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Project Title:	Stanton Energy Reliability Center	
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Document Title:	Staff's Data Requests, Set 1, A1 through A63	
Description:	Data Requests	
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Organization:	California Energy Commission	
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Project Title:	Stanton Energy Reliability Center	
TN #:	216815	
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EDMUND G. BROWN JR., Governor

CALIFORNIA ENERGY COMMISSION 1516 NINTH STREET SACRAMENTO, CA 95814-5512 www.energy.ca.gov



Kara Miles President SERC, LLC 650 Bercut Drive, Suite C Sacramento, CA 95811

April 5, 2017

Regarding: Stanton Energy Reliability Center Application For Certification (16-AFC-01), Staff's Data Requests, Set 1, A1 through A63

Dear Ms. Miles,

Pursuant to Title 20, California Code of Regulations, section 1716, the California Energy Commission staff requests the information specified in the enclosed data requests. The information requested is necessary to: 1) more fully understand the project, 2) assess whether the facility will be constructed and operated in compliance with applicable regulations, 3) assess whether the project will result in significant environmental impacts, 4) assess whether the facilities will be constructed and operated in a safe, efficient and reliable manner, and 5) assess potential mitigation measures.

These data requests, numbered A1 through A63, are being made in the technical areas of Air Quality, Cultural Resources, Socioeconomics, Visual Resources, and Transmission System Engineering. Written responses to the enclosed data requests are due to the Energy Commission staff on or before May 5, 2017.

If you are unable to provide the information requested, need additional time, or object to providing the requested information, please send a written notice to the Committee and to me within 20 days of receipt of this notice. The notification must contain the reasons for the inability to provide the information or the grounds for any objections (see Title 20, California Code of Regulations, section 1716 (f)).

If you have any questions regarding the enclosed data requests, please call me at (916) 653-8236 or email me at John.Heiser@energy.ca.gov .

Sincerely,

John Heiser (Signature on File) Siting Project Manager

Enclosure (Data Request Packet) cc: Docket (16-AFC-01) POS List

STANTON ENERGY RELIABILITY CENTER APPLICATION FOR CERTIFICATION (16-AFC-01)

Energy Commission Staff's Data Requests Set 1, A1-A63

April 5, 2017

Technical Area:Air QualityAuthor:Tao Jiang

AIR QUALITY APPLICATION TO THE AIR DISTRICT

BACKGROUND

The proposed project will require review by the South Coast Air Quality Management District (District). Therefore, staff will need copies of all correspondence between the applicant and the District in a timely manner in order to stay up to date on any issues that arise prior to completion of the Staff Analysis.

DATA REQUEST

A1. Please provide copies of all substantive District correspondence regarding the application to the District, including application supplements and e-mails, within one week of submittal or receipt. This request is in effect until the final Commission Decision has been docketed.

CONSTRUCTION AND OPERATION EMISSION CALCULATIONS

BACKGROUND

AFC appendix 5.1A (operational and commissioning emissions) and 5.1E (construction emissions) are used to document emissions calculations. Staff needs the spreadsheet files of the emission estimates with live, embedded, calculations to complete the review. In addition, the District issued two incompleteness letters dated December 2, 2016 and February 2, 2017. In applicant's responses to those letters, the operational and commissioning emission calculations have been revised. Further revisions may also be needed to address the District's comments in the completeness letter dated February 24, 2017. The spreadsheet files of the emission estimates should also be updated.

DATA REQUESTS

- A2. Please provide the updated spreadsheet versions of Appendix 5.1A and 5.1E worksheets with the embedded calculations live and intact.
- A3. Please update the corresponding summary tables in Appendix 5.1A, 5.1E and AFC section 5.1.4.

OPERATION AND COMMISSIONING MODELING

BACKGROUND

The District issued two incompleteness letters dated December 2, 2016 and February 2, 2017. In applicant's responses to those letters, the emissions estimates during commissioning and normal operations have been revised. The air quality modeling for both periods has also been revised accordingly. Additional revisions may also be needed to address the District's additional comments in the completeness letter dated February 24, 2017. Staff needs the updated modeling analysis to complete the staff analysis.

DATA REQUESTS

- A4. Please provide the updated air quality modeling files for normal operation and commissioning periods.
- A5. Please update the corresponding summary tables in Appendix 5.1B and AFC section 5.1.7.

