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EXECUTIVE SUMMARY

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INTRODUCTION

On October 26, 2016, Stanton Energy Reliability Center, LLC (SERC, LLC), (Applicant) filed an application for certification (16-AFC-01) to construct and operate an electrical reliability and generating facility in the city of Stanton, California. As proposed, the Stanton Energy Reliability Center (Stanton or project) would be located at 10711 Dale Avenue, situated on two parcels with a combined area of 3.978 acres. The facility would consist of two Hybrid EGT™ General Electric LM6000-based Electric Gas Turbines. (Hybrid EGT™ refers to the LM6000 PC Hybrid EGT jointly developed by General Electric International, Inc. (GE) and Wellhead Power Solutions.) The EGT combines a combustion gas turbine with a 10-megawatt integrated battery storage component operated by a proprietary software system and a clutch on each turbine/generator (CTG) to allow operation as a synchronous condenser. In total, Stanton would provide 98 MW (net) of generation capacity. The synchronous condenser mode would allow the facility to provide reactive power and grid support without the CTGs operating simultaneously. The battery systems would provide an instantaneous response, allowing the CTGs to start-up and come up to speed to then provide grid support and energy. It is not anticipated that the batteries and CTGs would both be on-line at the same time.

This Preliminary Staff Assessment (PSA) contains staff's initial, independent and objective evaluation of the proposed Stanton Energy Reliability Center project. The PSA examines engineering, environmental, public health and safety, and environmental justice aspects of the proposed project, based on the information provided by the applicant, government agencies, interested parties, independent research, and other sources available at the time the PSA was prepared. The PSA contains analyses similar to those normally contained in a Draft Environmental Impact Report required by the California Environmental Quality Act (CEQA).

Approval (certification of a license) for a thermal power plant with a generating capacity of 50 MW or greater falls under the regulatory oversight of the Energy Commission (Pub. Resources Code § 25500, et seq.). The Energy Commission is the lead agency under CEQA and the Energy Commission's certified regulatory program provides the environmental analysis that satisfies CEQA requirements. This document also determines whether the project is in conformance with all applicable local, state, and federal laws, ordinances, regulations and standards (LORS).

Determinations of LORS compliance are made through staff's active coordination with other regulatory agencies and incorporation of their findings, such as the South Coast Air Quality Management District and its Preliminary Determination of Compliance. The result of staff's research, collaboration, and comprehensive process of discovery and analysis are recommendations for mitigation requirements (proposed conditions of certification) to reduce to less than significant any adverse environmental effects resulting from the proposed project and to ensure project compliance with applicable LORS.

Staff in the technical areas of Air Quality, Biological Resources, Cultural Resources, Geological and Paleontology Resources, Hazardous Materials, Land Use, Noise and Vibration, Public health, Socioeconomics, Soil and Water Resources, Traffic and Transportation, Transmission Line Safety and Nuisance, Visual Resources, Waste Management, Worker Safety and Fire Protection, Facility Design, Power Plant Efficiency and Reliability, and Transmission System Engineering, concludes that with implementation of staff's recommended mitigation measures described in the conditions of certification, the project would not cause a significant adverse impact to the environment, public health and safety, or to environmental justice communities, and would comply with applicable LORS.

ENERGY COMMISSION SITING PROCESS

This PSA is not the decision document for these proceedings, nor does it contain findings of the Energy Commission related to environmental impacts or the project's compliance with local, state, and federal LORS. Rather, the PSA will serve as staff's preliminary evaluation of the proposed project that will be available for a 30-day comment period. Staff will incorporate responses to comments received and other information needed to finish its analysis to draw conclusions and make recommendations about the project that will be published in the Final Staff Assessment (FSA). During evidentiary hearings to be held by an assigned Committee of two Energy Commissioners (Commissioner Janea Scott the Presiding Member, and Commissioner Karen Douglas the Associate Member), the FSA will serve as staff's testimony. During evidentiary hearings, the FSA will be entered into the record, along with public comment, input from staff, the applicant, intervenors, and governmental agencies. The Committee will then engage in deliberation and review of the record before writing and submitting the Presiding Member's Proposed Decision (PMPD) for a 30-day public comment period and then to the full Energy Commission for consideration and action. Following a public hearing, most likely during a monthly Business Meeting, the full Commission will make a final decision on the Stanton Energy Reliability Center proposal. If approved and constructed, Stanton would provide generation and local reliability services in the SCE West Los Angeles Basin Subarea.

PROPOSED PROJECT LOCATION

The main access to the Stanton site would be via Dale Avenue, between Standustrial Street and Monroe Avenue in the city of Stanton, Orange County, at 10711 Dale Avenue. The Stanton site is located in an area that is zoned Industrial General (City of Stanton, IG). Adjacent land uses surrounding the site include the city of Stanton's industrial area to the north and south, consisting of commercial/industrial warehouse-based business, a public storage facility, an elementary school to the north of the industrial/commercial area, public/quasi-public utility areas to the east, consisting of the SCE Barre peaker power plant and Barre Substation, and high- and medium-density residential uses to the southeast and northwest. Secondary access to the site is from Pacific Street/Fern Avenue east of Beach Road.

APPLICANT'S PROJECT PURPOSE AND OBJECTIVES

As stated by the applicant, Stanton's primary objective is to be a state-of-the-art energy reliability resource. Stanton has been designed to deliver reliability services with a minimal carbon footprint and a low-emissions profile. The project would be one of the first commercial applications of the EGT. Using this technology, Stanton would be able to combine dispatchable, operationally flexible, and efficient energy generation with state-of-the-art energy storage technology to meet the need for new local capacity and reliability services specifically in the West Los Angeles (LA) Basin local reliability area of SCE's service territory.

Stanton's project objectives are as follows:

- Safely construct and operate an electrical energy reliability facility to meet SCE's need for local capacity in the West LA Basin local reliability area of its service territory.
- Use Wellhead's patent-pending EGT technology to provide the following:
 - Greenhouse gas (GHG)-free operating reserve;
 - Flexible capacity without start time;
 - Peaking energy for local contingencies;
 - Voltage support and primary frequency response without fuel burn;
 - Superior transient response attributable to co-location of gas turbines and battery;
 - Gas turbine management of battery state-of-charge in real time;
- Site the project as near as possible to an SCE substation with available transmission capacity to serve the West LA Basin and minimize the generation tie-line length.
- Site the project in an existing industrial area on a previously disturbed site to minimize environmental impacts.
- Site the project in a community that embraces the project and its new technology.
- Safely construct and operate an electrical energy reliability project that would satisfy the commercial obligations of both Resource Adequacy Purchase Agreements (RAPAs).

SUMMARY OF ENVIRONMENTAL CONSEQUENCES AND MITIGATION

Below in **Executive Summary Table 1** is a summary of environmental consequences and mitigation proposed in this PSA.

