*). Critical habitat for these species is located approximately 15 miles downstream from the project site and will not be impacted by the noise. The applicant has proposed mitigation to decrease noise levels. Each turbine package is equipped with sound deadeners to reduce the radiated noise from the package. Exhaust silencers will be used to reduce the noise levels of the exhaust system. There is a ten-foot block wall surrounding the existing substation, and the applicant has proposed installing a 20-foot block wall on the south side of the project area. This would decrease the noise levels in potential burrowing owl habitat to 50dBA.

### **WEEDS**

Weeds brought in by vehicles and other construction activities could displace the native vegetation. Non-native plants already dominate much of the area, however, additional

seed banks and/or species could be introduced through straw wattles and bales. BMP's used in construction and operation activities, such as straw bales, will be certified weed free, also decreasing the chances of additional non-native plants establishing on the site.

### **LIGHT**

Lighting at the facility could potentially impact sensitive nocturnal species (Moore 2001). Therefore, lighting at the facility will be limited to inside the walls of the facility and be screened from the outside habitat.

Implementation of standard Conditions of Certification **BIO-1** through **BIO-6**, as well as additional conditions **BIO-7** through **BIO-11** will ensure that appropriate actions are taken to prevent or mitigate impacts to listed species and their habitat. Implementation of this mitigation will ensure that impacts to listed species from construction and operation of the proposed project are less than significant.

### **LAND USE**

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The proposed project site is located in a partially developed area intended for industrial uses within the City of Colton. The General Plan land use designation for the project site is SP/Heavy Industrial; the Zoning designation is also SP/Heavy Industrial, as Colton's General Plan and Zoning Ordinance are consistent. Existing land uses in the immediate project vicinity include the Santa Ana River to the west and north, a railroad line and railroad facility to the northeast, a motorcycle training facility immediately adjacent the site to the southwest, and an industrial/office complex located to the immediate south of the existing substation. The General Plan land use and Zoning designations for the surrounding areas are as follows: to the north, Open Space and OS (Open Space); to the south, General Commercial and PC (Planned Community); to the east, Industrial and PC; and to the west Open Space and OS (Open Space). The proposed project is consistent with the existing land use and zoning designation of the project site, and the project will have a less than significant impact on surrounding land uses.

General Plan land use designations along the planned natural gas pipeline corridor, from west to east, are Medium Density Residential, General Commercial, Heavy Industrial, Open Space, and Industrial. Corresponding existing zoning classifications along the pipeline corridor, also from west to east, are R-2, M-2, C-2, OS, and PC/Industrial. Implementation of Condition of Certification **LAND-1** will ensure that any potential impacts related the proposed natural gas pipeline will be less that significant.

The City of Colton Zoning Ordinance has a height restriction of 50-feet. The proposed project would include four 52-foot exhaust stacks. As previously noted, on April 11,2001 the City of Colton Planning Commission found that the proposed project would be "...consistent with the guidelines for granting a Major Variance, as outlined in Section 18.58.040 of the Zoning Ordinance," and approved a Major Variance for the project to

exceed city height and noise restrictions. Therefore, the exhaust stacks as proposed will be in compliance with local height restrictions.

The applicant has not provided detailed information regarding either an equipment laydown area or additional parking areas that will be necessary during the construction phase of the project. However, in a letter to Kevin Kennedy, the CEC Project Manager, dated April 4, 2001, the applicant indicated that additional land east of the project site will be leased as an equipment lay down area, and land adjacent to the existing substation will be leased to provide additional parking during the construction phase of the project. This letter was included in the supplemental information submitted by the applicant. It should be noted that approval of this project does not constitute any approval or permitting of additional areas or facilities related to the project not specifically included in the application, and that is the applicant's responsibility to ensure that the necessary permits are obtained prior to the start of construction.

Although financial arrangements between Alliance Power and General Electric are confidential and have not been disclosed, staff estimates that the total cost of the proposed project would likely be on the order of \$40 Million. As Alliance Power has signed a lease with the City of Colton that requires the existing substation to be returned to its original condition upon termination of the lease, the proposed project is not expected to impact the assessed property value of the existing substation, now or in the future. In addition, because the existing substation is City owned and does not provide property tax revenue to the city, the proposed project would have no impact on current property tax revenues collected by the City of Colton. Alliance will provide annual lease payments to the city for use of a portion of the substation.

## **TRAFFIC AND TRANSPORTATION**

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Site access is provided by Interstate-10 to Mt. Vernon Avenue, south to Cooley Drive, then east on Cooley Drive to the project site. According to information received from the City of Colton Department of Public Works, all area roadways are currently operating at a satisfactory level, and the intersection of Mount Vernon Avenue and Cooley Drive is currently operating at Level of Service (LOS) B. The proposed project will not generate significant traffic during operation, and normal project operation will not result in significant traffic impacts.

Offsite construction of the natural gas pipeline will occur from west to east from 9<sup>th</sup> Street along "M" Street to Mount Vernon Avenue, where the pipeline would be hung by SoCal gas from the Mount Vernon Avenue Bridge across the Santa Ana River. The pipeline would then follow Cooley Drive to the project site. Pipeline construction may temporarily disrupt local traffic patterns. The applicant has not included a Traffic Control Plan (TCP) as part of the application; a TCP would be required prior to the start of any roadway construction activities. Implementation of a TCP and Conditions of Certification **TRANS-2** and **TRANS-4** will ensure that construction-related traffic impacts are reduced 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. A TCP would be required prior to any road disruption. Conditions of Certification **TRANS-1**, **TRANS-2**, and **TRANS-3** will ensure project compliance with Caltrans and City/County limitations on vehicle sizes and weights, and limitations for encroachment into public right-of-way.

