1.0 INTRODUCTION AND PROJECT GOALS AND OBJECTIVES

This chapter provides a brief introduction to the proposed WesPac Energy—Pittsburg LLC (WesPac, applicant) Pittsburg Energy Infrastructure Project (project) and the alternatives considered in this Environmental Impact Report (EIR). The chapter focuses on the purpose and need of the proposed project and associated established project goals and objectives. For a more detailed description of the proposed project and alternatives, including project elements, existing conditions, construction, and operation, see Chapter 2.0: Proposed Project and Alternatives.

1.1 INTRODUCTION

WesPac is proposing to modernize and reactivate the existing crude oil storage and transfer facilities located at the NRG Energy, Inc. (NRG; formerly GenOn Delta LLC) Pittsburg Generating Station in Pittsburg, California.

This document has been prepared to satisfy the requirements of the California Environmental Quality Act (CEQA) (California Public Resources Code, Section 21000 *et seq.*). It will be used by local, state, and federal agencies to identify, evaluate, and disclose potential significant environmental impacts of the proposed project and two alternatives, including a Reduced Onshore Storage Capacity Alternative (Alternative 1) and the No Project Alternative (Alternative 2).

The City of Pittsburg (City) will serve as the lead agency under CEQA. Because the project has the potential to result in significant impacts on the environment, the City is required to prepare an EIR to satisfy CEQA requirements before approving the project.

The primary purpose of an EIR is to identify and publicly disclose significant environmental impacts that may result from implementation of a proposed project and to identify feasible alternatives, mitigation measures, and/or revisions to the project that would reduce those impacts. Pursuant to Section 15126[d] of the CEQA Guidelines, an EIR must describe and evaluate a reasonable range of alternatives that would feasibly attain most of the proposed project's basic objectives, and, when feasible, would avoid or substantially lessen any of the significant impacts of the project as proposed. The CEQA Guidelines also state that the range of alternatives required to be evaluated in an EIR is governed by the "rule of reason"—that is, an EIR needs to describe and evaluate only those alternatives necessary to permit a reasoned choice and to foster informed decision making and public participation.

1.2 PROPOSED PROJECT SUMMARY

The proposed project would modernize and reactivate an existing oil storage and transportation facility, to be known as the WesPac Energy–Pittsburg Terminal (Terminal). The Terminal includes existing oil storage tanks that would be updated to accommodate the storage of crude oil and partially refined crude oil on-site. The Terminal would be designed to receive shipments of oil from trains, pipelines, and marine vessels; store these oil shipments for varying periods of time; and transfer stored oils out to local refineries via new and existing pipelines connected to the site. The Terminal would also have the capability to load marine vessels for shipment to other destinations. For the delivery of crude oil and partially refined crude oil by train, the project would include the construction of a new Rail Transload Operations Facility (Rail Transload Facility) within a nearby BNSF Railway Company (BNSF) rail yard. As stated above, all products received at the Terminal would be transported to the Terminal by rail, pipeline, ship, or barge. The proposed project includes no product transportation via truck.

1.2.1 Locomotive Operations

All movements of trains bringing rail tank cars to and from the Rail Transload Facility would be performed by BNSF, on BNSF property, and on trains operated by BNSF employees. As railroad operations are preempted from local and state environmental regulations by federal law (Interstate Commerce Commission Termination Act), the movements of locomotives to and from the Rail Transload Facility and within the perceived area of potential impact for the project are included in this EIR for evaluation and discussion purposes only. The City of Pittsburg and other State and local responsible agencies are preempted from imposing mitigation measures, conditions, or regulations to reduce or mitigate potential impacts of BNSF train movements.

By contrast, all activities performed to unload rail cars and transfer oil product between the Rail Transload Facility and the storage terminal are not preempted by federal law, and, therefore, the impacts of those activities are described and evaluated in the respective chapters of this EIR.

1.3 SUMMARY OF ALTERNATIVES EVALUATED

The following is a summary of the alternatives analyzed in this EIR. They are explained in greater detail in Chapter 2.0: Proposed Project and Alternatives.

