Application for Certification for COLUSA GENERATING STATION Colusa County, California

Volume I

November 2006

Prepared for:

E&L Westcoast, LLC

Prepared by:

URS

E&L Westcoast, LLC

ANDREW C. WELCH, P.E.
PROJECT MANAGER
T/ 240 723-2304
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IN THE MATTER OF THE APPLICATION	)	VERIFICATION IN SUPPORT OF
FOR THE CERTIFICATION OF COLUSA	)	THE APPLICATION FOR
GENERATING STATION	)	CERTIFICATION OF COLUSA
DOCKET NO._____	)	GENERATING STATION

I, Andrew Welch, Project Manager, E&L Westcoast, LLC, Applicant in the above-referenced matter, am authorized to make this verification on behalf of E&L Westcoast, LLC.

I have read and know of the contents of the Application for Certification for the Colusa Generating Station. ("Application").

I am informed and believe that the matters stated in the Application are true and on that ground I allege that the matters stated therein are true.

I declare under penalty of perjury that the foregoing is true and correct. Executed on November 1, 2006, at 221 Main Street, Suite 600, San Francisco, CA 94105.

_____
Andrew Welch

E&L Westcoast, LLC

ANDREW C. WELCH, P.E.
PROJECT MANAGER
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November 6, 2006

Mr. B.B. Blevins
Executive Director
California Energy Commission
1516 Ninth Street
Sacramento, California 95814

Dear Mr. Blevins:

RE: Submittal of Application for Certification—Colusa Generating Station

Enclosed please find E&L Westcoast, LLC's Application for Certification (AFC) to build and operate a new power plant in northern Colusa County. This project is a nominal 660 MW gas-fired combined-cycle generation facility. It will interconnect to PG&E's Cottonwood to Vaca-Dixon 230 kV lines via a new substation to be built at the site.

This Application is submitted under the six-month process pursuant to Title 20 of the California Code of Regulations (CCR), Division 2, Chapter 5, Article 7, which contains provisions for considering expedited applications under Public Resources Code Section 25550. In order to facilitate your review of the data requirements for processing this AFC under the six-month process, we have provided the following summary.

- In addition to containing all of the information outlined in Appendix B of the California Energy Commission (CEC) regulations, the AFC contains a description of all applicable laws, ordinances, regulations and standards (LORS) and a discussion of the project's compliance. Within each resource category, the AFC also contains a table of additional permits and anticipated processing schedules.

- 20 CCR 2022 (b) (2) (A) requires a cumulative air quality impact analysis of all proposed stationary emissions sources within a 6-mile radius of the proposed site. Only one such source exists, and the project in combination with this source will not result in significant cumulative air quality impacts. Modeling results substantiating this conclusion are included in the AFC.

- The Air Quality section of the AFC (Section 8.1) includes a description of the initial commissioning phase of the project and demonstrates through air dispersion modeling that emissions during initial commissioning do not cause new violations of state or federal ambient air quality standards for the criteria

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pollutants. This analysis demonstrates compliance with 20 CCR 2022 (b) (2) (B).

- The project will not emit any criteria air pollutants that currently exceed state or federal ambient air quality standards that will not be offset.

- The Public Health section of the AFC (Section 8.6) contains a modeling analysis that demonstrates that the project will not result in public exposure to toxic air contaminants that would be considered significant impacts, thereby complying with 20 CCR 2022 (b) (2) (D).

- The project will not need waste discharge requirements from the Regional Water Quality Control Board because wastewater will be disposed of in a zero-liquid discharge system as described in Sections 3.4.7.1 and 8.13.2.1.2. Therefore, the AFC need not contain the information required by 20 CCR Section 2022 (b) (2) (E).

- The Biological Resources section of the AFC (Section 8.2) describes biological survey methodology, results, and mitigation measures that demonstrate that the project will not have significant impacts on wetlands or special-status plant or animal species. This section contains the information necessary to comply with 20 CCR Section 2022 (b) (2) (F).

- The Hazardous Materials Handling section of the AFC (Section 8.12) contains a modeling analysis demonstrating compliance with 20 CCR Section 2022 (b) (2) (G) and (H). The project will use aqueous ammonia to reduce air emissions, but the project does not expose public receptors to unacceptable risks associated with a release of ammonia from either the storage tank or from an accident associated with a release during unloading of a tanker truck.