Implementation of the above mitigation measures will ensure that the project's impact on traffic and transportation will be less than significant.

## **SOIL & WATER**

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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. A total of 0.97 acres of disturbance (permanent and temporary) will be associated with the facility site and the pipelines (Moreau 2001). The project is being constructed partially at an existing substation and expanding 360 feet to the southwest.

The applicant will prepare an Erosion and Sediment Control Plan that identifies potential temporary and permanent erosion and storm water runoff control measures. The final plan will include specific best management practices (BMPs) to control storm water related pollution and minimize erosion during construction and operation of the facility. Staff is concerned that the applicant has not provided a plan to protect water quality during operation. Storm water coming in contact with the oil associated with the facility does not drain to a separation sump or oily water separator. The applicant will provide a plan that identifies storm water pollution prevention control measures, which is subject to approval by the CPM.

The BMP's used in this area will be weed free to ensure that no additional non-native plants are introduced into this area. For more details see the **BIOLOGY** section.

The applicant has provided a spill prevention plan. Secondary spill containment will be installed around the turbine packages and transformer to prevent oil spills in the event of catastrophic equipment failure. Each turbine holds approximately 850 gallons of lubricating oil. The oil will not be replaced, decreasing the probability of spills.

The facility will use a total of 20 gallons of water per minute during operation. Approximately 5 gallons of water per minute per turbine is required for the evaporative cooling on the turbine air intake (Moreau 2001). The water will completely evaporate and no wastewater will be produced. The simple-cycle turbines utilize air pollution control technology that does not require water to control emissions. A water line from the City of Colton currently exists on site, and the City of Colton has agreed to serve the facility.

Implementation of standard Conditions of Certification **SOIL&WATER-1** through **SOIL&WATER-3**, as well as additional Conditions of Certification **SOIL&WATER-5** and **SOIL&WATER-6** will ensure that impacts to soil and water from construction and

operation of the proposed project are less than significant. **SOIL&WATER-5** requires straw bales and similar erosion control devices to be weed-free, and **SOIL&WATER-6** requires the preparation of a Storm Water Pollution Prevention Plan for the operation of the facility. Standard Condition of Certification **SOIL&WATER-4** is not required because the facility is less than five acres and is not anticipated to have any discharge.

## **CULTURAL RESOURCES**

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The Century project is an addition to the existing Century Substation Facility. The Century Substation was constructed in 1986 under the CEQA guidelines. The initial project siting process addressed cultural/historic/archaeological elements at the site. No new cultural resource mitigation is required for modifications within the existing Century Substation. The current project proposed by Alliance will expand the existing substation footprint to the southwest and will require a natural gas pipeline that will extend along M Street and across the Mount Vernon Bridge.

In April 2001, Mike Lerch of Statistical Research, Inc, a cultural resource management firm, completed the record search of the current project area at the San Bernardino Archaeological Information Center. No archaeological sites have been recorded in the vicinity of the substation, however, there was no record of a previous archaeological survey in the substation or immediately adjacent areas. A record search of existing cultural resources in the vicinity of the proposed gas transmission route was completed on April 18, 2001. The route will extend the gas line from a connection at 9<sup>th</sup> Street and M Street in Colton, about 1.5 miles west, and cross the Mount Vernon Bridge, to the Century Substation. A recorded historic refuse deposit is located south of M Street, opposite the rail yards, which is associated with the railroad use of the area (which dates to the 1880s). It reportedly contains dining-car china and other refuse. There are also mapped reports of early irrigation canals crossing the gas-line route perpendicular to the route and parallel to the river. The potential to encounter buried cultural materials is present along the entire M Street route due to the presence of the historic refuse deposit.

On April 12, 2001 Mr. Lerch conducted a survey of the substation expansion area and did not identify any cultural remains on the surface. The expansion area is highly disturbed due to motor vehicle use, flood and flood-control activity. However, due to the proximity of the Santa Ana River and the potential for human habitation along the river edge, the possibility for prehistoric cultural deposits is present.

California Energy Commission (CEC) staff conducted a site visit on April 16, 2001 and inspected the expansion area and the gas line route. No cultural resources were observed in the expansion area or the proposed route of the natural gas lateral extension.

Due to the proximity of the Santa Ana River, the possibility for prehistoric cultural deposits is present in the vicinity of the Century Substation and expansion area. The presence of a historic refuse site south of the railroad right of way along M Street indicates a possibility of additional historic cultural remains along the route of the

proposed natural gas line extension. Cultural resource monitoring is required for all ground disturbing activities on the proposed substation expansion and the natural gas lateral extension. This monitoring is required by standard Condition of Certification **CUL-2**. Because of the slight possibility that cultural resources could be encountered in the project area, standard Condition of Certification **CUL-1** does not apply.