**Executive Summary Table 1
Environmental and Engineering Assessment**

Technical Area	Complies with LORS	Impacts Mitigated	Additional Information Required
Environmental Assessment			
Air Quality/Greenhouse gases	Yes	Yes	No
Biological Resources	Yes	Yes	No
Cultural Resources	Yes	Yes	No
Environmental Justice	Not Applicable	Yes	No
Hazardous Materials	Yes	Yes	No
Land Use	Yes	Yes	No
Noise and Vibration	Yes	Yes	No
Public Health	Yes	Not Applicable	No
Socioeconomics	Yes	Yes	No
Soil and Water Resources	Yes	Yes	No
Traffic and Transportation	Yes	Yes	No
Transmission Line Safety and Nuisance	Yes	Yes	No
Visual Resources	Yes	Yes	No
Waste Management	Yes	Yes	No
Worker Safety and Fire Protection	Yes	Yes	No
Engineering Assessment			
Facility Design	Yes	Not Applicable	No
Geology and Paleontology	Yes	Yes	No
Power Plant Efficiency	Not Applicable	Yes	No
Power Plant Reliability	Not Applicable	Not Applicable	No
Transmission System Engineering	Yes	Yes	No

ENVIRONMENTAL ASSESSMENT

AIR QUALITY/GREENHOUSE GASES

Staff concludes that with the adoption of the staff's proposed conditions of certification, the proposed project would not result in significant air quality related impacts during project construction or operation, and that Stanton would comply with all applicable federal, state, and South Coast Air Quality Management District (SCAQMD) air quality LORS and CEQA requirements.

The SCAQMD published a PDOC on February 9, 2018. Compliance with all SCAQMD rules and regulations was evaluated in the PDOC. Per the PDOC, the SCAQMD determined Stanton would comply with applicable LORS.

Staff has assessed the potential for localized impacts and regional impacts for the project's proposed construction, commissioning, and operation. Staff is recommending mitigation and monitoring requirements sufficient to reduce potential adverse construction, commissioning, and operating emission impacts to less than significant.

Staff has considered the potential for adverse air quality impacts to the minority and low-income populations surrounding the site. The adoption of the recommended conditions of certification is expected to reduce the project's direct and cumulative air quality impacts to less than significant for all populations, including minority and low-income populations.

Global climate change and GHG emissions from the proposed project are discussed and analyzed in **Air Quality Appendix AIR-1**. The project owner expects to operate the proposed gas turbines well below an annualized plant capacity factor of 60 percent. Therefore the proposed plant would not be considered a base load facility and the turbines would not be subject to California's Greenhouse Gas Emission Performance Standard.

BIOLOGICAL RESOURCES

The proposed Stanton project site, offsite staging and parking areas, are previously disturbed. Vegetation is limited to weedy species and landscaping. Rare plants and special-status wildlife are not expected to occur onsite, offsite, or along the linear facility routes; however, nearby ruderal areas support common bird species protected by the Migratory Bird Treaty Act and California Fish and Game Code (Sections 3503 and 3513). In addition, the proposed project site and offsite natural gas-line route alternatives are all bisected by storm channels under the jurisdiction of United States Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife.

Given the proximity of the proposed project to the aforementioned biological resources, construction and associated site clearance as well as operation of the proposed project, could result in various direct and indirect effects. Staff concludes that with implementation of proposed conditions of certification, compliance with all LORS would be achieved and direct, indirect, and cumulative impacts would be avoided, minimized, or mitigated to less than significant levels. However, the applicant did not provide information on the proposed methods to cross Anaheim-Barber City Channel as Southern California Gas Company (SoCalGas) did not complete a construction study for that route. If jack and bore would be required for that route then the same measures required for the Carbon Creek Channel would apply to the Anaheim-Barber City Channel.

CULTURAL RESOURCES

Staff concludes that the proposed Stanton project could result in significant, direct impacts to as yet unidentified buried archaeological resources, which may qualify as historical or unique archaeological resources under CEQA. The adoption and implementation of Conditions of Certification **CUL-1** through **CUL-8** would ensure that the applicant would be able to respond quickly and effectively in the event that archaeological resources are found buried beneath the project site during construction-related ground disturbance.

Staff's analysis of the proposed project with regard to ethnographic and historic built environment resources concludes that no ethnographic or historic built environment resources are present in the project area of analysis that qualify as historical resources under CEQA. Therefore, no ethnographic or historic built environment resources would be impacted by the construction or operation of the project.

ENVIRONMENTAL JUSTICE

Staff concludes that construction and operation of Stanton would not cause significant direct, indirect, or cumulative environmental justice impacts with the inclusion of proposed conditions of certification (see technical sections). Staff also concludes that project impacts would not disproportionately affect the environmental justice population.

HAZARDOUS MATERIALS MANAGEMENT

Staff concludes, based on its evaluation of the proposed Stanton project, along with staff's proposed mitigation measures, that hazardous materials use at the site would not present a significant risk of impact to the public or the environment. With adoption of the proposed conditions of certification, the proposed project would comply with all applicable laws, ordinances, regulations, and standards.

LAND USE

The Stanton project would neither result in, nor contribute substantially to, any significant direct, indirect, or cumulative land use impacts. The Stanton project would be compatible with present and expected land uses and in conformance with applicable land use and planning laws, ordinances, regulations, and standards, including the city of Stanton's General Plan and Zoning Code with findings in support of the issuance of a conditional use permit and a variance by the California Energy Commission.

NOISE AND VIBRATION

If built and operated in conformance with the proposed Noise and Vibration conditions of certification, Stanton would comply with all applicable noise and vibration LORS and would produce no significant direct or cumulative adverse noise impacts within the project area.

Staff recommends conditions of certification addressing worker and employee noise protection (**NOISE-3** and **NOISE-5**), measurement, and verification that noise performance criteria is met at the project's noise-sensitive residential receptors (**NOISE-4**), and restrictions on construction activities (**NOISE-6** and **NOISE-7**). Also, **NOISE-1** and **NOISE-2** establish a public notification and noise complaint process to resolve any noise complaints regarding project construction or operation.

Staff retains the responsibility to monitor the enforcement of the Noise and Vibration conditions of certification. Staff would work under the CPM's authority to monitor and review the reporting of project performance during construction and the full term of operation, including facility closure.

PUBLIC HEALTH

Staff has analyzed the potential human health risks associated with construction and operation of the proposed Stanton project. Staff's analysis of potential health impacts was based on a highly conservative health-protective methodology that accounts for impacts on the most sensitive individuals in a given population. Staff concludes that no one (including the public, off-site nonresidential workers, recreational users, and Environmental Justice [EJ] populations) would experience any acute or chronic cancer

or non-cancer effects of health significance during construction and operation of the proposed Stanton project. Therefore, there would be no significant health impacts from the project's toxic air emissions.

SOCIOECONOMICS

Staff concludes that construction and operation of the project would not cause significant adverse direct, indirect, or cumulative socioeconomic impacts. The project would not induce substantial population growth or displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere. Stanton also would not negatively impact acceptable service ratios of the project area's law enforcement services, parks and recreation facilities, or schools, necessitating the construction of new or physically altered governmental facilities that could result in significant environmental impacts. Staff-proposed Condition of Certification **SOCIO-1** would ensure payment of school impact fees consistent with local practices.