1.3.1 Alternative 1: Reduced Onshore Storage Capacity

Similar to the proposed project, the Terminal at the existing NRG Pittsburg Generating Station would be modernized and upgraded to be able to receive crude oil and partially refined crude oil from trains, marine vessels, and pipelines; store the oil in the South Tank Farm (for a description of the South Tank Farm, see Figure 2-5: Proposed Storage Terminal Layout in Chapter 2.0: Proposed Project and Alternatives); and transfer the oil to local refineries via marine vessels and pipelines. Under this alternative, tanks within the East Tank Farm would not be utilized in conjunction with the proposed project and would be left in their existing status, maintained at conditions similar to those currently displayed (for a description of the East Tank Farm, see Figure 2-5 in Chapter 2.0). Under Alternative 1, the facility would have approximately 80 percent of the storage capacity of the proposed project.

1.3.2 Alternative 2: No Project

Under Alternative 2, existing facilities would remain at the project site and proposed construction associated with the modernization and reactivation of the facilities and subsequent operation would not occur.

1.4 PROJECT BACKGROUND

1.4.1 Storage and Receiving Capacity of Crude Oil in California

The California Energy Commission (CEC) and other industry sources have identified the lack of adequate storage and receiving capacity for crude oil in the San Francisco Bay Area (Bay Area) as a major concern (CEC, 2009). Declining production from California oil sources has increased the State's reliance on imported oils, and subsequently, increased the need for additional marine terminals, pipeline connections, and storage capabilities along the West Coast. California currently lacks suitable port facilities to efficiently and economically import these additional amounts of crude oil. The CEC states in the *Integrated Energy Policy Report* (2009):

"California needs sufficient fuel infrastructure to ensure reliable supplies of transportation fuels for its citizens. Reliance on foreign oil imports increasingly puts the state's fuel supply at risk, not only because of security and reliability concerns, but also because the marine ports are not expanding to meet expected growth in demand... To maintain energy security, state and local agencies need to ensure that there is adequate infrastructure for the delivery of transportation fuels. The state should modernize and upgrade the existing infrastructure to accommodate alternative and renewable fuels and vehicle technologies as they are developed and to address petroleum infrastructure needs to preserve past investments and to expand throughput capacity in the state."

1.4.2 NRG Pittsburg Generating Station

Existing facilities at the NRG Pittsburg Generating Station—including the marine terminal, storage tanks, pipelines, and ancillary equipment—were formerly used to store and supply fuel oil to the Pittsburg Electric Generating Station, but have not been used for that purpose in over 15 years. The original marine terminal and East Tank Farm storage facilities were constructed at the same time as the generating station in the 1950s by Pacific Gas and Electric Company (PG&E); the East Tank Farm facilities were constructed in 1953 and the dock was constructed in 1954. At that time the Pittsburg Generating Station was designed to run on both fuel oil and natural gas.

In the 1970s, the price of natural gas was regulated by the federal government and the supplies of natural gas were steadily declining. Major industrial users such as electric generating plants were unable to secure reliable supplies of natural gas. In response, electric utility companies, including PG&E, made plans to run on alternative fuels such as fuel oil. In 1973, PG&E reviewed its generating stations in the San Francisco Bay Area and selected the Pittsburg Generating Station as the best site to construct a central fuel oil storage facility to support several generating stations in the area. This location was selected because the Pittsburg Generating Station had existing connections to nearby Bay Area refineries and to other regional generating stations by existing pipelines, access to marine deliveries through the existing dock, and available land to construct additional new storage tanks. With California Public Utilities Commission approval, PG&E proceeded to expand the capacity of the dock and construct nine additional large storage tanks (currently known as the South Tank Farm). In addition, the marine terminal was expanded to allow for a greater range of vessels to call to utilize the expanded storage terminal capabilities.