## **PALEONTOLOGICAL RESOURCES**

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The project site is located on highly disturbed alluvium and has been previously graded (Alliance Power, Inc., 2001a, page 5). The applicant indicates that no known paleontological resources are known within the area of the project which is likely to undergo some level of ground disturbance (Alliance Power, Inc., 2001a, page 20). However, paleontological resources information regarding the substation has not been received by the CEC as of April 18, 2001. CEC staff is familiar with the project site from work on other projects in the Colton area and concur that there is a negligible chance of encountering significant paleontological resources during the construction of this project. No significant excavations (deeper than five feet below final grade) are anticipated for this project. Ground disturbance of previously undisturbed alluvium will be minimal since the light loads associated with the foundation of the peaker point to shallow foundation (piers not expected to exceed a depth of 14 feet below finished grade (Alliance Power, Inc., 2001a, page 2) and the limited length of the project linear facilities (natural gas line and electrical transmission line). The proposed expansion and peaker sites have been disturbed in the past and are not likely to contain significant paleontological resources in-situ. Although the intact quaternary alluvium has a high paleontological sensitivity due to paleontological resources finds in alluvium elsewhere within the San Bernardino Basin, the project is considered by CEC staff to have a low potential for encountering significant paleontological resources.

CEC staff propose that the use of the standard Condition for Certification **PALEO-2** to ensure that, should significant paleontological resources be encountered during construction, the resources will be appropriately assessed and managed. Because of the slight possibility that cultural resources could be encountered in the project area, standard Condition of Certification **PALEO-1** does not apply.

## **VISUAL RESOURCES**

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The project site is characterized by flat terrain with sparse vegetation and a mixture of developed and undeveloped parcels. An electrical substation lies immediately adjacent to the site to the east, and existing transmission lines located to the north of the site would be utilized by the proposed project. There are no important aesthetic resources in or near the project area, and there are no residences in the project area. The majority of existing public views of the site from Interstate-10, which lies approximately 0.3 miles to the north, are blocked by an existing construction contractor facility adjacent to the freeway. Views of the site would be available from Interstate 215 and have already been degraded by the existing substation and electrical transmission lines. The

proposed project would include 4 exhaust stacks, each measuring 52-feet in height, as well as a 20-foot block wall on the south side of the project site.

The applicant has not proposed any landscaping and has indicated that the City of Colton will not require a landscape plan for the project. Given the industrial nature of the surrounding area, the distance of the project from Interstate 10 and 215, intervening structures that block views of the project site, the existing lack of significant visual resources in the project area, and the Planning Commission's approval of a Major Variance for the project, visual impacts are considered less than significant.

The project is subject to specific Conditions of Certification **VIS-1** and **VIS-2**, which require steps to ensure mitigation of potential visual impacts. These measures will further reduce any potential visual impacts related to the project to less than significant level. No further Visual conditions are required.

## **ENVIRONMENTAL JUSTICE**

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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.

Estimated 2000 population data from Claritas shows numerous census tracts within six miles of the project site to include greater than 50% minority population, primarily to the north and east of the project site. Staff has determined that the impacts from this project, with implementation of staff's recommended conditions of certification, will not result in a significant impact in the surrounding community. Though minority populations are present in the area, staff finds that there are no environmental justice issues associated with this project.

## **TRANSMISSION SYSTEM ENGINEERING**

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The Alliance Century facility will connect to the city of Colton's Century substation. The power produced by the generators will be stepped up to 66 kV and will connect to the substation via an approximately 200-foot transmission line. A new transformer and circuit breaker will be built adjacent to the Century substation equipment. There are no significant transmission issues. Based on the results of the interconnection study, the operation of proposed generators at the Century substation will not require significant downstream electric facilities and will comply with safety standards<sup>1</sup>. The operation of the proposed gas turbines at the Century substation appears to reduce the loading on

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<sup>1</sup> CPUC General Order 95, CPUC Rule 21, Title 8, Articles 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.

lines bringing power from the Southern California Edison service area into Colton. Alliance Power may be required to replace circuit breakers in the Southern California Edison substation, but that will be determined by a Facilities Study which will be completed at a later date<sup>2</sup>. Thus, the interconnection of the Alliance Century facility will not require the construction of linear downstream transmission facilities and there are no significant transmission issues.

## **CONCLUSION**

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The Century project, if built and operated in compliance with the proposed conditions of certification included in this staff assessment, will be available in time to help alleviate the current emergency. The proposed conditions of certification serve to protect the public interest and the environment. Staff recommends approval of this project.

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<sup>2</sup> The replacement of circuit breakers usually occurs within the fence line of an existing substation and is not considered a significant downstream facility for the purposes of this analysis.

## REFERENCES

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## **STAFF CHECKLIST**

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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.

**ALLIANCE COLTON CENTURY SUBSTATION PROJECT  
EMERGENCY PERMIT EVALUATION CHECKLIST  
CALIFORNIA ENERGY COMMISSION**

<u>Application Requirement</u>	<u>Y/N</u>	<u>Application pages</u>	<u>Significant Issues</u>	<u>Special Conditions</u>	<u>Comments</u>
<b>1 Project Description</b>					
1.1 Project owner/operator (Name, title, address, phone)	Yes	p. 1			
1.2 Overview of power plant and linear facilities	Yes	pp. 1-2			
1.3 Structure dimensions (size and height), plan and profile	Yes	p. 2; attachment D			
1.4 Full size color photo of the site and rendering of proposed facility if available	Yes	Attachment D			
1.5 Maximum foundation depth, cut and fill quantities	Yes	Section 1.5	None	None	Slab foundations and pier foundations, no more than 14 feet deep, will rest on a site graded with minor balanced cut and fill.
1.6 Conformance with California Building Code	Yes	Section 1.6	None	None	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	pp. 2-3			

