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1.0 EXECUTIVE SUMMARY

1.1 PROJECT OVERVIEW

This Application for Certification (AFC) is for the construction and operation of a nominal 550-megawatt (MW) generation facility at the site of the existing Pittsburg Power Plant (PPP) facility owned and operated by Mirant Delta, LLC (Mirant Delta) in California. The Willow Pass Generating Station (WPGS) will be owned and operated by Mirant Willow Pass, LLC (Mirant Willow Pass) and will be an independent, stand-alone facility from the PPP. The general location of the site is shown on Figure 1-1. When completed, the WPGS site will be approximately 26 acres of the northeastern portion of the PPP property, generally within the footprint of the area occupied by retired PPP Units 1 through 4, an administration building, an unused surface impoundment, one unused #6 fuel oil tank, temporary buildings, and other ancillary facilities. The WPGS parcel will be created by adjusting lot lines on the existing parcels that constitute the site of the PPP and will be purchased by Mirant Willow Pass from Mirant Delta.

The PPP is located at 696 West 10th Street in the City of Pittsburg in Contra Costa County. The majority of the PPP site was annexed into the City's jurisdiction in June 2008. The WPGS will be located within the existing PPP site, on Assessor's Parcel Number (APN) 085-010-014. The WPGS site is located in Township 2 North, Range 1 East, on the U.S. Geological Survey (USGS) Honker Bay Topographic Quadrangle Map.

This brownfield WPGS site is surrounded by Suisun Bay to the north, the PPP to the east and west, and the Pacific Gas & Electric Company (PG&E) switchyard to the south. The nearest residential neighborhood is approximately 500 feet east of the WPGS site boundary.

The WPGS will consist of two power blocks: two Siemens Flex Plant 10 (FP10) units operating in combined-cycle mode. The FP10 units will be intermediate load power blocks, expected to operate at a 40 to 50 percent capacity factor, and generating approximately 550 MW (net average conditions) when both are operated together. The generators for the WPGS will be connected to the PG&E switchyard adjacent to the site. The WPGS will be interconnected to PG&E's California transmission grid, and power generated by the facility will be available to serve energy needs throughout northern California.

The WPGS will use dry cooling technology, which does not require the large water supply necessary for wet-cooled power generation projects. The source process water will be recycled water from the Delta Diablo Sanitation District (DDSD) system. Two water pipelines, approximately 5 miles in length, will be constructed to bring recycled water from, and return wastewater to, DDSD's Wastewater Treatment Plant (WTP). The small amount of potable water needed will be supplied by the City of Pittsburg to the water line on the PPP property via a new connection located within the WPGS site. There will be no withdrawals from, or discharges of process water to, Suisun Bay.

The power generation facility will burn pipeline-quality natural gas delivered by PG&E. Natural gas will be provided to the new facility via an onsite gas pipeline, approximately 2,700 feet long, which will be constructed to carry natural gas from the existing PPP metering station to the WPGS site. The gas metering station will be located within the WPGS site.

Construction of the WPGS is estimated to cost approximately \$585 million dollars (in 2008 dollars). Construction and startup of the WPGS is expected to take approximately 34 months. Construction will begin in autumn 2009. Commercial operation is expected in summer 2012.

1.2 PROJECT OBJECTIVE

Mirant Willow Pass has identified several basic objectives for the development of an electric generating station at the PPP site. These objectives include:

- Providing new dispatchable, operationally flexible resources to meet the electric needs of the State of California.
- Installing new generating capacity at an existing brownfield site owned by a Mirant entity and avoiding the need for significant new electricity or gas infrastructure or rights-of-way.
- Generating electric power at a location near the electric load center, to increase reliability of the regional electricity grid, while satisfying local capacity requirements and reducing regional dependence on imported power.
- Producing quick-start electricity during times when renewable (e.g., wind) generation is not available (i.e., as backup generation for renewables).
- Safely producing electricity without creating significant environmental impacts.