SOIL AND WATER RESOURCES

As proposed, Stanton could potentially impact soil and water resources. Staff evaluated the potential for the project to: cause accelerated water erosion and sedimentation; exacerbate flood conditions in the vicinity of the project; adversely affect surface or groundwater supplies; or degrade surface or groundwater quality. Staff further evaluated if the proposed project would comply with all applicable LORS, and state policies.

Based on the analysis of the information provided in the Application for Certification (AFC), staff concludes as follows:

1. Condition of Certification **SOIL&WATER-1** would reduce or avoid impacts of soil erosion and storm water runoff to surface water and groundwater quality during construction.
2. Post-construction best management practices (BMPs) to control storm water would reduce storm water runoff impacts during operations to less than significant by compliance with Condition of Certification **SOIL&WATER-2**.
3. Potential impacts of Stanton's wastewater streams would be mitigated to less than significant during construction through compliance with Condition of Certification **SOIL&WATER-2** (to manage storm water runoff), **SOIL&WATER-3** (to manage hydrostatic testing and/or construction dewatering) and during operations with Condition of Certification **SOIL&WATER-6** (to manage sanitary waste).
4. Compliance with Conditions of Certification **SOIL&WATER-4** and **SOIL&WATER-5** would ensure the project owner complies with the water use limits consistent with this analysis.
5. During project operation, wastewater generation by the project would be discharged to the city of Stanton's sewer system. Condition of Certification **SOIL&WATER-6** requires documentation from the applicant demonstrating the city of Stanton's fees associated with sewer connections have been paid.

6. Prior to project construction the owner would be required to submit a Frac-Out Plan detailing how jack and bore activities would be conducted to ensure no significant impacts to Carbon Creek if the northern gas alignment is chosen. Condition of Certification **SOIL&WATER-7** requires documentation of applicable permits and the preparation of a Frac-Out Plan. No information was provided regarding the southern alignment, which would cross the Anaheim-Barber City Channel, therefore staff could not complete analysis of that option. Staff needs information on the method of construction that would be used for the crossing and identify whether any other permitting programs would otherwise apply to the proposed construction of this option.
7. Prior to project construction the owner would be required to obtain an encroachment permit for the construction of a vehicle and a utility bridge. Condition of Certification **SOIL&WATER-8** requires the applicant to comply with Orange County Public Works Department requirements and obtain a Flood Control Encroachment Permit.

Staff concludes that the project would not result in significant adverse impacts that cannot be avoided or mitigated and would comply with federal, state, and local LORS with implementation of conditions of certification recommended by staff.

TRAFFIC AND TRANSPORTATION

Staff has analyzed the proposed project's impacts to the nearby traffic and transportation system. As currently proposed, the construction of Stanton could result in significant impacts to the nearby traffic and transportation system. However, staff has determined that with implementation of the proposed conditions of certification, impacts from the project to the surrounding traffic and transportation system would be less than significant. Condition of Certification **TRANS-2** would require implementation of a Traffic Control Plan to reduce the potential for accidents involving construction workers crossing Monroe Avenue and the railroad tracks between the project site and the Bethel Romanian Pentecostal Church parking lot. Condition of Certification **TRANS-3** would reduce road hazards by requiring restoration of any public roads, easements, rights-of-way, and other transportation infrastructure damaged by project-related construction or traffic. Finally, Condition of Certification **TRANS-6** would require implementation of a rail crossing safety plan to ensure safety of construction workers and train operators.

With implementation of the proposed conditions of certification (**TRANS-1** through **TRANS-8**), Stanton would comply with all applicable LORS related to traffic and transportation and would result in less than significant direct, indirect, and cumulative impacts to the traffic and transportation system and to the EJ population.

TRANSMISSION LINE SAFETY AND NUISANCE

The applicant proposes to build a new underground 0.35-mile, single-circuit 66-kV transmission line to connect the proposed Stanton project to the area's electric power grid through the existing SCE Barre Substation to the east. According to the applicant, the proposed project location was chosen in part for its proximity to this substation. This generator-tie line would be routed underground through a mostly industrial area with only a few residences in the immediate vicinity, thereby minimizing the potential for residential field exposures which have been of some health concern. Since the line

would be operated within the SCE service area, it would be designed, constructed, operated, and maintained according to SCE's guidelines for line safety and field management which conform to applicable LORS. Staff proposes two conditions of certification to ensure compliance.

VISUAL RESOURCES

The proposed Stanton project would not have a substantial adverse effect on visual resources, and would be in conformance with applicable LORS pertaining to visual resources, with the effective implementation of the applicant's proposed mitigation measures and staff's proposed conditions of certification. Overall the project, as proposed, was determined to have a less than significant impact on visual resources.

Staff evaluated whether the proposed project would have a significant effect on the environment according to Appendix G of the State CEQA Guidelines and if the project would be in conformance with applicable LORS. Staff concludes the following:

- The proposed project would not affect scenic vistas within the city of Stanton or surrounding region.
- The proposed project would not damage any scenic resources within the city of Stanton or surrounding region.
- With recommended Conditions of Certification **VIS-1** and **VIS-2**, the proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings for the life of the project.
- With recommended Conditions of Certification **VIS-3** and **VIS-4**, the proposed project would not create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area.
- The proposed project's incremental visual effect would not contribute to significant cumulative impacts in combination with past or anticipated future projects.
- Proposed mitigation measures (conditions of certification) would reduce visual impacts to less than significant for all populations, including environmental justice populations represented in **Environmental Justice Figures 1 and 2** and **Table 3**.
- The project, as currently proposed, would be in conformance with applicable local LORS pertaining to visual resources with the effective implementation of staff's proposed conditions of certification.

WASTE MANAGEMENT

Wastes may be hazardous or nonhazardous, depending on how generated, and are required to be managed in compliance with specific health and safety LORS, which staff noted in the **Waste Management** section of this PSA. The applicant proposes a Waste Management Plan to ensure compliance. Staff has evaluated the applicant's management plan, considers it adequate for compliance, and has proposed specific conditions of certification to ensure implementation.

WORKER SAFETY AND FIRE PROTECTION

Staff concludes that the proposed Stanton project would incorporate sufficient measures to ensure adequate levels of industrial safety and comply with applicable LORS. Staff recommends the project owner provide a Project Construction Safety and Health Program and a Project Operations and Maintenance Safety and Health Program as required by Conditions of Certification **WORKER SAFETY-1** and **-2**, and fulfills the requirements of Conditions of Certification **WORKER SAFETY-3** through **-7**. The proposed conditions of certification require verification that the proposed plans adequately assure worker safety and fire protection and comply with applicable LORS.

The Orange County Fire Authority has stated that its ability to respond to emergency calls would not be significantly impacted by the construction and operation of the Stanton project.

ENGINEERING ASSESSMENT

FACILITY DESIGN

Staff concludes that the design, construction, and eventual closure of Stanton and its linear facilities would comply with applicable engineering LORS. The proposed conditions of certification would ensure compliance with these LORS.