<b><u>Application Requirement</u></b>	<b><u>Y/N</u></b>	<b><u>Application pages</u></b>	<b><u>Significant Issues</u></b>	<b><u>Special Conditions</u></b>	<b><u>Comments</u></b>
1.8 Expected on-line date	Yes	p. 3			Project meets the Executive Order D-28 requirement of being online by Sept. 30, 2001 to qualify for this emergency permit process
1.9 Proposed duration of operation (years)	Yes	p. 3			
1.10 Identify transmission interconnection facilities	Yes	1,3 and attachment D	No significant issues	See standard condition	Adjacent to substation.
1.11 Transmission interconnection application	Yes	Attachment E			
1.12 "Down-stream" transmission facilities, if known	Yes	3, letter from Wes Williams to Timothy Trewyn dated 3/30/01.	No significant downstream facilities. However, additional circuit breakers beyond those identified in study may need to be replaced. Such replacement will not cause significant environmental impacts.	Circuit breakers should be sized to comply with a short-circuit analysis.	Further studies may identify breakers that will need to be replaced.
1.13 Fuel interconnection facilities	Yes	p. 3			
1.14 Fuel interconnection application	Yes	Attachment E			
1.15 Water requirements and treatment	Yes	p. 4			
1.16 Water interconnection facilities (supply/discharge)	Yes	p. 4			

<u>Application Requirement</u>	<u>Y/N</u>	<u>Application pages</u>	<u>Significant Issues</u>	<u>Special Conditions</u>	<u>Comments</u>
1.17 Source and quality of water supply	Yes	p. 4, attachment E			
1.18 Water supply agreement/ proof of water supply	Yes	p. 4, attachment E			
<b>2 Site Description</b>					
2.1 Site address (street, city, county)	Yes	Page 5	None		
2.2 Assessor's parcel number	Yes	Page 5	None		
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	Page 5 refers to attachment F.	None		
2.4 Existing site use	Yes	Page 5	Portions of the site have not been previously developed, although evidence of human disturbance is present.		See potential impacts analysis in Section 8, Biological Resources, and Section 13, Cultural Resources.
2.5 Existing site characteristics (paved, graded, etc.)	Yes	Page 5 and attachment D.	Portions of the site have not been previously developed, although evidence of human disturbance is present.		See potential impacts analysis in Section 8, Biological Resources, and Section 13, Cultural Resources.
2.6 Layout of site (include plot plan)	Yes	Page 5 and attachment D.	Location of laydown area not clearly identified.		See text.

<b><u>Application Requirement</u></b>	<b><u>Y/N</u></b>	<b><u>Application pages</u></b>	<b><u>Significant Issues</u></b>	<b><u>Special Conditions</u></b>	<b><u>Comments</u></b>
2.7 Zoning and general plan designations of site and linear facilities	Yes	Page 6	None		
2.8 Ownership of site (Name, address, phone)	Yes	Page 6	None		
2.9 Status of site control	Yes	Page 6 and attachment G.	None		
2.10 Equipment laydown area – size and location	Y	Page 6	Location of laydown area not clearly identified at this time.		See text.
<b>3 Construction Description</b>					
3.1 Construction schedule	Yes	p. 7, April 4 supplemental letter			
3.2 Workforce requirements (peak, average)	Yes	p. 7, April 4 supplemental letter			
<b>4 Power Purchase Contract (DWR, ISO, other)</b>					
4.1 Status of negotiations and expected signing date	Yes	p. 8			Final contract negotiations between DWR and Alliance in progress.
<b>5 Air Emissions</b>					
5.1 Nearest monitoring station (location, distance)	Yes	p. 9			

<u>Application Requirement</u>	<u>Y/N</u>	<u>Application pages</u>	<u>Significant Issues</u>	<u>Special Conditions</u>	<u>Comments</u>
5.2 Provide complete self certification air permit checklist	Yes	Attachment B, revised in March 20 supplement			
5.3 Provide complete air permit application	Yes	Attachment I, revised in March 20 supplement			
5.4 Status of air permit application with air district	Yes	pp. 9-10		Condition AIR-2 requires the project owner to comply with the final permit approved by the air district	South Coast AQMD issued a notice of their draft permit on March 29, starting a 30-day public comment period. The final permit is expected to be issued shortly after the end of the comment period. The notice is included in this report as App. A, and the draft permit is included as App. B.
5.5 Status of offsets and/or mitigation fees, as required	Yes	p. 10			
<b>6 Noise</b>					
6.1 Local noise requirements	Yes	Page 11	None		
6.2 Nearest sensitive receptor (type, distance)	Yes	Page 11	None		

<u>Application Requirement</u>	<u>Y/N</u>	<u>Application pages</u>	<u>Significant Issues</u>	<u>Special Conditions</u>	<u>Comments</u>
6.3 Project noise level at nearest property line	Yes	Page 11	Project noise levels at the property line would exceed allowable noise standards.		The Colton Planning Commission approved a Major Variance on April 11, 2001 to allow the project to exceed noise limitations.
6.4 Proposed mitigation if required	Yes	Page 11	None		
<b>7 Hazardous Materials</b>					
7.1 Type and volume of hazardous materials on-site	Y	Page 12, April 4 supplemental letter	No	No	No
7.2 Storage facilities and containment	Y	Page 12, April 4 supplemental letter	No	No	No
<b>8 Biological resources</b>					
8.1 Legally protected species* and their habitat on site, adjacent to site and along right of way for linear facilities ( <i>*threatened or endangered species on State or federal lists, State fully protected species</i> )	Y	Page 13, Attachment K	No biological surveys were conducted at the site or along the linear facilities.	Bio-7 Bio-8 Bio-9	No surveys were done, however, the area is highly disturbed and habitat required is not present.