1.3 PROJECT BACKGROUND

The WPGS will be adjacent to the existing PPP, which includes seven existing units: retired Units 1 through 4 which began service in 1954; Units 5 and 6 which began service in 1960 and 1961; and Unit 7 which was added in 1972. Units 5, 6, and 7 are conventional gas-fired boilers. PPP Units 1 through 4 were last operated in 2003 and are retired. Units 5, 6, and 7 currently produce electricity for distribution through the grid. PG&E sold the PPP to Southern Energy Delta, L.L.C. (now known as Mirant Delta) in 1999. Mirant Delta continues to own and operate the PPP facility.

In addition, the PPP site includes an existing water treatment plant, 29 percent aqueous ammonia storage facilities, and water intake and discharge facilities. Mirant Delta has ongoing routine maintenance and capital improvement projects at the PPP that may occur prior to, and during the development of, the WPGS. These projects are not directly or indirectly connected to the WPGS and, therefore, are not part of the project.

1.4 FACILITY DESCRIPTION

The WPGS will be constructed, owned, and operated by Mirant Willow Pass (an indirect, wholly owned subsidiary of Mirant Corporation) at the PPP, an existing power plant owned and operated by Mirant Delta (also an indirect wholly owned subsidiary of Mirant Corporation). The WPGS site is bounded by Suisun Bay to the north, PPP facilities to the east and west, and the PG&E switchyard to the south. The WPGS property is approximately 26 acres, generally within the area currently occupied by retired PPP Units 1 through 4, an unused surface impoundment, an administration building, one unused #6 fuel oil tank, temporary buildings, and other ancillary facilities. The locations of the WPGS, associated linear facilities, and worker parking and equipment staging areas are shown on Figure 2.2-2. Permanent access to both the PPP and WPGS will be from Willow Pass Road/West 10th Street. Figure 1-2 provides a photograph of the site. A visual simulation of the site from the same viewing angle after construction of the WPGS is shown on Figure 1-3.

The WPGS will be a 550-MW power plant constructed entirely within the existing PPP property in the City of Pittsburg, California. The WPGS site is located in Township 2 North, Range 1 East, on the USGS Honker Bay Topographic Quadrangle Map. The WPGS will consist of two power blocks: two Siemens

FP10 combined-cycle units. Each of the combustion turbines and steam turbines will be connected to separate electric generators. The generators for the WPGS will be connected to the PG&E switchyard adjacent to the WPGS site.

Major elements of the WPGS are summarized below:

- Each Siemens FP10 power block includes one natural-gas-fired SGT6-5000F combustion turbine generator (CTG) equipped with ultra low NO_x combustors and inlet air evaporative coolers, one heat recovery steam generator (HRSG), one SST-800 back pressure steam turbine generator (STG), an air-cooled heat exchanger, and associated auxiliary systems and equipment;
- Use of dry-cooling for heat rejection;
- Natural gas compressors;
- One 20,000-gallon aqueous ammonia storage tank, associated ammonia unloading station, in-plant distribution piping, and ammonia vaporizer(s);
- Two approximately 150-foot-tall stacks equipped with continuous emissions monitoring systems, each discharging the exhaust from one CTG/HRSG train;
- Water treatment system building and associated water storage tanks;
- A control building for housing the WPGS plant distributed control systems and electrical equipment and warehouse for storage of equipment;
- An administrative building including warehouse, shops, IT, engineering, and production offices;
- Connection via a new 12-inch-diameter gas line to the existing PG&E's natural gas transmission line;
- Single circuit 230-kilovolt (kV) transmission lines from the new generators to PG&E's adjacent switchyard; and
- An underground fire loop that will be fed from the existing PPP fire system.

In addition, the WPGS project will include approximately 21.5 acres of construction laydown, offices, and parking, all located within the PPP site or adjacent PG&E switchyard property. Primary access to the WPGS site during construction will be from State Route (SR) 4 and Railroad Avenue or Bailey Road exits. Existing entrances and access roads within the PPP will be used.