GEOLOGY AND PALEONTOLOGY

The Stanton site area can be characterized as an active seismic area. Earthquake-related ground shaking and the effects of this shaking on structures must be mitigated. In addition to strong seismic shaking, the project may be subject to soil failure caused by liquefaction and/or dynamic compaction. A design-level geotechnical investigation is required for the project by the California Building Code 2016, and proposed Conditions of Certification **GEO-1** and **Facility Design** Conditions of Certification **GEN-1**, **GEN-5**, and **CIVIL-1**.

At the Stanton site, the surface, and near surface, material consists of disturbed fill and Quaternary alluvium, both of which have low paleontological potential. However, the actual conditions at depth are unknown and, if paleontological resources were discovered during construction activities, they would be protected through worker training and monitoring by qualified paleontologists, as required by proposed Conditions of Certification **PAL-1** through **PAL-8**.

Based on this information, staff concludes that the potential adverse cumulative impacts to project facilities from geologic hazards during its design life are less than significant. Similarly, staff concludes the potential adverse cumulative impacts to potential geologic, mineralogic, and paleontologic resources from the construction, operation, and closure of the proposed project, if any, are less than significant. It is staff's opinion that the proposed Stanton facility can be designed and constructed in accordance with all applicable LORS, in a manner that both protects environmental quality and assures public safety.

POWER PLANT EFFICIENCY

Stanton would generate 98 MW (net output¹) of electricity and would operate at an overall project fuel efficiency of 41 percent lower heating value (LHV²) at full load³. While it would consume substantial amounts of energy, it would do so in a sufficiently efficient manner to satisfy the project's objectives of producing peak-load electricity and ancillary load-following services. It would not create significant adverse effects on energy supplies or resources, would not require additional sources of energy supply, and would not consume energy in a wasteful or inefficient manner. No energy standards apply to the project. The battery energy storage systems and synchronous condenser would not impact Stanton's overall thermal efficiency, and would provide grid services without contemporaneous generation, or using stored low-GHG/low cost electricity.

Staff therefore concludes that the project would not present significant adverse impacts upon energy resources. No conditions of certification are proposed for power plant efficiency.

POWER PLANT RELIABILITY

Staff concludes that Stanton would be built to operate in a manner consistent with industry norms for reliable operation and would be expected to demonstrate an equivalent availability factor⁴ between 92 and 98 percent. The battery energy storage systems and synchronous condensers would perform reliably and would not adversely affect project reliability. No conditions of certification are proposed for power plant reliability.

TRANSMISSION SYSTEM ENGINEERING

The proposed Stanton project electric transmission outlet lines and termination are acceptable and would comply with all applicable LORS.

- The SCE Queue Cluster 9 (QC9) Phase One study identified a new Operating procedure that would be implemented to curtail the generation of the QC9 projects in order to mitigate Short Circuit Duty impacts caused by the projects on the Barre 230 kV/66 kV SCE substation.
- The proposed project would be designed and constructed with adequate reactive power resources to compensate for the consumption of Var by the generator step-up transformers, distribution feeders, and generator tie-lines, and maintain a 0.95 power factor at the plant point of interconnection.

¹ Net output is the facility's gross electricity generation minus its parasitic electricity (load) requirements, or the amount of electricity that the facility delivers to the electricity grid

² LHV is lower heating value, or a measurement of the energy content of a fuel correcting for post-combustion water vapor.

³ At site annual average temperature of 65°F and relative humidity of 72 percent (SERC 2016a, AFC Figure 2.1-3)

⁴ Equivalent availability factor is the percentage of time a power plant is available to generate electrical power, and reflects the probability of planned and unplanned (forced) outages.

- A SCE study identified conceptual interconnection facilities and Barre Substation upgrades that are necessary to interconnect the Stanton project. The proposed upgrades would be done within the Barre Substation, therefore no additional environmental analysis is required.

The Stanton project could be reliably interconnected to the SCE sub-transmission network without additional facilities, other than those proposed by the applicant.

PROJECT ALTERNATIVES

CEQA requires consideration and discussion of a “range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives” (Cal. Code Regs., tit. 14, § 15126.6, subd. (a)). Project alternatives developed for Stanton are fully analyzed in the **Alternatives** section of this document. Some of the environmental impacts of constructing and operating Stanton would be reduced or avoided under the project alternatives evaluated in this PSA though staff concludes that the project’s environmental impacts would be reduced to less than significant levels with implementation of recommended conditions of certification (mitigation) and through compliance with applicable LORS. Nonetheless, the **Alternatives** section evaluates a reasonable range of potentially feasible alternatives to the proposed Stanton project to foster informed decision making and public participation. Summaries of the comparative environmental impacts of the alternatives and the proposed project are as follows:

- **The No-Project Alternative:** Under the No Project Alternative, the Energy Commission would not issue a license to the applicant to construct and operate the Stanton project. No action would be taken. Staff assumes that the existing uses would continue at the site, and the estimated fiscal benefits of the project would not be realized. No other use is predicted to occur in the foreseeable future if the proposed project is not approved; however, additional capacity would need to be obtained elsewhere in the West LA Basin to meet the identified long-term local capacity requirements by 2021.
- **Alternative Site 1: Warner Site:** The Warner Site is a rectangular parcel encompassing approximately 4.5 acres at 1312 East Warner Avenue within the city of Santa Ana. The Warner Site is approximately 10 miles southeast of the Stanton project site.

The Warner Site was eliminated from further detailed consideration for the following reasons:

- The site is located within the flight path (conventional west arrival pattern) and located within a notification area and airport obstruction imaginary surface area for the primary runway for John Wayne Airport, thereby creating potential issues with thermal plumes from the plant, and
- Contaminated soils and groundwater are potentially present beneath the site, along with known California Department of Toxic Substances Control issues at the site immediately to the north.

- **Alternative Site 2: Birch Street Site:** The Birch Street Site encompasses approximately 7.8 acres and is located at 2620 Birch Street in Santa Ana. This site is approximately 9 miles southeast of the Stanton site and approximately 1 mile west of the Warner Site.

The Birch Street Site was eliminated from further detailed consideration for the following reasons:

- The site is located within the flight path (conventional west arrival pattern) and located within the FAR Part 77 notification area and airport obstruction imaginary surface area for the primary runway for John Wayne Airport, thereby creating potential issues with thermal plumes from the plant.
- **Alternative Site 3: Carson Site:** The Carson Site is located at 18937 Main Street in Carson, California. It encompasses approximately 4.6 acres and is zoned Heavy Manufacturing.

The Carson Site was eliminated from further detailed consideration for the following reasons:

- Contaminated soils and groundwater are potentially present beneath the site, and
- The Goodyear Blimp operates less than 1,000 feet away thereby creating a potential for thermal plumes to adversely impact blimp operations.
- **Technology Alternatives:** In addition to the No Project Alternative, staff created a conceptual design for a 100 MW/50 MWh Battery Energy Storage Alternative that would be installed and operated at the Stanton site. This alternative is included because it would avoid on-site use of fossil fuels for power generation, but could contribute to the local capacity requirement.

The FSA will discuss staff's conclusions on whether an alternative emerges as an environmentally superior alternative following review and comment on this PSA by the parties to this proceeding and the public.