<b><u>Application Requirement</u></b>	<b><u>Y/N</u></b>	<b><u>Application pages</u></b>	<b><u>Significant Issues</u></b>	<b><u>Special Conditions</u></b>	<b><u>Comments</u></b>
8.2 Designated critical habitat on site or adjacent to site (wetlands, vernal pools, riparian habitat, preserves)	Y	Page 13, Attachment K	The Santa Ana River is adjacent to the site.	Bio-10	Habitat will be avoided during construction and operation of the facility.
8.3 Proposed mitigation as required	Y	Page 13, Attachment K	Additional lighting	Bio-11	CDFG is requiring lighting to be focused away from habitat.
<b>9 Land Use</b>					
9.1 Local land use restrictions (height, use, etc.)	Yes	Page 14	None		The Colton Planning Commission approved a Major Variance on April 11, 2001 to allow the project to exceed height and noise limitations.
9.2 Use of adjacent parcels (include map)	Yes	Page 14 and attachment D.	None		
9.3 Ownership of adjacent parcels – site and linears	Yes	Page 14 and attachment F.	None		
9.4 Demographics of census tract where project is located (most current available)	Yes	Attachment F.	None		
<b>10 Public Services</b>					
10.1 Ability to serve letter from Fire District	Yes	Attachment L			
10.2 Nearest fire station	Yes	p. 15			

<b><u>Application Requirement</u></b>	<b><u>Y/N</u></b>	<b><u>Application pages</u></b>	<b><u>Significant Issues</u></b>	<b><u>Special Conditions</u></b>	<b><u>Comments</u></b>
<b>11 Traffic and Transportation</b>					
11.1 Level of Service (LOS) measurements on surrounding roads – a.m. and p.m. peaks	Yes	Page 16	None		24-hour counts supplied by applicant. Further information obtained from the City of Colton Department of Public Works.
11.2 Traffic Control Plan for roads during construction period	Yes	Pages 16	None		
11.3 Traffic impact of linear facility construction	Yes	Page 16	None		
11.4 Equipment transport route	Yes	Page 16-17	None		
11.5 Parking requirements – workforce and equipment	Yes	Page 17	Location of laydown area not clearly identified.		See text.
<b>12 Soil and Water Resources</b>					
12.1 Wastewater volume, quality, treatment	Y	Page 18			The facility will have no waste water.
12.2 Status of permits for wastewater discharge or draft permit (WDR/NPDES)	Y	Page 18			Not required for sites with less than 5 acres of disturbance and no waste water.
12.3 Draft Erosion Prevention and Sedimentation Control Plan or Mitigation Strategy	Y	Page 18	Addition of non-native seeds in straw bales and wattles used in erosion prevention.	Soil&water-5	

<b><u>Application Requirement</u></b>	<b><u>Y/N</u></b>	<b><u>Application pages</u></b>	<b><u>Significant Issues</u></b>	<b><u>Special Conditions</u></b>	<b><u>Comments</u></b>
12.4 Spill Prevention/Water Quality Protection Plans	Y	Attachment M Page 3	Storm water runoff from facility is not routed to a separation sump.	Soil&water-6	SWPPP is needed for operation and construction.
<b>13 Cultural Resources</b>					
13.1 Identification of known historic/prehistoric sites	Y	Page 19	None	None	None
13.2 Proposed mitigation if required	Y	Page 19	None	Standard Condition CUL-1 will not apply. Standard Condition CUL-2 will apply to the substation, expansion area, and the natural gas lateral extension.	It is critical to require a monitor during excavation along the proposed natural gas lateral extension due to the potential for encountering cultural remains.
<b>14 Paleontological Resources</b>					
14.1 Identification of known paleontologic sites	Y	Page 20	None	None	The applicant has yet to submit a copy of the exiting paleontological resources review results for the substation.
14.2 Proposed mitigation if required	Y	Page 20	None	None	None.
<b>15 Visual resources</b>					
15.1 Plan for landscaping and screening to meet local requirements	Yes	Page 21	None		The City of Colton does not require additional landscaping or screening for the project.

<u>Application Requirement</u>	<u>Y/N</u>	<u>Application pages</u>	<u>Significant Issues</u>	<u>Special Conditions</u>	<u>Comments</u>
15.2 Full size color photo of the site and rendering of proposed facility with any proposed visual mitigation if available	Yes	Attachment D.	None		The City of Colton does not require visual mitigation for the project.
<b>16 Transmission System Engineering</b>					
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	Page 22	None		

# ALLIANCE COLTON CENTURY SUBSTATION PROJECT GENERAL CONDITIONS INCLUDING COMPLIANCE MONITORING AND CLOSURE PLAN

## INTRODUCTION

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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 is permanent, rather than temporary or mobile in nature;
- the project owner demonstrates site control;
- the project owner has secured permanent emission reduction credits (ERCs) approved by SCAQMD and the California Air Resources Board (CARB) to fully offset project emissions for its projected run hours prior to expiration of any temporary ERCs obtained from CARB or SCAQMD;
- the project is in current compliance with all Energy Commission permit conditions specified in the final decision;
- the project is in current compliance with all conditions contained in the Permit to Construct and Permit to Operate issued by SCAQMD for the project; and
- the project continues to meet BACT requirements under SCAQMD and CARB requirements.