- The AFC also demonstrates in Section 3.4.8 that the project will not store gaseous flammable or explosive materials in quantities greater than 25,000 standard cubic feet in compliance with 20 CCR 2022 (b) (2) (I).

- Appendix F contains a System Impact study demonstrating that the project will not result in significant adverse impacts on the electrical system, as required by 20 CCR Section 2022 (b) (3). A summary of the results of the study is provided in Chapter 5 of the AFC.

- Section 8.8.3 of the AFC contains an environmental justice evaluation as specified in 20 CCR Section 2022 (b) (4). The evaluation demonstrates that the project will not have a disproportionate impact on low-income or minority populations.

- A discussion of project ownership and site control as required by 20 CCR Section 2022 (b) (5) (A) is contained in Section 1.5 of the AFC.

- The will-serve letter from Glenn-Colusa Irrigation District as required by 20 CCR Section 2022 (b) (5) (B) is included as Figure 7.1-1 of the AFC.

This submittal includes one original and 60 paper copies of the AFC (each is a two-volume set), and 65 copies on CD.

E&L Westcoast requests that any questions or discussion regarding this submittal be directed to:

Andrew C. Welch
E&L Westcoast, LLC
8403 Colesville, Suite 915
Silver Spring, Maryland 20910

and that the service list for the Application proceeding also include copies to:

Michael J. Carroll
Latham & Watkins LLP
650 Town Center Drive, Suite 2000
Costa Mesa, California 92626

and

Dale D. Shileikis
URS Corporation
221 Main Street, Suite 600
San Francisco, California 94105

E&L Westcoast, LLC believes that this plant is situated in an ideal location from the perspective of available infrastructure and environmental concerns. We look forward to the opportunity to work with the Commission as it begins its review of this Application.

Yours very truly,

Andrew C. Welch

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URS

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ACRONYMS

AAQS	Ambient Air Quality Standards
AASHTO	American Association of State Highway and Transportation
AB	Assembly Bill
ACC	Air Cooled Condenser
ACHP	Advisory Council on Historic Preservation
AERMOD	American Meteorological Society/Environmental Protection Agency Regulatory Model
AFC	Application for Certification
AIHA	American Industrial Hygiene Association
ANC	acid neutralizing capacity
ANSI	American National Standards Institute
AOU	American Ornithologists Union
APCO	Air Pollution Control Officer
APE	Area of Potential Effect
APN	Assessor's Parcel Number
AQMP	air quality management plan
AQRV	air quality related values
ARM	ambient ratio method
ASTM	American Society for Testing and Materials
ATC	Authority to Construct
BAAQMD	Bay Area Air Quality Management District
BACM	best achievable control measures
BACT	Best Available Control Technology
BEA	Bureau of Economic Analysis
bhp	brake horsepower
BLM	Bureau of Land Management
BMPs	Best Management Practices
BPIP	Building Profile Input Program
BTEX	benzene, toluene, ethylbenzene, and xylenes
Btu	British thermal units
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CAAQS	California Ambient Air Quality Standards
$CaCO_3$	calcium carbonate
CACP	Census of Agriculture County Profile
CAD	Computer Aided Design
Cal/ARP	California Accidental Release Prevention
Cal/EPA	California Environmental Protection Agency
Cal-ISO	California Independent System Operator
Cal/OSHA	California Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CAS	Chemical Abstract Service
CATEF	California Air Toxics Emission Factor
CBC	California Building Standards Code
CCAPCD	Colusa County Air Pollution Control District
CCCC	Colusa County Chamber of Commerce
CCDA	Colusa County Department of Agriculture
CCGP	Colusa County General Plan
CCR	California Code of Regulations