The WPGS related linear facilities will include potable and makeup water lines, a wastewater discharge line, electric transmission line and a natural gas line. Plant process wastewater will be discharged via a new pipeline, approximately 5 miles in length, to the DDSD WTP. Stormwater runoff from non-industrial portions of the site will be discharged to Suisun Bay in accordance with the NPDES Industrial Storm Water General Permit. Stormwater runoff from curbed areas, which has the potential to be in contact with contaminants, will be collected and then conveyed to the wastewater discharge system for discharge to DDSD's system.

1.5 PROJECT OPERATIONS

Power produced by the WPGS will be sold into the wholesale energy market and serve electric demand in northern California. The design of the WPGS provides for a wide range of operating flexibility (i.e., an ability to start up quickly and operate efficiently). Depending on market demand and the provisions of bilateral sales, in any given hour the plant may be operating at peak load, base load, or part load with one or more CTGs running. Peak load operation will most likely occur during summer on-peak hours, and minimum load operation during off-peak hours. Shutdown periods for annual maintenance will be scheduled during extended periods of low demand, which typically occur in the autumn or spring.

The average net generating capacity of each of the FP10 units will be approximately 275 net MW. The actual net output of the system will vary in response to ambient air temperature conditions, use of evaporative coolers, power augmentation, amount of auxiliary load, generator power factor, firing conditions of the combustion turbines, and other operating factors. Full load output (net) of the WPGS under expected operating conditions will range from approximately 265 MW to 285 MW. The FP10 units can operate at part load with the CTGs operating down to minimum load while keeping the STG on line or off line. Operational modes will be driven by good operating practices, market conditions, and dispatch requirements. Overall annual availability of the WPGS as measured by equivalent availability factor is expected to be in the range of 92 to 98 percent.

An ultra low NO_x combustor system will be used to control the NO_x concentration exiting each CTG. As an additional post-combustion NO_x control system, a selective catalytic reduction (SCR) system will be provided in each HRSG to further reduce the NO_x emissions. The SCR system for each HRSG will inject ammonia into the exhaust gas stream upstream of a catalyst bed to reduce the NO_x to inert nitrogen and water. An oxidation catalyst system will also be incorporated into the air quality control system to control emissions of carbon monoxide (CO) and volatile organic compounds (VOCs).

1.6 PROJECT SCHEDULE

This AFC for the WPGS has been submitted to the California Energy Commission in June 2008 under the 12-month review and certification process. Construction and startup are expected to take at least 34 months. Construction will begin approximately in autumn 2009 and commercial operation is planned for summer 2012.

1.7 PROJECT OWNERSHIP

The WPGS will be owned and operated by Mirant Willow Pass.

1.8 WATER SUPPLY

The WPGS will use dry cooling technology, which does not require the large water supply necessary for wet-cooled power generation projects. The source for raw process water will be recycled water from the DDSD WTP. A new offsite water pipeline, approximately 5 miles in length, will be constructed to bring recycled water from the DDSD WTP. The small amount of potable water needed for domestic and sanitary water will be supplied by the City of Pittsburg via a connection to an existing water line on the PPP property. There will be no withdrawals from, or discharges of process water to, Suisun Bay.

1.9 FUEL SUPPLY

The WPGS will burn pipeline quality natural gas delivered by PG&E. Natural gas will be provided to the new facility via an onsite pipeline that is approximately 2,700 feet long. The pipeline will connect to the existing transmission line upstream of the PPP metering station and run across the PPP property to the WPGS. The gas metering station will be located within the WPGS site.

1.10 ELECTRIC TRANSMISSION

The WPGS site is adjacent to PG&E's switchyard. One single-circuit 230-kV transmission connection, approximately 1,600 feet in length, will be constructed connecting the WPGS site to the PG&E switchyard to deliver the project's electrical output to the transmission grid.