CUMULATIVE IMPACTS

Preparation of a cumulative impact analysis is required under CEQA. In the CEQA Guidelines, "a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts" (Cal. Code Regs., tit. 14, § 15130(a)(1)). Cumulative impacts must be addressed if the incremental effect of a project, combined with the effects of other projects, is "cumulatively considerable" (Cal. Code Regs., tit. 14, § 15130(a)(2)). Such incremental effects are to be "viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects" (Cal. Code Regs., tit. 14, § 15164(b)(1)). Together, these projects comprise the cumulative scenario which forms the basis of the cumulative impact analysis.

CEQA also states that both the severity of impacts and the likelihood of their occurrence are to be reflected in the discussion, “but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion of cumulative impacts shall be guided by standards of practicality and reasonableness, and shall focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact” (Cal. Code Regs., tit. 14, § 15130(b)).

DEFINITION OF THE CUMULATIVE PROJECT SCENARIO

The cumulative impacts analysis is intended to identify past, present, and probable future projects that are closely related either in time or location to the project being considered, and consider how they have harmed or may harm the environment. Most of the projects on the Master Cumulative Project List below are required to undergo their own independent environmental reviews under CEQA. Staff developed the Stanton Master Cumulative Project List by contacting planning staff with the cities of Anaheim, Buena Park, Cypress, and Stanton. Staff also reviewed proposed project information from other agencies, including CALTRANS, the Orange County Transportation Authority, and the CEQANet database to develop a list of past, present, and reasonably foreseeable projects.

Under CEQA, there are two acceptable and commonly used methodologies for establishing the cumulative impact setting or scenario: the “list approach” and the “projections approach.” The first approach would use a “list of past, present, and probable future projects producing related or cumulative impacts.” (Cal. Code Regs., tit. 14, § 15130(b)(1)(A)). The second approach is to use a “summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact.” (Cal. Code Regs., tit. 14, § 15130(b)(1)(B)). This PSA uses the “list approach” for purposes of state law to provide a tangible understanding and context for analyzing the potential cumulative effects of the proposed project. All projects used in the cumulative impacts analyses for this PSA are listed in the cumulative projects table (**Executive Summary Table 2**), and locations are shown on **Executive Summary Figure 1**.

APPROACH TO CUMULATIVE IMPACT ANALYSIS

This PSA evaluates cumulative impacts within the analysis of each resource area, following three steps:

- Define the geographic scope of cumulative impact analysis for each discipline, based on the potential area within which impacts of Stanton could combine with those of other projects.
- Evaluate the effects of Stanton in combination with past and present (existing) projects within the area of geographic effect defined for each discipline.
- Evaluate the effects of Stanton with foreseeable future projects that occur within the area of geographic effect defined for each discipline.

**Executive Summary Table 2
Stanton Energy Reliability Center – Master Cumulative Project List**

Label ID#	Project Title	Description	Location	Distance to SERC (Miles)	Status
1	PPD780	Construction of a 2,418 square foot fast food restaurant with drive-through	7952 Cerritos Ave. and 10511-10529 Beach Blvd., Stanton	0.39	Tentative Completion - Summer 2017
2	PPD 774	Construction of a four unit condominium project	7921 Second St., Stanton	0.58	Building Plan Check
3	PPD-783	Two new commercial office buildings	10441/10425 Magnolia, Stanton	0.74	Still in entitlement process
4	PPD 777	Construct commercial development including a retail pad building, drive-through restaurant, gas station and a drive through car wash	11382, 11430 and 11462 Beach Blvd., Stanton	0.76	Building Plan Check
5	Relocation and construction of school district central kitchen facility	Relocate District's central kitchen facility from the District Office, located at 501 North Crescent Way, Anaheim, to 2735 West Ball Road, Anaheim, on land currently used as a school athletic field, and construct the new central kitchen facility thereon. Existing central kitchen facility to be converted into a District conference center- only internal changes necessary. New central kitchen facility to consist of a 40,000 sq. ft., two-story facility, with parking areas and loading dock. Four primary components: (1) dry storage, (2) cold storage, (3) production kitchen, and (4) offices and support facilities (e.g., small storage areas, restrooms, and a meeting room). New facility will have capability to produce up to 50,000 meals daily without further expansion.	2735 W. Ball Rd, between S. Dale Ave. and S. Magnolia Ave, Anaheim	0.79	Unknown
6	Ball Road Townhomes- Bonanni, DEV2016-00100	Subdivide and construct a 43-unit single-family attached residential project with 10% affordable units and density bonus incentives	2730 W Ball Rd., Anaheim	0.81	Under Review

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7	DEV2016-00048	Land use entitlements requested: (1) to reclassify the property from the T (Transition) Zone to the RS-2 (Single-Family Residential) Zone - and, (2) a tentative parcel map to subdivide property into two parcels. Existing building on new parcel 2 would be removed.	807 S. Dale Ave., Anaheim	0.98	Approved
8	PPD 775	Construction of 11 single-family detached units	8101-8111 Catherine Ave., Stanton	1.58	Building Plan Check
9	PPD 766	Five-story mixed use development including outpatient clinic, assisted living facility and restaurant	12282 Beach Blvd., Stanton	1.59	Building Plan Check
10	Lincoln Townhomes DEV2013-00028A	Entitlements requested: (i) a Planning Commission determination of conformance with the Density Bonus Code to construct a 35-unit condominium complex with affordable units and Tier 2 incentives - and, (ii) a tentative tract map to establish a 1-lot, 35 unit attached condominium subdivision.	2726 W Lincoln Ave A,B,C,D, Anaheim	1.68	Under planning review.
11	PPD 779	Construction of a medical office building	12456 Beach Blvd., Stanton	1.73	Construction complete
12	PPD 776	Construction of a 25-unit development, including eight live-work units	8081 Lampson Ave., Stanton	1.75	Building Plan Check
13	Emeritus at Fairwood Manor Expansion DEV2014-00100	Expand an existing assisted living facility.	200 N. Dale Ave., Anaheim	1.84	Under planning review.
14	Westgate	Commercial retail center, 250,000 sq. ft.	Northeast corner of Beach Blvd. and Lincoln Ave., Anaheim	1.86	Approved. Construction estimated 2018.
15	Lincoln Cottages, DEV2016-00043	Entitlements requested to develop 22-unit, three-story attached single-family residential project: (i) reclassify westerly property from C-G (General Commercial) Zone to RM-3 (Multiple Family Residential) Zone; (ii) conditional use permit to allow attached single-family residential development with modified development standards; and (iii) tentative tract map to establish 22-lot residential subdivision.	3319-3321 W Lincoln Ave., Anaheim	2.05	Approved
16	Braille Institute	Demolish existing Braille Institute building and reconstruct new campus with less parking than required by zoning.	527 N. Dale Ave., Anaheim	2.23	Approved