CCTS	Central California Taxonomic System
CCW	Closed Cooling Water
CDFG	California Department of Fish and Game
CDMG	California Division of Mines and Geology
CEC	California Energy Commission
CEMS	Continuous Emissions Monitoring System
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CGA	Compressed Gas Association
CGS	Colusa Generating Station
CHP	California Highway Patrol
CIWMA	California Integrated Waste Management Act
CNDDB	California Natural Diversity Data Base
CNEL	Community Noise Equivalence Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
COC	carbon monoxide oxidation catalyst
COTP	California-Oregon Transmission Project
CPM	Compliance Project Manager
CPUC	California Public Utilities Commission
crashes/MVM	crashes per million vehicle miles
CRHR	California Register of Historical Resources
CRMMP	Cultural Resources Monitoring and Mitigation Plan
CRS	Cultural Resources Specialist
CRSBBZ	Coast Ranges-Sierran Block Boundary Zone
CT	combustion turbine
CTG	combustion turbine generator
CUPA	Certified Unified Program Agency
CURE	California Unions for Reliable Energy
CUSD	Chico Unified School District
CVP	Central Valley Project
CVRWQCB	Central Valley Regional Water Quality Control Board
CWA	Clean Water Act
cy	cubic yards
dB	decibels
dBA	A-weighted sound level
DBT	dry bulb temperature
DCS	Distributed Control System
DFA	Department of Food and Agriculture
DLN	dry low-NO_X
DNAG	Decade of North American Geology
DOC	Determination of Compliance
DOE	Department of Education
DOF	Department of Finance
DTM	Digital Terrain Modeling
DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources
EAF	Equivalent Availability Factor
EAP	Emergency Action Plan

EDD	Employment and Development Department
EHSD	Environmental Health Services Department
EMF	electromagnetic fields
EP&C	engineering, procurement, and construction
EPRI	Electric Power Research Institute
ERAF	Education Revenue Augmentation Fund
ERC	Emission Reduction Credit
ERPG-2	Emergency Response Planning Guideline Level 2
ESA	Environmental Site Assessment
ESU	Evolutionarily Significant Unit
ºF	degrees Fahrenheit
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FSA	Final Staff Assessment
FTA	Federal Transit Administration
g/s	grams per second
GCID	Glenn-Colusa Irrigation District
GE	General Electric
GEP	good engineering practice
gpm	gallons per minute
gpd	gallons per day
GPPL	Geothermal Public Power Line
GPS	Geographic Positioning System
HBF	historical burn fraction
HCP	Habitat Conservation Plan
HDPE	high-density polyethylene
HP	high pressure
HRA	health risk assessment
HRSG	heat recovery steam generator
HVAC	heating, ventilation, and air conditioning
HWCL	Hazardous Waste Control Law
Hz	Hertz
I-5	Interstate 5
IAN	Integrated Assessment of Need
IDLH	Immediately Dangerous to Life and Health
IEEE	Institute of Electrical and Electronics Engineers
IIPP	Injury and Illness Prevention Program
IP	intermediate pressure
ISC	Industrial Source Complex
ISCTS3	Industrial Source Complex Short Term 3
JHA	job hazard analysis
km	kilometers
KOP	key observation point
kV	kilovolts
kV/m	kilovolts per meter
LAER	Lowest Achievable Emission Rate
lb/hr	pounds per hour
L_{eq}	equivalent sound level
LORS	Laws, Ordinances, Regulations, and Standards
LOS	Level of Service
LO/TO	Lock Out/Tag Out
LP	low pressure

LTMS	Long-Term Management Strategy
m/s	meters per second
Ma	million years ago
MCC	motor control center
MCE	maximum credible earthquake
MFPD	Maxwell Fire Protection District
mG	milligauss
$\mu g/m^3$	micrograms per cubic meter
mg/L	milligrams per liter
mgd	million gallons per day
M_L	Local Magnitude
MLD	Most Likely Descendent
MLLW	mean lower low water
mm	millimeters
MM	modified Mercalli
mm Btu/hr	million British thermal units per hour
MMcf	million cubic feet
msl	mean sea level
MUSD	Maxwell Unified School District
MVFD	Maxwell Volunteer Fire Department
MW	megawatt
M_w	Moment Magnitude
N_2	nitrogen
NAAQS	National Ambient Air Quality Standard
NAHC	Native American Heritage Commission
NCWA	Northern California Water Association
NEPA	National Environmental Policy Act
NERC	North American Electric Reliability Council
NESC	National Electric Safety Code
NFPA	National Fire Protection Association
NFRAP	No Further Remedial Action Planned
NH_3	aqueous ammonia
NHPA	National Historic Preservation Act
NIOSH	National Institute of Occupational Safety and Health
NLCD	National Land Cover Data
NMFS	National Marine Fisheries Service
NNSR	Nonattainment New Source Review
NO_2	nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
NO_X	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NSPS	New Source Performance Standards
NSR	New Source Review
NTU	nephelometric turbidity units
NWS	National Weather Service
O_2	oxygen
O_3	ozone
O&M	Operations and Maintenance
OEHHA	Office of Environmental Human Health Assessment
OES	Office of Emergency Services