1.11 PROJECT ENVIRONMENTAL FACTORS

Impacts that the WPGS may have on the environment have been evaluated in detail. The WPGS would avoid or minimize potential environmental impacts through project siting and design, and incorporation of mitigation measures. As a result, the WPGS would not have any significant environmental impacts.

1.11.1 Air Quality

The WPGS would not have a significant adverse impact on air quality. The WPGS would generate emissions of criteria pollutants including NO_x, CO, VOCs, sulfur dioxide (SO₂), and particulates less than or equal to 10 microns in diameter (PM₁₀). Emissions of NO_x, CO, VOCs, SO₂, and PM₁₀ will be fully offset by providing emission reductions from emission reduction credits held by Mirant entities or from other local sources.

In addition, the WPGS will incorporate the following state-of-the-art air emission controls that reflect Best Available Control Technologies (BACT) to reduce emissions:

- Ultra low NO_x burner technology and SCR to reduce NO_x emissions to 2 parts per million (ppm) at 15 percent oxygen (O₂) dry.
- An oxidation catalyst to limit CO emissions to 3 ppm at 15 percent O₂ dry and VOC emissions to 2 ppm at 15 percent O₂ dry.
- Pipeline-quality natural gas as a primary fuel and inlet air filtration to limit SO₂ and PM₁₀ emissions.

The modeling analysis conducted for nitrogen dioxide, CO, SO₂, and PM₁₀ is presented in Appendix J. The results show that the WPGS, with the planned emission control systems, would neither cause an exceedance of the California and National Ambient Air Quality Standards, nor contribute significantly to an existing exceedance. Additional modeling results demonstrate that the project would not cause an incremental impact above the significant impact thresholds under the Federal Prevention of Significant Deterioration program.

1.11.2 Biological Resources

Biological impacts have been minimized by siting most WPGS facilities within an existing power plant facility. Offsite facilities are limited to two new five-mile-long water pipelines that will supply recycled water and return wastewater between the WPGS and the DDSW WTP, primarily along the route of an existing pipeline. Based on surveys conducted to date and the use of specific pipeline installation methods near creek crossings, no special-status plants or wildlife would be permanently affected by the WPGS. Potential temporary impacts to some special status species were identified, but mitigation would reduce those impacts to a less than significant level. Temporary impacts to wetlands that would occur as a result of construction of the water pipelines in the vicinity of the DDSW WTP on Arcy Lane would be fully mitigated in accordance with U.S. Army Corps of Engineers (USACE) "no net loss" policy and the conditions authorized by the USACE. Implementation of mitigation measures would reduce these potential impacts to a less-than-significant level.

1.11.3 Cultural Resources

Consultation with three Native American individuals/was initiated based on information provided by the Native American Heritage Commission. No responses have been received to date; any future information received will be considered as the permitting process moves forward. Site-specific surveys conducted for the WPGS site, including laydown areas and the offsite water pipeline alignment, did not identify any archaeological or significant built environment resources. Given the extent of previous disturbance at the site as well as along the route of the proposed pipelines it is unlikely that intact archaeological deposits exist undiscovered within the area of potential effects for archaeological resources. However, mitigation measures are identified in the unlikely event that this would occur. With implementation of mitigation measures, impacts would be less than significant.

The historical inventory analysis concludes that the PPP at 696 West 10th Street does not meet the criteria for listing in the California Register of Historical Resources or National Register of Historic Places. Furthermore, none of the resources subject to reconnaissance survey along the linear features of the project appeared to be historically sensitive, and they required no further study. None of the resources surveyed are considered historical resources for the purposes of the California Environmental Quality Act. Therefore, there would be no impacts to historical architectural resources.

1.11.4 Land Use

The WPGS site is located within an existing industrial facility in the portion of the City of Pittsburg designated for industrial use. The WPGS is compatible with City of Pittsburg's land use designations and zoning, and with applicable land use plans and policies. Land use impacts would be less than significant.