FUMIGATION ANALYSIS

BACKGROUND

The facility owner used the AERSCREEN model to evaluate combustion turbine impacts under inversion breakup conditions because these are special cases of meteorological conditions. Section 5.1.7.3.1 of the AFC shows that only the annual average case (Case 103 - 100 percent load at 65°F) was modeled.

DATA REQUEST

A6. Please evaluate whether the annual average case (Case 103 - 100 percent load at 65°F) represents worst case fumigation impacts, and provide the assumptions and data. If the annual average case does not represent the worst case, please provide the worst case fumigation impact analysis, including a discussion of the assumptions and data that support the analysis.

CUMULATIVE AIR QUALITY IMPACTS

BACKGROUND

The application does not include a complete cumulative air quality modeling analysis. The cumulative analysis should include all reasonably foreseeable new projects with a potential to emit 5 tons per year or more that are located within a 6-mile radius. This includes all projects that have received construction permits but are not yet operational and those that are either in the permitting process or can be expected to be in permitting in the near future. A complete cumulative impacts analysis should identify all existing and planned stationary sources that affect the baseline conditions and consider them in the modeling effort.

- A7. Please provide a copy of the District's correspondence regarding existing and planned cumulative sources located within six miles of the project site.
- A8. Please provide the list of sources to be considered in the cumulative air quality impact analysis.
- A9. Please provide the cumulative modeling impact analysis, including Stanton Energy Reliability Center (SERC) and other identified new and planned projects within 6 miles of the SERC site.

EMISSION OFFSETS BACKGROUND

The project does not trigger any emission offset requirements of criteria pollutants based on the District's NSR rule and their offset thresholds. However, the Energy Commission generally requires CEQA mitigation for emissions of all nonattainment criteria pollutants and their precursors. Staff's current expectation is that CEQA mitigation for this site would include NOx, VOC, SOx, PM10 and PM2.5.

DATA REQUEST

A10. Please provide the mitigation strategy for all nonattainment criteria pollutants and their precursors to meet the Energy Commission's CEQA mitigation requirements, including NOx, VOC, SOx, PM10 and PM2.5.

BATTERY OPERATION

BACKGROUND

Typical operating mode data are provided in the AFC. However, the AFC does not describe the extent to which operation of the battery component would be integrated with operation of the combustion turbine. This is a new configuration and use of conventional equipment. Staff needs more information on this integration to understand how the battery affects operation of the turbine and associated emissions.

- A11. Please describe how the battery component would be integrated with the combustion turbine operation.
- A12. Please evaluate if the emissions would be affected by the integrated operation and how.
- A13. Please explain how the battery size (capacity and energy) was determined and what factors were considered to reduce facility emissions?
- A14. Please explain whether presence of the battery system eliminates the need for diesel-fueled internal combustion engine equipment such as for an emergency generator or fire pump?

Technical Area:Traffic and Transportation – Thermal PlumeAuthor:Tao Jiang

PLUME VELOCITY MODELING DATA

THERMAL PLUME VERTICAL VELOCITY ANALYSIS

BACKGROUND

South Coast Air Quality Management District (District) issued two incompleteness letters dated December 2, 2016 and February 2, 2017. In applicant's responses to those letters, the emissions estimates and air quality modeling during project operations have been revised. Additional revisions may also be needed to address the District's comments in the completeness letter dated February 24, 2017. The thermal plume vertical velocity analysis may need to be revised if the related turbine operational parameters have been revised.

DATA REQUEST

A15. Please provide the updated thermal plume vertical velocity analysis if the related turbine operational parameters have been revised.

Technical Area:Biological ResourcesAuthors:Ann Crisp, Tia Taylor

BACKGROUND: BIOLOGICAL RECONNAISSANCE AND RARE PLANT SURVEYS TECHNICAL MEMORANDUM

AFC Appendix 5.2B provides the results of biological reconnaissance and rare plant surveys for special status plants, special status wildlife, and nesting birds for the two parcels that would be developed for the Stanton Energy Reliability Center. The survey methods state that the surveys focused on observations of wildlife sign, including burrows, scat, tracks, remains, and other distinguishing indicators. The special status wildlife species list included as Appendix 5.2A lists western burrowing owl (*Athene cunicularia*), a California Species of Special Concern, as having a "not expected to low" potential for occurrence due to lack of suitable habitat. However, the survey report does not provide whether or not any observations of wildlife sign including potential burrows were detected. The western burrowing owl utilizes ground squirrel burrows and other fossorial mammal burrows for nesting during the breeding season and for roosting and cover year round.