The project shall expire if these continuation criteria are not met. At least six months prior to the expiration of the power purchase agreement with the Department of Water Resources (DWR), or prior to the expiration of the Summer Reliability Agreement with the California Independent System Operator if no DWR contract is signed, the project owner shall provide verification that these conditions have been met.

In addition, the project owner shall submit a report after completion of the first three years in operation, as described below.

## **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 Reporting**

The project owner shall submit status reports to the CPM every two weeks indicating its progress in meeting milestones for procuring necessary project components and all required approvals for construction and operation of the facility by August 1, 2001. The first of these reports will be due two weeks after certification of the project by the Energy Commission.

### **Start of Operations**

The Alliance Colton Drews Substation Project (Drews) shall be on-line by the expected date of operation of August 1, 2001, or the earliest possible date thereafter, but no later than September 30, 2001. If Drews is not operational by September 30, 2001, the Energy Commission will conduct a hearing to determine the cause of the delay and

consider what sanctions, if any, are appropriate. If the Energy Commission finds that the project owner failed to proceed with due diligence to have Drews in operation by September 30, 2001, the Energy Commission will set a specific date by which Drews must be brought on-line as a condition precedent to continue the certification.

### **Three-Year Review**

No later than 15 days after completion of the first three years in operation, the project owner shall submit to the Energy Commission a report of operations that includes a review of Drew's compliance with the terms and conditions of certification, the number of hours in operation, and the demand for power from the facility during the three year period.

### **Compliance Verifications**

Condition 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:

1. 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;
2. appropriate letters from delegate agencies verifying compliance;
3. Energy Commission staff audits of project records; and/or
4. 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:

1. 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

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### NOISE

Standard Condition of Certification **NOISE-1** is not required because the City of Colton approved a Major Variance allowing the project to exceed the local noise standards.

**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.

**Verification:** 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.

**Verification:** 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.

**Verification:** 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 unless approved by the CPM.

**Verification:** 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.

**Verification:** 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 local 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.

**Verification:** 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.

**Verification:** 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**

**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 Designated Biologist, a person knowledgeable of the local/regional biological resources and the compliance project manager (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.

**Verification:** 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. If listed species are encountered during construction additional agency consultation may be required. Throughout construction, the project owner shall report on items one through six above if identified resources are found or impacted.

- BIO-6** Upon decommissioning the site, the biological resource values will be reestablished at pre-construction levels or better.
- BIO-7** Ground breaking activities associated with the facility and the gas pipeline shall not begin until the CPM approved Designated Biologist is available to be on site.

**Protocol:** The Designated Biologist must meet the following minimum qualifications:

- a. A Bachelor's Degree in biological sciences, zoology, ecology, botany, or related field;
- b. At least three years of experience in field biology or current certification of a nationally recognized biological society;
- c. At least one year of experience with biological resources found in or near the project site; or
- d. Or an ability to demonstrate to the satisfaction of the CPM the appropriate education and experience for the biological resources tasks that must be addressed during project construction and operation.

**Verification:** Prior to ground disturbance activities, the project owner shall submit for the CPM for approval, the name, qualifications, address, and telephone number of the individual selected by the project owner as the Designated Biologist.

**BIO-8** A qualified biologist, with knowledge of listed plant and animal species in this area, shall survey the site for listed species prior to ground breaking activities associated with the facility including the gas pipeline installation. Sensitive areas shall be flagged for avoidance. If any listed species are encountered, consultation with U.S. Fish and Wildlife Service and California Department of Fish and Game will be required.

Protocol: The biologist shall survey undeveloped areas that are to be disturbed, including the facility expansion, equipment laydown, and the gas pipeline route.

**Verification:** The biologist shall provide written confirmation to the CPM of the survey results with locations of sensitive areas and listed species presence or absence.

**BIO-9** The project owner's Construction Manager shall act on the advice of the Designated Biologist (DB) to ensure conformance with the Biological Resources Conditions of Certification.

Protocol: The project owner's Construction Manager shall halt, if directed by the DB, all construction activities to assure that potentially significant biological resource impacts are avoided.

**Verification:** Immediately upon the DB notification to halt construction, the project owner shall notify the CPM of the circumstances and actions being taken to resolve the problem.

**BIO-10** During all construction activities associated with the Century facility, equipment laydown shall be within CPM approved areas.

**Verification:** The CPM will approve parking areas and equipment laydown.

**BIO-11** If additional lighting is to be installed at the facility, it shall be limited to inside the walls of the facility and be screened from the outside habitat.

**Verification:** Lighting shall be focused into the facility and not the surrounding habitat. If additional lighting is required by the facility, the plans shall be approved by the CPM prior to installation.

## **LAND USE**

**LAND-1** The project permitted under this emergency process will conform to all local, state and federal land use requirements, including, where applicable, general plan policies, zoning regulations, local development standards, easement requirements, and encroachment permits.

**Verification:** Prior to start of construction or at a later time approved by the CPM, 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.

**Verification:** 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-of-way and shall obtain necessary encroachment permits from Caltrans and all relevant jurisdictions.

**Verification:** 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 or licenses are secured from the California Highway Patrol and Caltrans for the transport of hazardous materials.