1.11.5 Noise

Construction noise would temporarily elevate the noise levels in the surrounding community. Most often, the sound levels would be moderate, with a few processes causing short-term elevated noise levels. Construction noise impacts would be less than significant. Project noise levels during operation of the WPGS are not predicted to exceed CEC recommended noise compatibility guidelines at any sensitive noise receptors. Operational noise impacts would be less than significant.

1.11.6 Public Health

Because project construction will be of short duration, significant long-term public health effects are not expected as a result of construction. During operation, the WPGS will be fueled with clean-burning natural gas to minimize potential toxic air emissions. The maximum incremental cancer risk from project emissions is estimated to less than 0.1 in one million, which is well below the significance criterion of 10 in one million and the Toxic Best Available Control Technology (TBACT) Threshold of 1 in one million. For sensitive receptors, the maximum chronic total hazard index (THI) and the maximum acute THI are both estimated to be less than 0.1, which is well below the significance criterion of 1.0 and the TBACT threshold of 0.2. Based on this evaluation using conservative assumptions, WPGS emissions are expected to pose no significant cancer or non-cancer health effects. As demonstrated by the air quality analysis, criteria pollutant emissions from the WPGS would not cause or contribute to violations of California or National Ambient Air Quality Standards, which have been set at levels designed to protect public health. Adverse health effects from criteria pollutant emissions would be well below significance thresholds.

1.11.7 Worker Safety and Health

Worker exposure to physical and chemical hazards would be minimized through adherence to appropriate engineering design criteria, implementation of appropriate safety and administrative procedures, use of

personal protective equipment, and compliance with applicable health and safety regulations. Impacts would be less than significant.

1.11.8 Socioeconomics

The WPGS would have a positive impact on fiscal resources in the local community and region. Construction is expected to occur over a 34-month period, and total construction costs are estimated to be approximately \$117 million for payroll and \$468 million for materials, supplies, and equipment. An estimated \$23.4 million would be spent on materials supplies and equipment sourced within the five-county area—Contra Costa, Sacramento, San Joaquin, Alameda, and Solano counties (Five County Study Area)—on materials and supplies, with the remaining \$444.6 million purchased elsewhere.

Estimated indirect and induced effects of construction that would occur within the Five-County Study Area would include an additional 896 jobs and \$141 million in payroll.

During operation, labor costs would be approximately \$3.5 million per year, most of which would likely be spent in the Five-County Study Area. Nonlabor operational costs would be approximately \$6.5 million per year. In the Five-County Study Area, the total estimated direct, indirect, and induced effects of operations would result in 38 additional jobs, \$4.4 million in payroll, as much as \$6.6 million in property taxes, \$25,000 in sales tax revenues, and \$6.5 million in additional economic input in the Five-County Study Area.

The majority of the construction workers would be expected to be hired from within the Five-County Study Area. Given the substantial available construction force in Contra Costa County alone, as well as in the surrounding four counties, it is expected that an adequate labor force within daily commute distance would be available to support the project.

The construction and operation of the WPGS would not have a significant adverse impact on law enforcement, fire, emergency, medical, utility, or educational services. The project would not create a disproportionate impact on any low income or minority populations.

1.11.9 Soils

The WPGS will be built within an existing power plant site in an area dominated by existing industrial uses. Approximately 75,500 cubic yards of soil are expected to be imported to the site. The erosion characteristics of the soil types on the project site range from slight to moderate. With best management practices incorporated into the project, impacts from soil erosion would be less than significant.