Label ID#	Project Title	Description	Location	Distance to SERC (Miles)	Status
17	Parkgate Center, DEV2015-00127	Entitlements requested to permit the development of a 48-unit, three story attached and detached single family residential project: (i) reclassify the subject properties from C-G (General Commercial) Zone to RM-3 (Multiple Family Residential) Zone; (ii) conditional use permit to allow attached single-family residential development with modified development standards; and (iii) tentative tract map to create 48-unit residential subdivision	2301-2331 W Lincoln Ave 114A, Anaheim	2.25	Approved
18	PPD 780	Construct a 4,175 square foot multi-tenant building with drive through	12950 Beach Blvd., Stanton	2.26	Building Plan Check
19	CUP-092-2017	Conditional Use Permit request to operate new 29,010 sq. ft. Smart and Final with an Original Alcoholic Beverage Control Type "21" (Off-Sale, General) License.	10870 Katella Ave. Suite G, Garden Grove	2.57	Entitlements granted
20	CUP-085-2016	Conditional Use Permit (CUP) approval to operate new, approximately 44,007 square foot Gold's Gym, located in the Gardenland Shopping Center.	10870 Katella Ave. Suite A, Garden Grove	2.58	In plan check
21	18-Units on Euclid, DEV2016-00027	Entitlements requested: (i) reclassification of property from Transition (T) zone to Multiple-Family Residential (RM-3) zone; (ii) conditional use permit to construct 18-unit, 3-story condominium project with deviation in development standards; and (iii) tentative tract map for one lot subdivision for condominium purposes.	1525 S Euclid St., Anaheim	2.66	Plan Check
22	Ball and Euclid Plaza, DEV2015-00119	Entitlements requested: (i) conditional use permit for demolition of liquor store building and construction of new drive-through restaurant building within existing shopping center; and, (ii) variance to permit fewer parking spaces than required by Zoning Code.	901-951 S Euclid St, Anaheim	2.75	Approved
23	Hotel Stanford	Ten-story hotel with 150 guest rooms, conference and banquet space and rooftop bar.	7860 Beach Blvd., Buena Park	2.94	Approved May 2016
24	Fairmont Private School, DEV2014-00138	Four-story student dormitory building on the existing Fairmont private school campus	2200 W Sequoia Ave., Anaheim	3.03	Approved

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25	SP-022-2016, LLA-011-2016, DA-002-2016, CUP-065-2016	Site Plan and Conditional Use approval to construct a four-story, 10-unit, work-live mixed-use development on three separate properties in conjunction with a Lot Line Adjustment to consolidate three properties into one. A Development Agreement is also included.	10641 Garden Grove Blvd., 10661 Garden Grove Blvd., and 10662 Pearl St., Garden Grove	3.26	Entitlements granted
26	Barton Place	Mixed-use Project with two main components: senior residential community and commercial/retail uses along Katella Avenue. Senior residential community to be developed on approx. 28 acres on northern portion of the project site. Commercial/retail improvements to be developed on approx. 5-acre parcel on southern portion of project site.	Northeast corner of Katella Ave. and Enterprise Dr., Cypress	3.50	Approved Final EIR Oct. 2015. Construction anticipated to begin in 2018 with construction period of 34 months.
27	SP-034-2017, TT-17928-2017, DA-005-2017, CUP-097-2017	A request to build two (2) work-live units and fourteen (14) residential units.	11222 Garden Grove Blvd., Garden Grove	3.72	Entitlements granted
28	Beach and Orangethorpe Mixed Use Project (The Source)	Max. development allowed would be 500,000 sq. ft. retail, office, restaurant, hotel, and entertainment complex. Approx. one thousand multi-family residential units, 300-room 277,000 sq. ft. hotel, 355,000 sq. ft. retail, and 4,560 parking stalls. One option would be for one residential unit in Phase 1 to be developed as offices. Would reduce residential by 177 condominiums in Phase 1 with addition of approx. 195,000 sq. ft. office space.	6940 Beach Blvd., Buena Park	3.72	Under construction. Construction in two phases over a three-year period.
29	CUP-095-2017	Construct 8,308 sq. ft. fire station, replace 1,000 sq. ft. community building with 2,000 sq. ft. community building, with associated site improvements at West Haven park in O-S (Open Space) zone.	12252 West St., Garden Grove	4.08	Entitlements granted
30	SP-032-2016	Site Plan approval to construct new approx. 3,000 sq. ft. one-story building, for operation of retail meat market on vacant 13,259 sq. ft. lot with associated improvements, including parking lot and landscaping.	10691 Westminster Ave., Garden Grove	4.14	In plan check

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31	Anaheim Plaza, DEV2015-00120	580-room, 8-story hotel with 50,000 sq. ft. meeting space; 25,600 sq. ft. restaurant space; 20,188 sq. ft. concierge lounge space; fewer parking spaces than required by the Code; and request to adopt development agreement between the city of Anaheim and Good Hope International for proposed hotel project.	1700 S Harbor Blvd., Anaheim	4.23	Approved
32	La Palma Complex Reservoir Rehabilitation & Pump Station Replacement	Replace deteriorated, metal roof of 4.0 million gallon reservoir with aluminum roof. Install structural support for reservoir, a hypalon liner, a surge tank, a 1000-1200 kilowatt semi-enclosed diesel generator for emergency backup power, piping and 6-ft. high fencing along front setback on West St. Replace pump station and its five pumps (capacity of the largest pump is 2,750 gallon per minute (GPM)) with new pump station with four pumps (two 250 horsepower (hp) at 3800 GPM each and two 125-hp at 1900 GPM for total of 6,250 GPM with largest pump out of service). Demolish existing 3.0 MG reservoir, and existing inactive water production well. Also, remove approx. 10 shrubs/trees of ornamental variety to allow space for turn-around driveway during construction and replacement with new shrubs and trees.	West St and La Palma Ave, Anaheim	4.25	Unknown
33	Harbor Substation	Construct two 45 megavolt-amp transformers and switchgear distribution system. The two new single-story structures to be constructed: structure measuring approx. 180 ft. by 50 ft.; and second structure measuring approx. 90 ft. by 50 ft. The latter surface to house two transformers. Underground 69 kilovolt (kV) and 12 kV transmission and distribution lines to be installed in the rights-of-way at Cerritos Ave., Katella Ave., Hast St., Zeyn Street., Disney Way, Harbor Blvd., Clementine Street., Anaheim Blvd., Manchester Ave., and Ninth St. Subterranean vaults (approx. 8 ft. by 20 ft.) at depths of approx. 9 ft. below grade on Katella Ave., Zeyn St., Anaheim Blvd., Haster St., Disney Wy., Clementine St., and Manchester Ave.	131 W Katella Ave, Anaheim	4.64	February 28, 2017 Design & Construction Award Consideration by City Council, Late Summer 2017 Site Preparation, Fall 2019 Construction Complete