**Verification:** The project owner shall keep copies of all permits/licenses acquired by the project owner and 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 RESOURCES**

**SOIL&WATER-1** Prior to ground disturbance, the project owner shall obtain CPM approval of a Storm Water Pollution Prevention Plan (SWPPP) as required under the General Storm Water Construction Activity Permit for the project.

**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.

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

**Verification:** 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.

**Verification:** A copy of the water service agreement or well permit shall be submitted to the CPM prior to site mobilization.

Standard Condition of Certification **SOIL&WATER-4** is not required because the facility is less than five acres and is not anticipated to have any discharge.

**SOIL & WATER-5** All BMP's such as straw wattles and straw bales shall be certified weed free.

**SOIL&WATER-6** Prior to operation of the facility, the project owner shall obtain CPM approval of a Storm Water Pollution Prevention Plan (SWPPP) for operation of the facility.

**Verification:** Prior to operation of the facility, the project owner will submit a copy of the Storm Water Pollution Prevention Plan for the facility to the CPM. This may include an oil/water separator or some other method to protect water quality.

## **CULTURAL**

For this project standard condition **CUL-1** does not apply due to slight possibility that cultural resources could be encountered in project area.

- 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 qualified Cultural Resource Specialist (CRS) who will have access to the site and linear rights-of-way at any time prior to and during ground disturbance.
  2. The CRS 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 Compliance Project Manager (CPM) and a decision will be made by the CPM within 24-hours as to how to proceed.

3. If suspected human remains are discovered during construction, all work will stop immediately within a radius of 100 feet (30 meters) of the discovery and the San Bernardino County Coroner's Office will be notified within 24 hours. If the remains are identified to be Native American, the Coroner's Office will contact the Native American Heritage Commission (NAHC) who will identify the Most Likely Descendant (MLD). The MLD will be notified and will determine the most appropriate disposition of the remains and any associated artifacts.
4. The project owner shall allow time for the CRS to recover significant resource finds, and pay all fees necessary to curate recovered significant resources.

**Verification:** Throughout construction, the project owner shall inform the CPM concerning any substantive activity related to items 1 through 4 above. The CRS will maintain a daily log of monitoring activities and any cultural resource finds. 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.

**Verification:** 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.

Standard Condition of Certification **VIS-3** is not required because the City of Colton is not requiring additional landscaping or screening for the project.

## **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.

**Verification:** 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 RESOURCES**

Standard Condition of Certification **PALEO-1** has not been included due to slight possibility that paleontological resources could be encountered in project area.

**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.

**Verification:** 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:

1. 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 (CCR), 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).

**Verification:** 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 seq).

**Verification:** 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.

**Protocol:** 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.

**Verification:** 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 the South Coast Air Quality Management District, as modified by any Compliance Orders issued by SCAQMD relating to this project.

**Verification:** 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 days.

**AQ-3** The project owner shall operate Drews in compliance with all Best Available Control Technology (BACT) standards imposed by the Air District in its Authority to Construct permit, with the exception of an initial period of operation if the Air District issues a Compliance Order allowing operation of the facility with NOx emissions up to 25 ppm. The length of this initial period shall be specified in the Compliance Order. Failure to meet these standards will result in a finding that the project owner is out of compliance with the certification.

**ALLIANCE COLTON CENTURY SUBSTATION PROJECT  
EMERGENCY PERMIT EVALUATION PREPARATION TEAM  
CALIFORNIA ENERGY COMMISSION**

Kevin Kennedy ..... Project Manager  
Jim Bartridge ..... Assistant Project Manager, Land Use, Noise, Transportation, Visual  
Mary Dyas ..... Project Assistant  
Jeff Ogata ..... Legal Counsel  
Christopher Meyer ..... Compliance Manager  
Caprice Harper ..... Cultural Resources  
Bob Anderson ..... Paleontologic Resources  
Danielle Muir ..... Biological Resources  
Steve Baker ..... Facility Design  
Rick Tyler ..... Hazardous Materials  
Joe Crea ..... Soil and Water Resources  
Mark Hesters ..... Transmission Engineering

## APPENDIX A

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### NOTICE OF INTENT TO ISSUE PERMIT PURSUANT TO AQMD RULES 212 AND 3006

This notice is to inform you that the South Coast Air Quality Management District (AQMD) has received and reviewed permit applications for two power generation facilities to be operated by Alliance Colton LLC. The AQMD intends to issue a facility permit for each facility at the end of this 30-day public comment and review period and after the applicant demonstrates full compliance with all requirements.

The AQMD is the air pollution control agency for the four county region including Orange County and parts of Los Angeles, Riverside and San Bernardino Counties. Anyone wishing to install or modify equipment that could control or be a source of air pollution within this region must first obtain a permit from the AQMD. Under certain circumstances, before a permit is granted, a public notice, such as this, is prepared by the AQMD and distributed by the applicant.