1.11.10 Traffic and Transportation

Access to the WPGS site will be from SR 4 via the Railroad Avenue or Bailey Road exits; then turning onto Willow Pass Road/West 10th Street. From West 10th Street, construction vehicles would use existing PPP access roads to the construction parking and laydown areas, and the project site. During the peak construction month, June 2011, there would be an estimated 390 workers traveling to the project site. With carpooling, approximately 351 peak daily round trips are anticipated. The schedule has been estimated based on a single shift, 10-hour day, and 50-hour week. The majority of construction operations are expected to take place between 6:00 a.m. and 6:00 p.m. However, longer workdays or work weeks may be necessary to make up schedule delays or complete critical construction activities. During the start-up and testing phase of the project, some activities may continue 24 hours per day, 7 days per week.

Construction traffic is not projected to result in Level of Service degradation of any intersections or roadway segments to unacceptable levels. Therefore, the project would have a less-than-significant impact on traffic during construction.

During plant operations, there will be a total of approximately 20 employees: eight on rotating shift and 12 working regular hours (Monday through Friday, 6:30 a.m. to 3:00 p.m.). A total of 20 peak daily round-trip employee trips and 16 delivery round trips are anticipated. This would not change the existing LOS on local or freeway access roads or intersections and would be a less-than-significant impact.

1.11.11 Visual Resources

The WPGS will be located within the PPP site, an existing power plant site in an area dominated by existing industrial uses. In general, short-term construction impacts are not expected to lead to significant visual impacts, due to their temporary nature. The WPGS' location within an existing heavy industrial area also reduces the visual impact. Furthermore, the WPGS will replace four existing 211-foot stacks and four 160-foot boiler structures associated with retired Units 1 through 4 (which will be demolished as part of the project) with two 150-foot stacks associated with the FP10 units. Project features designed to reduce visual impacts include colors chosen to blend with the PPP, use of non-reflective materials, addition of five screening walls, and shielded and controlled lighting using high-pressure sodium vapor fixtures. Visual modifications range from not-noticeable to noticeable, and impact levels range from low to moderate. These impacts would be less than significant.

1.11.12 Hazardous Materials Handling

Minimal storage of hazardous materials would occur on WPGS site. Hazardous materials would include aqueous ammonia for the SCR system, combustion exhaust catalysts, lubricating and machine oils, various water additives and water treatment chemicals including acids and caustics, and various cleaning chemicals. None of the chemicals at the WPGS site would be stored in quantities above the federal thresholds, and only aqueous ammonia would be stored on the site in a quantity greater than the California Accidental Release Prevention Program threshold. Equipment and containers would be located inside containment berms, and incompatible materials would be stored in separate containment areas. Areas susceptible to potential leaks or spills will be paved and bermed. Piping and tanks will be protected from potential traffic hazards by concrete and/or steel barriers. The WPGS will provide employee training and implement accident prevention and mitigation measures to reduce the risk associated with the use and storage of hazardous materials.

The WPGS will have one new ammonia storage facility. The ammonia storage tank will be located within a dedicated concrete containment area with underground sump and have a tanker truck offloading facility located within a containment berm. Analyses of public health impacts associated with a hypothetical release of ammonia indicate that the predicted worst-case scenarios would not result in a predicted impact exceeding any of the toxic endpoint concentrations at the nearest offsite receptor locations. Therefore, the potential impacts of these release scenarios would be less than significant.

1.11.13 Waste Management

Wastes generated by the WPGS during construction and operation of the facility will be recycled to the extent practicable. Wastes would include nonhazardous solid and liquid wastes (e.g., scrap metal and sanitary waste) as well as hazardous solid and liquid wastes (e.g., spent SCR and oxidation catalyst and waste lubrication oil). Appropriate procedures and personnel training would provide assurance that nonhazardous and hazardous wastes are properly handled and do not significantly affect the environment or health and safety.

Disposal of nonhazardous waste from the plant would not significantly impact the capacity of the Class II and III waste disposal facilities identified as available for use by the project. Similarly, hazardous waste generation and disposal from the WPGS would be minimized by recycling and would not significantly impact the capacity of Class I hazardous waste disposal facilities identified as available for use by the project.