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34	SP-033-2017	Site Plan approval to construct approx. 4,954 sq. ft. commercial pad building within parking lot of existing multi-tenant shopping center, Harbor Place Center.	13200-13220 Harbor Blvd., Garden Grove	4.67	Entitlements granted
35	Cambria Hotel and Suites, DEV2016-00038	Final site plan to construct 12-story, 352-room hotel, three restaurant tenant spaces and one-level of subterranean parking.	1721 S Manchester Ave., Anaheim	4.73	Approved
36	Hampton Inn and Suites	Four-story hotel with 102 rooms, pool, spa, meeting room, and fitness area.	7307 Artesia Blvd., Buena Park	4.73	Under construction
37	Buena Park Nabisco Mixed Use Project	149 residential condo/townhomes, 100-room 4 -story hotel, and auto dealership.	Northwest corner of Artesia Blvd. and Rostrada Ave., Buena Park	4.76	Townhome construction completion estimated December 2017. Hotel construction completion Fall 2015. Although there is no proposal for development of an auto dealership, construction is estimated in 2017 with opening in 2018.
38	OnBeach Mixed Use Development	Five-story mixed-use development on approximately 2.31-acre former Anaheim General Hospital site. Includes approx. 48,000 sq. ft. medical office, restaurant, and retail uses as well as 60 senior apartments.	5742 Beach Blvd., Buena Park	4.83	Under construction
39	Industrial Building, DEV2016-00056	New 143,000 sq. ft. industrial building.	1710-1730 S Anaheim Blvd., Anaheim	4.86	Plan Check

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40	La Palma Village, DEV2014-00095	Entitlements requested to permit mixed use project to include 162-unit attached single family residential units with ground floor commercial space: amend General Plan land use designation from Open Space to Mixed Use; amend General Plan Circulation Element to modify circulation maps; reclassify subject properties from General Commercial and Industrial Zones to Mixed Use Overlay Zone; conditional use permit to allow mixed-use development with modified development standards; tentative tract map to create 152-unit residential subdivision; and tentative tract map to create a 10-unit residential subdivision with ground floor commercial space.	1110 N Anaheim Blvd., Anaheim	4.91	Approved
41	GPA-001-2017, PUD-006-2017, SP-028-2017, TT-17927-2017, DA-006-2017	Develop gated small lot subdivision with 70 single-family detached residential units and related street and open space improvements on 9.01 acre site. Project site currently contains church, school, and parking lot. Project includes a proposed sphere of influence change and annexation of 0.901 acres from the city of Orange to the city of Garden Grove. Amend the General Plan Land Use Map and Zoning Map with proposed annexation and modify General Plan Land Use Designation of project site from Civic/Institution to Low Density Residential and adopt Residential Planned Unit Development zoning with Single-Family Residential base zoning for the entire site. A contingent approval of Site Plan and Tentative Tract Map to subdivide proposed 70-unit small lot single-family residential subdivision, with recommendation for City Council approval of Development Agreement with applicant.	12901 Lewis St. and 12921 Lewis St., Garden Grove	5.59	Awaiting city council approval
42	Anaheim Five Coves (Northern Extension) Park Project	Develop 9-acre linear urban nature park extending from Lincoln St. to Fontera St. Project in second phase of existing 14-acre Anaheim Coves Nature Park and is a continuation of that park's 1.5-mile multi-use trail and native-plant greening effort for the area. Urban nature park includes 0.9- mile class 1 permeable asphalt bike	Lincoln Ave and S Rio Vista St , Anaheim	6.99	Construction estimated mid Sept 2017- mid March 2018.

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		path parallel to stabilized decomposed granite multi-use trail. Park includes demonstration garden/children's education/nature play area and native vegetation and earthen swales for stormwater capture throughout length of park.			
43	Anaheim Station Improvements	Construct a second station track and platform, Americans with Disabilities Act (ADA) improvements, possible expansion of parking.	Metrolink Anaheim Canyon Station, Anaheim	9.10	Environmental study phase. Construction estimated October 2019 to October 2020.
44	Anaheim Sustainability Center	Organic waste-to-energy facility to convert organic waste to biogas. Biogas used to generate renewable electricity for onsite needs and for sale to utility companies, including Anaheim Public Utilities. At buildout, facility would include two anaerobic digester tanks; an administration building; a receiving/processing building with loading bays; an outdoor power generation apparatus; and 15 passenger vehicle parking spaces. Capacity to generate up to 4.5 megawatts (MW) of renewable energy in Phase 1 and up to a total of 9.0 MW in Phase 2.	1300 and 1322 N. Lakeview Ave., Anaheim	10.50	MND July 2016
n/a	Prestressed Concrete Cylinder Pipe Rehabilitation Program	Rehab pre-stressed concrete cylinder pipe portions of five subsurface water distribution pipelines nearing end of service life. The second lower feeder is closest to the city of Stanton. Rehab methods include steel cylinder relining with collapsed pipe, steel pipe slip-lining with non-collapsed pipe, and replacement or new pipe construction. Maintenance and replacement of worn or outdated appurtenant structures (e.g. above-ground air release valves, vacuum valves, manholes, and buried vault structures) to be completed. Individual projects in Metropolitan owned rights-of-way, public roads and open space. Possible acquisition of additional temporary right of way to facilitate construction.	Second Lower Feeder-Rolling Hills, Lomita, Torrance, Los Angeles, Carson, Long Beach, Los Alamitos, Cypress, Buena Park, Anaheim, Placentia, Yorba Linda.	n/a	Second Lower Feeder (1 route out of three routes in Metropolitan Water District of Southern California region) constructed over 10-12 year period and broken up into 10 groups with construction of

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					<p>each group between each October to June. Construction of 1st group Oct. 2017 to June 2018, 2nd group Oct. 2018 to June 2019, and so on. Section of feeder between Interstate 605 and Interstate 5 broken into two groups, with construction estimated Oct. 2023 to June 2024 and Oct 2024 to June 2025. Construction may be delayed if surveys of the other routes yield pipe requiring repair before other pipe in the second lower feeder route.</p>
n/a	Anaheim Resort Electric Line Extensions Project	Extend underground electric line to connect to existing substation circuit breakers. Approx. 8,000 linear ft. (lf) cable line pulled through existing ductbank, approxim. 11,000 lf installed within new ductbank. New ductbanks require trench generally excavated to depth of 4-10 ft. at	Cerritos Ave, Walnut St, Magic Way, Ninth St, Disney Way, Disneyland Dr., Lewis St, Anaheim	n/a	In construction. Construction started Feb. 2017 with completion