The AQMD has evaluated the permit applications listed below for the following two facilities and determined that it meets all applicable AQMD rules and regulations subject to the conditions described below:

FACILITY:	Alliance Colton, LLC Drews Substation 559 South Pepper Ave. Colton, CA 92324	Alliance Colton, LLC Century Substation 661 South Cooley Dr. Colton, CA 92324
CONTACT:	Brian O'Neill Vice President Alliance Colton, LLC 7950 South Lincoln Street, Suite 114 Littleton, CO 80122	

### AQMD APPLICATION NUMBERS

#### DREWS SUBSTATION

383349	Turbine #1
383350	Turbine #2
383351	Turbine #3
383352	Turbine #4
383880	Ammonia storage tank
383881	Air pollution control system #1
383882	Air pollution control system #2
383883	Air pollution control system #3
383884	Air pollution control system #4
383879	Title V application

## **CENTURY SUBSTATION**

383353	Turbine #1
383354	Turbine #2
383355	Turbine #3
383356	Turbine #4
383886	Ammonia storage tank
383887	Air pollution control system #1
383888	Air pollution control system #2
383889	Air pollution control system #3
383890	Air pollution control system #4
383885	Title V application

## **PROJECT DESCRIPTION**

Each of the two projects consists of four new electric generating gas turbines and the associated air pollution control equipment. Each turbine has a nominal rating of 10.5 megawatts, totaling 42 megawatts for all four turbines at each facility. The two facilities are located at Drews substation and Century substation respectively, at the addresses indicated above. Both projects are expected to be operational by September 2001 and to supply electricity to the California electricity grid system and are being permitted pursuant to Governor Gray Davis' Executive Orders (D-24-01 and D-26-01). Both facilities have selected to operate under Regulation XX – RECLAIM for NOx pollutants. The proposed permits to construct will require these turbines to be equipped with air pollution control equipment that will meet the following emission levels: 5ppmv NOx @ 15%O<sub>2</sub>, 6 ppmv CO @ 15% O<sub>2</sub>, and 2 ppmv ROG @ 15% O<sub>2</sub>. The air pollution control equipment will consist of either Selective Catalytic Reduction (SCR) with oxidation catalyst, XONON™ combustor technology, or XONON™ combustor technology with oxidation catalyst. If the SCR is utilized as the air pollution control equipment, ammonia will be used to react with NOx emissions in the exhaust gases; therefore, an ammonia storage tank is also being proposed for the SCR control option.

## **PROJECTED EMISSIONS**

Due to the critical need for electricity this summer and since the construction schedule does not allow for full installation of air pollution control equipment prior to September 2001, in implementing the Governor's Executive Orders, the turbines will initially for the first few months be operated without air pollution control equipment and under a Compliance Order that Alliance Colton LLC will obtain from the AQMD. Upon achieving full operating load, the following emissions are expected for each facility from the operation of these turbines with and without air pollution control systems:

Pollutant	Controlled emissions Lbs/day	Uncontrolled emissions lbs/day
Nox	231	1158
CO	169	564
VOC	32	32
PM <sub>10</sub>	79	79
SOx	41	41
NH <sub>3</sub>	86*	0

\* Assuming SCR will be utilized

Emissions from the proposed projects contain pollutants that are considered toxic under AQMD Rule 1401-New Source Review of Toxic Air Contaminants. Therefore, health risk assessments were performed for these projects. The health risk assessments use health protective assumptions in estimating actual risk to an individual person. Even assuming this health protective condition, the evaluations show that the maximum individual cancer risk increases from the projects are less than one-in-one-million. These levels of estimated risk are below the threshold limits established for new or modified sources.

**The projects will not cause or contribute to violations of any state or federal ambient air quality standard for any attainment pollutants.**

**The AQMD will issue the permits to construct for the equipment described above after the applicant demonstrates full compliance with all applicable rules and regulations meeting the following requirements:**

- Alliance Colton LLC must provide emission offsets, or provide contractual agreement to provide emission offsets for NOx emissions. Emission offsets will either be in the form of RECLAIM Trading Credits in the total amount of 37,467 pounds for the first RECLAIM compliance year or be purchased from the State-funded Emission Reduction Credit Bank, established pursuant to the Governor's Executive Order D-24-01.
- Conduct additional refined modeling to demonstrate compliance with the air quality standard for Significant Changes in Air Quality Concentration of 20 µg/m<sup>3</sup> NOx.

These facilities are classified as a Federal Title V facilities and have filed application for a Title V permit. Pursuant to AQMD Rule 3006, any person may request a proposed permit hearing on an application for a Title V significant permit revision by filing with the Executive Officer a complete Hearing Request Form (Form 500G) for a proposed hearing within 15 days of the date of publication of notice. On or before the date the request is filed, the person requesting a proposed permit hearing must also send by first class a copy of the request to the facility address and contact person listed above.

The proposed permit and other information are available for public review at the Luque Branch Library, 294 E. "O" Street, Colton, CA 92324. Additional information including the facility owner's compliance history submitted to the AQMD pursuant to Section 42336, or otherwise known to the AQMD, based on credible information, is available at the AQMD for public review by contacting Mr. Chandra Bhatt at Engineering and

Compliance, South Coast Air Quality Management District, 21865 Copley Drive, Diamond Bar, CA 91865-4182, (909) 396-2653. Anyone wishing to comment on the air quality elements of these permits should submit the comments in writing within 30 days of the distribution/publication date. Submit written comments to the AQMD, attention Ms. Pang Mueller, Senior Engineering Manager. If you are concerned primarily about zoning decisions and the process by which the facility has been sited in this location, contact your local city or county planning department or the California Energy Commission at (916) 653-0062.

DISTRIBUTION DATE: March 29, 2001

**APPENDIX B**

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**PROPOSED AUTHORITY TO CONSTRUCT ISSUED BY THE SOUTH  
COAST AIR QUALITY MANAGEMENT DISTRICT**