From 1976 to 1982, the NRG Pittsburg Generating Station generated most of its electricity using fuel oil as its energy source. In 1978, the price of natural gas was deregulated in an attempt to relieve the supply shortage. This resulted in increased natural gas prices and corresponding increased natural gas supply. During this time there was also an increase in concerns and regulations on air emissions. Natural gas is a cleaner-burning fuel than fuel oil. The combination of an adequate supply of natural gas and the lower air emissions created when using natural gas led PG&E to reduce its use of fuel oil, and eventually idle all of the fuel oil facilities at the Pittsburg Generating Station.

Since then, various owners of the Terminal and the associated Shell San Pablo Bay Pipeline, owned and operated by Shell Pipeline Company LP, (hereafter, referred to as the San Pablo Bay Pipeline) have performed minimal maintenance work to the facilities and pipeline to provide some stand-by capabilities in case of natural gas supply interruptions or similar circumstances. For example, after regular operations ceased, oil was moved through the San Pablo Bay Pipeline as necessary to maintain the integrity of the pipe (however, the last major oil movement through the pipeline was in 1991 and the pipeline is currently idle).

The existing marine terminal was placed into caretaker status in 2003. The facility would require upgrades, repair, and replacement work to meet the California Marine Oil Terminal Engineering and Maintenance Standards (MOTEMS), Chapter 31F, Title 24, Part 2 of the California Code of Regulations.

The proposed project would both modernize and upgrade existing facilities to comply with MOTEMS, renewing the capability to transport and store virgin and partially refined crude oil. In addition, the facility would receive and deliver crude oil through the existing San Pablo Bay Pipeline, which connects directly to the Shell and Tesoro refineries; a new pipeline connection with the proposed Rail Transload Facility, allowing for the delivery of crude oil by rail car; and a new pipeline connection with an existing active Chevron KLM Pipeline, which is owned and operated by Chevron Pipeline Company (hereafter referred to as the KLM Pipeline); allowing shipment to additional refineries.

WesPac would evaluate all existing equipment for condition and suitability for service. While some maintenance has been performed since the NRG Pittsburg Generating Station facilities were idled, it is anticipated that much of the existing equipment (e.g., pumps, motors, heaters, electrical equipment, valves, etc.) would be replaced, upgraded, or repaired in accordance with current industry standards and in accordance with applicable permit requirements by the City of Pittsburg Building Department.

1.4.3 Previously Circulated Draft Environmental Impact Report

This document is considered a Recirculated Draft EIR because new and significant information and analyses have been added or changed throughout the original Draft EIR after it was circulated for public comment in June 2012. For clarity, this document will be referred to as the Recirculated Draft EIR, and the previously circulated Draft EIR will be referred to as the Draft EIR. The Draft EIR for the project was made available for public comment for a 45-day public review period, beginning on June 12, 2012, and ending on July 27, 2012. The City received 17 comment letters. After the close of the public comment period, a revision to the project description was requested by the applicant, WesPac, to add a new method for oil delivery via rail, which was originally excluded from the project analysis. Due to significant changes in the scope of the project description and to conduct additional analyses deemed necessary in response to comments received on the Draft EIR, it has been determined that a recirculation of the document is warranted. Refer to the Executive Summary for more details.

1.5 PURPOSE AND NEED

1.5.1 Statewide Concerns Related to Crude Oil Storage and Receiving Capacity

1.5.1.1 Crude Oil Demand

Crude oil in California is predominantly used to make transportation fuels for consumers and businesses. Crude oil demand is being driven by four interconnected factors: Increasing population size, increasing vehicle fleet size, vehicle fleet fuel economy, and increasing mileage driven by California vehicles. Of these four factors, population growth appears to be the most substantial. Between 1970 and 2007, California added 17.8 million people, raising the population by 88 percent, from 20 million to 37.8 million residents (LAEDC, 2008). This trend is expected to continue, and California's population is projected to grow to 42 million by 2020 (WSPA, 2008a). As the population has continued to grow, so has the number of vehicles on the roads of California. This trend is expected to continue to increase, and according to the CEC, the number of lightduty vehicles in California is expected to rise from 25.6 million in 2005 to 37.2 million in 2030, a 45 percent increase. In 2008, Californians consumed 44 to 45 million gallons of gasoline and 10 million gallons of diesel fuel per day (WSPA, 2008a). More vehicles have created a greater demand for fuel, impacting the fleet fuel economy. According to the Western States Petroleum Association (WSPA), demand for transportation fuels has increased nearly 50 percent in the last 20 years. More vehicles and a greater population have yielded a greater number of miles travelled. This trend is expected to continue to increase and, according to the CEC, the number of vehicle miles travelled in California is expected to increase by about 50 percent from the year 2005 through 2030, from 320 billion to 480 billion miles. In combination with a healthy economy, these trends all point to higher demands for crude oil (LAEDC, 2008).