OLM	ozone limiting method
OSHA	Occupational Safety and Health Administration
PAHs	polycyclic aromatic hydrocarbons
Pb	lead
PCB	power circuit breaker
PCBs	polychlorinated biphenyls
PG&E	Pacific Gas and Electric Company
PGT	Pacific Gas Transmission
PM_{10}	particulate matter less than 10 microns in diameter
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
PNAs	polynuclear aromatics
POC	precursor organic compound
PPE	personal protective equipment
ppm	parts per million
ppmw	parts per million by volume
ppmvd	parts per million by volume, dry
PSD	Prevention of Significant Deterioration
psig	pounds per square inch gauge
PSM	Process Safety Management
PTO	Permit to Operate
PWL	sound power levels
QDF	quarterly distribution fraction
RACT	Reasonably Available Control Technology
RCRA	Resource Conservation and Recovery Act
REC	recognized environmental conditions
RELs	reference exposure level
RI/TVI	Radio and television interference
RMP	Regional Monitoring Program
RMP	Risk Management Plan
RMS	root-mean-square
RO	reverse osmosis
ROC	reactive organic compound
ROWD	Report of Waste Discharge
RWQCB	Regional Water Quality Control Board
SACOG	Sacramento Area Council of Governments
SB 110	Senate Bill 110
SCAQMD	South Coast Air Quality Management District
SCC	Source Classification Code
scf	standard cubic feet
scf/d	standard cubic feet per day
SCMSA	Sacramento Metropolitan Statistical Area
SCR	selective catalytic reduction
SCVB	Sacramento Convention and Visitors Bureau
SEPCO	Sacramento Ethanol and Power Cogeneration Project
SHPO	State Historic Preservation Office
SIL	Significant Impact Level
SIP	State Implementation Plan
SJC	Sacramento Junior College
SMS	Scenery Management System
SMUD	Sacramento Municipal Utilities District
SO_2	sulfur dioxide
SO_4	sulfate

SOI	Sphere of Influence
SPL	sound pressure levels
SST	station service transformer
STG	steam turbine generator
STPEL	Short-Term Public Emergency Limit
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TANC	Transmission Agency of Northern California
TCCA	Tehama Colusa Canal Authority
TDS	total dissolved solids
THI	total hazard index
tpy	tons per year
TRIS	Toxic Chemical Release Inventory System
TSDF	Treatment, Storage, and Disposal Facility
UBC	Uniform Building Code
UC	University of California
UCMP	University of California Museum of Paleontology at Berkeley
UFC	Uniform Fire Code
UHC	unburned hydrocarbons
UPS	uninterruptible power supply
URF	unit risk factor
USACE	U.S. Army Corps of Engineers
U.S. BLM	U.S. Bureau of Land Management
USBR	U.S. Bureau of Reclamation
USC	U.S. Code
USCS	Unified Soils Classification System
USDA	U.S. Department of Agriculture
U.S. EPA	U.S. Environmental Protection Agency
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UTM	Universal Transverse Mercator
V	volts
VCAPCD	Ventura County Air Pollution Control District
VFD	variable frequency drive
VLBI	very long baseline interferometry
VOC	volatile organic compound
VRM	visual resource management
VSD	variable speed drive
WAPA	Western Area Power Administration
WDRs	Waste Discharge Requirements
WGNCEP	Working Group on Northern California Earthquake Potential
WRCC	Western Regional Climate Center
YMSA	Yuba Metropolitan Statistical Area
ZLD	zero liquid discharge