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		width of approx. 2 ft. Install approx. 2,500-3,000 lf ductbank on Cerritos Ave. and Anaheim Blvd. for future installation of 69 kilovolt line to be installed under future project in mid-2017. Areas of ductbank total approx. 4.25 miles. Install risers and vaults max vault depth = 10 ft. x 8 ft. x 20 ft. long.			estimated Nov. 2018.
n/a	Lincoln Avenue Widening Project (from East Street to Evergreen Street)	Widen approx. 2,700 ft. segment of Lincoln Ave. from four to six-lane divided facility. Remove existing improvements, clearing and grubbing, excavation, place new asphalt concrete pavement, construct concrete curb and gutter, driveways, access ramps, sidewalks, bus pads, drainage system improvements, relocate existing facilities, install traffic signal at Lincoln Avenue and La Plaza intersection, traffic signal modifications, signing, striping, and landscaping. Landscaped medians along Lincoln Ave. and along project roadways include drought-tolerant and low-maintenance plantings and trees.	Lincoln Ave., between East St. and Evergreen St., Anaheim	n/a	Notice of Intent
n/a	Lincoln Avenue Widening Project from West Street to Harbor Boulevard	Widen Lincoln Ave. with additional through lane in each direction from West St. to Harbor Blvd. Dedicated right-turn pocket added on eastbound Lincoln Ave. at intersection with Harbor Blvd., beginning approx. 230 ft. west of intersection. Raised medians added and designated left turn-pockets would be provided at Illinois St., Ohio St., Citron St., Resh St., and Harbor Blvd. intersections. Lengthen existing left-turn pocket on eastbound Lincoln Ave. at Harbor Blvd, to 250 feet to accommodate u-turns. Remove on-street parking within project limits. Bicycles continue to use existing outside lane similar to existing condition. Parkways reconstructed with 5-ft. sidewalks separated from street by a 5-ft. wide curb-adjacent planter strip. New pavement, curbs, gutters, sidewalks, and pedestrian ramps through project area. Two replacement bus pads added eastbound and westbound Lincoln Ave. between Ohio St. and Citron St. Off-site regrading and paving on adjacent private properties required to facilitate joining	Lincoln Ave. between West St. and Harbor Blvd., Anaheim	n/a	Neg Dec for MND published Dec. 2016. Construction estimated to start in 2018 with a 10-month construction period.

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		of new roadway to adjacent property access driveways. Areas planned for striping and marking improvements included with reconstruction of existing storm drain catch basins and connector pipes. Construct three new catch basins near Illinois St./Lincoln Ave. intersection. Also new 24-inch storm drain constructed in Lincoln Ave. from West St. to Illinois St. to alleviate existing street flooding during rain events. New landscaping in medians and parkways.			
n/a	Rehabilitation of Western Regional Sewers, Project No. 3-64	Rehab and/or replace entire lengths of Orange Western Sub-Trunk, Los Alamitos Sub-trunk, Westside Relief Interceptor, and Seal Beach Blvd interceptor. Complete replacement of the Westside Pump Station wet well and replacement or rehabilitation of existing force main and odor control facilities.	Route along Los Alamitos Blvd., Denni St., and Bloomfield St. Route along Los Alamitos Blvd., Denni St., and Moody St. Route along Orange Ave. and Western Ave. Cities of Cypress, La Palma, Los Alamitos, and Seal Beach and the community of Rossmore.	n/a	Construction Oct. 2019 to June 2026.
n/a	North Basin Monitoring Well Project	Construct and operate 14 monitoring wells at 8 locations within cities of Anaheim and Fullerton. Northern portion of Orange County Groundwater Basin (North Basin Area) impacted by volatile organic compounds (VOCs) at concentrations well above primary drinking water standards. Predominant VOCs present in the North Basin area are trichloroethylene (TCE), tetrachloroethylene (PCE), 1,1-dichloroethylene (1,1-DCE), and 1,4-dioxane.	Various locations, Fullerton and Anaheim (north of SR-91 and south of Commonwealth Avenue)	n/a	Unknown
n/a	SR-241/SR-91 Tolled Express Lanes Connector Project	Construct median-to-median connector between State Route (SR) 241 and tolled lanes in median of SR-91. Length of project approx. 8.7 miles.	Junction of SR 241 and SR 91, cities of Anaheim, Yorba Linda, and Corona	n/a	Unknown
n/a	Eastbound State Route 22 Safety Improvement Project	Convert collector-distributor road to freeway to freeway direct connector for Interstate 5 (I-5) southbound. Create new freeway to freeway connector from State Route 22 (SR) eastbound to I-5/SR-57 northbound by re-striping	East of Garden Grove Ave. to Devon Rd., cities of Orange, Santa Ana, and Garden Grove	n/a	Unknown

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		and widening connector to add one additional lane. Access to SR-22 eastbound from Bristol St. on ramp eliminated to accommodate I-5/SR-57 northbound connector. Install new and upgrade existing traffic control devices. Existing high occupancy vehicle lane with continuous access maintained. New changeable message sign installed east of SR-39.			
n/a	OC Streetcar	Streetcar line linking Santa Ana Regional Transportation Center with multi-modal hub at Harbor Blvd./Westminster Ave. in Garden Grove. A 4.15-mile route along Santa Ana Blvd., Fourth Street, and Pacific Electric right-of-way.	Route along Santa Ana Blvd., Fourth Street, and Pacific Electric right-of-way in the Cities of Santa Ana and Garden Grove.	n/a	Construction estimated 2018-2020.
n/a	Spectrum Paint & Powder, Inc.	Powder coat booth	1332 S. Allec St., Anaheim	n/a	SCAQMD Permit to Operate (PTO) granted
n/a	Dae Shin USA Inc. /Jae Weon Lee	5-20 million British thermal unit (mmbtu) boiler	610 N. Gilbert St., Fullerton	n/a	SCAQMD PTO granted
n/a	International Paper - Buena Park Plant	Flexographic air dry	6485 Descanso Ave., Buena Park	n/a	SCAQMD PTO granted
n/a	Ameripecc Inc.	5-20 mmbtu boiler	6965 Aragon Circle., Buena Park	n/a	SCAQMD PTO granted
n/a	New Cingular Wireless PCS, AT&T Mobility	>500 horsepower (hp) emergency generator	301 N. Crescent Way, Anaheim	n/a	SCAQMD PTO granted
n/a	Damac Products, LLC.	Spray booth	14489 Industry Circle, La Mirada	n/a	SCAQMD PTO granted
n/a	Anaheim City, Convention Center	Charbroiler	800 W. Katella Ave., Anaheim	n/a	SCAQMD PTO granted
n/a	Southern California Edison Co.	Gas turbine, selective catalytic reduction (SCR), ammonia, etc.	8662 Cerritos Ave., Stanton	n/a	SCAQMD Authorization to Construct (ATC) applied

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n/a	UCI Medical Center	>500 hp emergency generator	101 The City Drive, Route 104, Orange	n/a	SCAQMD PTO granted
n/a	LA County Sanitation District NO. 2	Sewage treatment process	7400 E. Willow St., Long Beach	n/a	SCAQMD PTO granted
n/a	GKN Aerospace Transparency Sys Inc.	Drying oven, dip tank	12122 Western Ave., Garden Grove	n/a	SCAQMD PTO granted
n/a	US Foodservice	Charbroiler	15155 Northam St., La Miranda	n/a	SCAQMD PTO granted
n/a	Techno Coatings Inc.	Baghouse	1391 S. Allec St., Anaheim	n/a	SCAQMD PTO granted
n/a	CAL Aurum IND	Plating tank	15632 Container Lane, Huntington Beach	n/a	SCAQMD ATC applied
n/a	PRIMA-TEX Industries, Inc.	Screen printing press	6237 Descanso Circle, Buena Park	n/a	SCAQMD PTO granted
n/a	The Boeing Company	Cooling towers	5301 Bolsa Ave., Huntington Beach	n/a	SCAQMD PTO granted

Note: n/a not applicable or not available.