1.5.1.2 Crude Oil Supply

Currently, crude oil used in the State of California comes from three sources: Oilfields within the State, Alaska's North Slope, and assorted foreign suppliers (WSPA, 2008a). However, production of crude oil from these two domestic sources is steadily declining, and this trend is anticipated to continue. According to the CEC's *Transportation Energy Forecasts and Analyses for the 2009 Integrated Energy Policy Report* (2010), between 1998 and 2008, production of crude oil from California has declined at an average rate of approximately 3.2 percent per year. According to the CEC, this decline, in combination with a minor increase in crude oil refining capacity, suggests annual crude oil imports to California would increase by approximately 8.5 percent to 17.3 percent between 2008 and 2015, 13.6 percent to 28 percent between 2008 and 2020, and by 23 percent to 47 percent between 2008 and 2030 (CEC, 2010). Almost all of these imports will be delivered to California refineries by marine vessels and rail.

In the last few years there has been an increase in several oil-producing areas in the central United States. More specifically, oil production has increased in North Dakota, Montana, Wyoming, and Colorado. According to the U.S. Energy Information Administration, forecasts indicate that production from these areas will continue to increase over the next few years (EIA, 2012). While there are railroad lines enabling the transport of product, pipeline facilities that transport crude oil from central United States to refineries in California are limited.

1.5.1.3 Storage and Receiving Capacity

A shift to heavier reliance on waterborne crude oil for California would require sufficient crude oil terminals and pipelines to receive and distribute foreign product. However, as previously mentioned, according to the CEC's *Integrated* Energy Policy Report (2009) and the WSPA (2008a and 2008b), California currently lacks sufficient oil-handling infrastructure, particularly marine port infrastructure. The increased imports of crude oil are expected to result in a greater number of marine vessels (crude oil tankers) arriving in California ports, forecasted by the CEC to be specifically 17 to 100 additional crude oil tanker arrivals per year by 2015, 28 to 162 additional crude oil tanker arrivals per year by 2020, and 46 to 272 additional arrivals per year by 2030 (CEC, 2010). Additional storage tank capacity would have to be constructed to handle the incremental imports of crude oil, forecasted by the CEC to be between 1.5 million and 5.8 million barrels by 2015, between 2.4 million and 9.5 million barrels by 2020, and between 4.0 million and 15.9 million barrels of storage capacity by 2030 (CEC, 2010). To ensure reliable supplies of transportation fuels for California, it will be necessary to increase the receiving capacity of existing infrastructure for offloaded cargo.

As stated by the WSPA:

"With a current population exceeding 37 million and projected to grow to 42 million by 2020, California's already over burdened infrastructure - roads, pipelines, ports, refineries, power plants and transmission lines - will be strained further to meet increasing demand for energy. The state cannot reliably meet its increasing fuel demand without a robust petroleum infrastructure that includes refineries, storage, pipelines, distribution terminals, and marine facilities."

The CEC recommends the State, "address petroleum infrastructure needs to preserve past investments and to expand throughput capacity in the state." The proposed project directly addresses this stated need: To preserve existing infrastructure in the City of Pittsburg and to expand existing throughput capacity in northern California.