1.11.14 Water Resources

The WPGS will use dry-cooling technology that, compared to wet-cooling technology, reduces water demand by several thousand acre-feet per year. The project would use recycled water supplied by a local provider, Delta Diablo Sanitation District. Two water pipelines, approximately 5 miles in length, will be constructed to bring recycled water from, and return process wastewater to, DDS's WTP. The project would connect to existing potable water supply and sanitary wastewater lines on the PPP site. Potable water will be supplied by the City of Pittsburg. Sanitary waste will be conveyed to the DDS WTP via the City's existing sewer line.

Because the WPGS would be constructed on an existing power plant site, within an area currently covered by PPP's retired Units 1 through 4, a tank, and paved areas, there would not be an increase in the amount of impervious area. Therefore, there would not be an increase in the volume or rate of stormwater runoff. Project features designed to be protective of water quality include curbs around areas with potential oil or chemical contamination and secondary spill containment around chemical delivery and storage areas, and transformers. The site would be elevated above the floodplain. Impacts to water resources would be less than significant.

1.11.15 Geologic Hazards and Resources

No significant geological or soil-related impacts are anticipated from the construction or operation of the WPGS. Final foundation design would incorporate mitigation measures designed to reduce impacts from moderate earthquake motions.

1.11.16 Paleontological Resources

Literature reviews, archival reviews, and pedestrian surveys did not provide evidence that any paleontological resources would be affected by the construction or operation of the WPGS. Mitigation measures that would be implemented during construction would reduce potential impacts to a less-than-significant level.

1.12 PROJECT ALTERNATIVES

A range of reasonable alternatives that could feasibly attain the objectives of the WPGS were identified and evaluated. These alternatives included:

- The "No Project" alternative (that is, not developing a new power generation facility);
- Alternative site locations for constructing and operating the WPGS, both within the existing property boundaries of the PPP property and on vacant alternative sites;
- Alternative air pollution emission control technologies; and
- Alternative generation technologies.

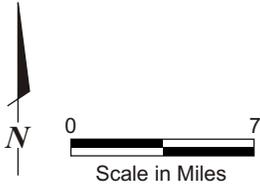
The project site arrangement within the PPP property was selected over other onsite configurations because of space constraints due to the operation of Units 5 through 7 and the presence of marshland

further west. Offsite locations were rejected because these sites would require site acquisition from an unrelated third-party, longer offsite connections to transmission lines and gas lines, and additional construction due to the unavailability of shared facilities. In addition, these offsite locations would not reduce any unmitigated impacts associated with development of the proposed project site.

To comply with the Bay Area Air Quality Management District's (BAAQMD's) BACT requirements for NO_x, the WPGS' design includes ultra low NO_x combustion controls on the gas turbine and SCR to control NO_x emissions. To comply with BAAQMD's BACT requirements for CO, an oxidation catalyst will be employed. Other air pollution emission control technologies were evaluated and rejected due to lack of commercial availability, economic feasibility, and implementability. Alternative generation technologies were similarly evaluated based on commercial availability, implementability, and cost-effectiveness, and were rejected. The WPGS' use of dry-cooled technology and recycled water for process purposes is the most environmentally advantageous and economically feasible option.



Source:
 Topo USA 5.0, 2004; www.delorme.com



SITE VICINITY MAP

Willow Pass Generating Station
 Mirant Willow Pass, LLC
 Pittsburg, California

June 2008
 28067343



FIGURE 1-1



**VIEW OF EXISTING
PITTSBURG POWER PLANT FACILITY**

June 2008
28067343

Willow Pass Generating Station
Mirant Willow Pass, LLC
Pittsburg, California



FIGURE 1-2



**VISUAL SIMULATION
OF WILLOW PASS GENERATING STATION**

June 2008
28067343

Willow Pass Generating Station
Mirant Willow Pass, LLC
Pittsburg, California



FIGURE 1-3