DATA REQUEST

A16. For western burrowing owl, provide results of reconnaissance surveys focused on observations of wildlife sign including burrows, scat, tracks, remains, and other distinguishing indicators. Include negative results (e.g. no sign detected) including if there was a lack of burrow surrogates or fossorial mammal dens that could be used by burrowing owl observed in the project area.

BACKGROUND: BIOLOGICAL RECONNAISSANCE AND RARE PLANT SURVEYS ALONG GENERATION TIE LINE

The biological reconnaissance and rare plant surveys conducted for the project did not include the 0.35-mile underground generator tie-line corridor, the 12- or 16-inchdiameter natural gas line along Dale Avenue (spanning either 2.27 miles north or 1.78 miles south), nor the temporary 2.89-acre worker parking area located at the Bethel Romanian Pentecostal Church. The natural gas line alternatives and temporary parking areas are paved and developed. However, the generator tie line route appears to be vegetated based on review of aerial photos.

DATA REQUEST

A17. Provide a description of the land cover/vegetation communities of the generator tie-line route. Include in your description the dominant, co-dominant, and other associated plant species observed for each land cover type/vegetation community. Depending on the plant species identified, rare plant surveys may be required.

TECHNICAL AREA: PROJECT DESCRIPTION

BACKGROUND: Construction and Maintenance of the Generation Tie-Line

In the Electric Transmission section (section 3.0) little information is provided about the 66-kV generation tie-line and how it would be constructed. There is no information

provided about this new generator tie-line, such as how the line would be installed underground (including the depth, width, and amount of cover above the generator tieline to bring the soil to grade). There is also no information about what area(s) may be necessary for construction staging and equipment laydown.

DATA REQUESTS

- A18. Please provide the right-of-way width required for the new generator tie-line (half and full right-of-way). Note any differences in right-of-way width requirements due to terrain or adjacent land uses or structures. Please map the right-of-way on aerials and a series of maps based on USGS 7.5-minute topographic maps enlarged to a scale of 1"=1,000 feet. Please provide the Geographic Information Systems shape files for the right-of-way. Please indicate areas of any new right-of-way versus existing right-of-way.
- A19. Please describe how the generator tie-line would be installed, including the depth of cover provided over the generator tie-line, depth and width of the trench, or buried area, to install the generator tie-line.
- A20. Please provide the amount of temporary and permanent area disturbed for the generator tie-line and show the areas on aerials and also a series of maps based on USGS 7.5-minute topographic maps enlarged to a scale of 1"=1,000 feet for the following list items (a-d). Identify the temporary and permanent impacted areas (size in acres). Please provide the Geographic Information System shape files for the following:
 - a. generator tie-line
 - b. access route for construction (location and length of route)
 - c. construction staging areas (locations and size)
 - d. permanent (including on-going) and temporary vegetation removal (e.g. trees, shrubs, etc.) within and around the right-of-way.

BACKGROUND: NATURAL GAS PIPELINE

The Natural Gas Supply section of the AFC (Section 4) discusses the two alternative proposed 12-inch or 16-inch diameter pipelines, either 2.75 miles north along Dale Avenue to SoCalGas's Transmission Line 1014 in La Palma Avenue or 1.78 miles south along Dale Avenue to SoCalGas's Transmission Line 1019 in Lampson Avenue, that would supply natural gas to the Stanton Energy Reliability Center site. Construction methods and other specifics are provided, such as the width of the trench, depth of pipe burial, and a description of stringing and installation, backfilling, plating, hydrostatic testing, cleanup, and commissioning activities. The 2.75-mile pipeline route north crosses Carbon Creek and is adjacent to the Stanton Storm Channel and the 1.78-mile pipeline route to the south crosses the Union Pacific Railroad (UPRR) and the Anaheim Barber City Channel. There is not a description of construction methods across these areas. Construction would require laydown of equipment and installation (e.g. bending, welding) of pipeline after it has been strung together; all of which would require space to carry out these activities. There is not a clear description of what area would be needed to perform these activities along either pipeline route.