1.5.1.4 Increased Capacity to Reduce Supply Disruptions

As discussed above, to sustain an increased demand for crude oil given steadily declining Californian oil production, crude oil must come from foreign crude sources shipped on marine vessels or domestic and foreign sources delivered by rail and pipeline. Typically, oil delivered by rail and pipeline to Bay Area refineries from California sources is considered reliable, predictable, and ratable, and consequently, requires a minimal amount of infrastructure and storage facilities to receive and store the oil. This is because rail tracks and pipelines are located on land, which makes them less likely to experience service interruptions. In contrast, oil delivered by marine vessels requires more facilities, in the form of marine terminals and additional storage capacity, to accommodate unpredictable deliveries. Vessel arrival times cannot be predicted accurately because vessels can be delayed by weather and other conditions. Marine deliveries also require more storage capacity than rail and pipeline deliveries. Cargo sizes on vessels are much larger than batch delivery sizes delivered by rail and pipelines. In addition, marine vessels need to be offloaded in less than 24 hours. Lastly, more ships arriving will require more marine terminals because the existing terminals are at or near capacity. With larger batches of crude oil arriving on vessels whose arrival dates are less predictable, it is even more critical that storage and receiving capacity infrastructure be able to sustain larger volumes to minimize supply interruptions (CEC, 2009; WSPA, 2008a). All of these factors lead to a need for more storage capacity for oil delivery by marine vessels.

1.5.2 Local Concerns

1.5.2.1 Congestion in Shipping Lanes

According to the WSPA (2008a), existing San Francisco Bay Area marine oil terminals are currently at or near capacity. As a result, ships are often required to wait in the San Francisco Bay for a place to berth while ship engines continue to idle. This congestion contributes to existing regional and local air pollution as well as excess marine traffic in shipping lanes. The proposed project would provide an additional alternative receiving point for existing and projected future marine vessels, thereby alleviating existing ship congestion and streamlining local marine traffic in these shipping lanes.

1.5.2.2 Idled Infrastructure

The existing dock and storage tanks at the facility were constructed decades ago to receive and store fuel oil to supply nearby electric generating stations. Although the tanks contain some residual fuel oil, the facilities have been out of service for over 15 years. The proposed project would reactivate the idle oil facility to a service similar to its original use while renewing, modernizing, and upgrading the aging infrastructure to current industry standards and regulatory requirements.

1.6 PROJECT GOALS AND OBJECTIVES

The basic objectives of the proposed project are as follows:

1. Increase regional crude oil receiving capacity from distant sources and relieve ship congestion in San Francisco Bay.

As described above, crude oil received by Bay Area refineries principally comes from the following three sources: (1) oil fields within the State (transported by pipeline), (2) oil fields within Alaska's Northern Slope (transported by marine vessel), and (3) various foreign sources (transported by marine vessel) (LAEDC, 2008; WSPA, 2008a). Marine vessels are required to moor in San Francisco Bay while awaiting other ships to unload and ship out, thereby contributing to regional and local air pollution and marine traffic. In addition, some of these existing regional docks are situated in shallow waters, limiting the availability for larger-sized vessels to unload cargo at these locations, and furthering the need for additional marine shipments that would otherwise not be required. The lack of sufficient infrastructure for the delivery of crude oil, coupled with anticipated increasing demands for fuel, lead to the need for additional capacity for crude oil deliveries today and even more so into the future.

2. Increase crude oil storage reserve capacity in the San Francisco Bay Area.

It is anticipated that the amount of crude oil storage capacity required within existing Bay Area refineries will increase significantly in the near future (CEC, 2009; WSPA, 2008a). It is also desirable by industry, government, and consumers to have additional reserve oil storage capacity in case of an interruption due to a natural disaster (e.g., earthquake) or other incident impacting existing domestic sources and any associated infrastructure (WSPA, 2008a). The proposed project would provide increased reserve capacity for San Francisco Bay Area refineries.

- 3. Revitalize existing idled infrastructure in the City of Pittsburg.

 The proposed project would reactivate an out-of-service oil facility to a service similar to its original use while renewing, modernizing, and upgrading the aging infrastructure to current industry standards and regulatory requirements.
- 4. Provide opportunities for project-related community improvements. Locally, WesPac anticipates several benefits to the City of Pittsburg and the community. For example, it is anticipated that the project would create up to 295 union jobs during construction, 40 direct jobs for ongoing operation, and 280 to 400 indirect jobs for ongoing operation. WesPac is committed to working with the City to ensure the hiring of as many Pittsburg residents as possible.

1.7 REQUIRED PERMITS AND APPROVALS

Permits and approvals required to implement the project would depend on the alternative ultimately selected. While permits could vary, requirements likely to apply to both the proposed project and Alternative 1 include compliance with the following:

- Federal and State regulations and standards regarding air pollutant emissions
- Federal and State regulations and standards regarding the storage of petroleum products in aboveground storage tanks
- California State Fire Marshal requirements under the California Pipeline Safety Act governing activation and operation of an oil pipeline
- Provisions of the federal and State Endangered Species Acts, including U.S.
 Fish and Wildlife Service and/or National Marine Fisheries Service Section 7
 Consultation
- Provisions of the California Department of Fish and Game Code, including Section 1602 Lake and Streambed Alteration Agreement and 2081 Incidental Take Permit
- Federal and State protection of cultural, historical, and paleontological resources, including State Historic Preservation Office Section 106 Permit
- Federal Clean Water Act stipulations regarding discharge of stormwater from construction sites
- Federal Clean Water Act stipulations regarding placement of fill materials in jurisdictional waters of the United States, including U.S. Army Corps of Engineers Clean Water Act Section 404 Permit and Rivers and Harbors Act Section 10 Permit
- Provisions of the U.S. Coast Guard (USCG), including Rivers and Harbors Act Section 9 Permit and compliance with required USCG notifications regarding construction work and marine vessel traffic
- California Building Standards Code and grading and construction permitting requirements of local jurisdictions
- Local general plan standards for traffic flow
- Compliance with the Dredge Material Management Office and the City of Pittsburg lease agreement regarding dredging of the project site located within the Sacramento River

- Compliance with the California Air Resources Board and Bay Area Air Quality Management District regarding air pollutant emissions
- Compliance with East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan
- Compliance with City of Pittsburg dock and tidelands lease agreement
- Compliance with State Water Resources Control Board, including Section 401
 Water Quality Certification and National Pollutant Discharge Elimination
 System Construction Stormwater Permit
- Compliance with City of Pittsburg road encroachment and conditional use permits
- Integrated Waste Management Board standards and project-specific Demolition Waste Management Plan

Additional information on relevant regulations and likely compliance requirements for various types of resources is presented in Chapters 3.0 through 17.0.

1.8 ORGANIZATION OF THIS EIR

In addition to this introduction, this EIR contains the following chapters:

- Chapter 2.0: Proposed Project and Alternatives
- Chapter 3.0: Aesthetics
- Chapter 4.0: Air Quality
- Chapter 5.0: Greenhouse Gas Emissions
- Chapter 6.0: Aquatic Resources
- Chapter 7.0: Terrestrial Resources
- Chapter 8.0: Cultural Resources
- Chapter 9.0: Geology, Soils, and Seismicity
- Chapter 10.0: Hazards and Hazardous Materials
- Chapter 11.0: Public Services and Utilities
- Chapter 12.0: Land Use and Recreation
- Chapter 13.0: Noise and Vibration
- Chapter 14.0: Population and Housing
- Chapter 15.0: Land Transportation
- Chapter 16.0: Marine Transportation and Marine Terminal Operations
- Chapter 17.0: Water Resources
- Chapter 18.0: Cumulative Effects
- Chapter 19.0: Growth-inducing Effects
- Chapter 20.0: Comparison of Alternatives and Impact Conclusions
- Chapter 21.0: Summary of Significant and Unavoidable Impacts

- Chapter 22.0: Mitigation Monitoring and Reporting Program
- Chapter 23.0: Consulting and Coordination
- Chapter 24.0: List of Preparers

1.9 REFERENCES