- A21. Please provide the right-of-way width required for the new natural gas pipeline (half and full right-of-way). Note any differences in right-of-way width requirements due to terrain or adjacent land uses or structures. Please map the right-of-way on aerials and a series of maps based on USGS 7.5-minute topographic maps enlarged to a scale of 1"=1,000 feet. Please provide the Geographic Information Systems shape files for the right-of-way. Please indicate areas of any new right-of-way versus existing right-of-way.
- A22. Please provide the location and dimensions of boring and drilling entry and exit points where the pipeline is routed under existing drainages or infrastructure. Please provide construction details if the pipeline will be installed on existing structures such as overpasses or bridges that cross the existing drainages.
- A23. Please provide the amount of temporary and permanent area disturbed for the natural gas pipeline. Show the areas on aerials and also a series of maps based on USGS 7.5-minute topographic maps enlarged to a scale of 1"=1,000 feet for the following list items (a-d). Identify the temporary and permanent impacted areas (acres) and please provide the Geographic Information System shape files for the following:
 - a. natural gas pipeline
 - b. access route for construction (location and what length)
 - c. construction staging areas (locations and size)
 - d. permanent (including on-going) and temporary vegetation removal (e.g. trees, shrubs, etc) within and around the right-of-way.

BACKGROUND

Pursuant to the California Environmental Quality Act (CEQA), the Energy Commission is required to determine a project's potential impact on the environment. In some circumstances, ground disturbance can result in significant adverse effects to cultural resources and, therefore, must be analyzed. The AFC specifies that construction of the Stanton Energy Reliability Center (SERC) would involve a variety of ground-disturbing activities associated with various elements of the proposed project. Those project elements are defined by the applicant as:

- The project site and laydown areas;
- An underground transmission line; and
- A natural gas line.

However, the AFC does not provide sufficient information about the planned ground disturbance associated with the construction of these key project facilities. Previously provided information is as follows:

- Project site: consisting of 2 power blocks and 2 battery storage enclosures, 3.978 acres.
- Transmission line: 0.35 miles long underground.
- Gas pipeline: a 12- or 16- inch diameter pipeline, either 2.75 miles long, north along Dale Avenue to a Southern California Gas line on La Palma Avenue, or 1.78 miles long south along Dale Avenue to a Southern California Gas line on Lampson Avenue.
- Laydown area: 2.89 acres, paved (SERC 2016:1-2).

To identify potential project impacts, staff needs additional information on the various project components.

- A24. Please provide a series of maps (based on USGS 7.5-minute topographic maps enlarged to a scale of 1"=1,000 feet) that include the project site and all the proposed alternative routes of linear facilities. In addition to the project components, please depict the following:
 - a. The boundaries of all project rights of way;
 - b. The proposed project site, confirmation of the maximum dimensions of the ground disturbance associated with construction;
 - c. The proposed transmission line route, and a confirmation of the maximum dimensions of the ground disturbance associated with installation;
 - d. The proposed gas pipeline routes, a confirmation of the maximum dimensions of the ground disturbance associated with pipeline installation, location and

any dimensions of boring and drilling entry and exit points where the pipeline is routed under existing drainages or infrastructure; and,

e. The proposed locations and dimensions of both temporary and permanent access roads that the project would construct, if any.

BACKGROUND

The AFC, Section 5.3-16, Table 5.3-2, denotes previously recorded historic architecture within the Stanton project study area. This summary table indicates that all resources located at the Hobby City retail development (APN 12627106-7 & APN 12628122) have been given a historical resources status code of 6Z, not eligible with the exception of 1238-K South Beach Boulevard Doll and Toy Museum.

The status assigned to Hobby City resources (not eligible) appears to be based on two cultural resource reports included in the Confidential Records Search: "Cultural Resource Assessment Report: The Hobby City Development Project" (Sorrell 2007) and "Historic Architectural Report for the Proposed Development of Hobby City in the Cities of Anaheim and Stanton, Orange County" (Galvin 2006).

The previous cultural resources reports (Sorrell 2006 & Galvin 2007), which determined Hobby City resources are ineligible for listing on the National Register of Historic Places or California Register of Historical Resources (CRHR), were based primarily on age of the structure (less than 50-years, Sorrell 2007: 18). Since the time of the previous evaluations, these resources have turned 50 years old. Pursuant to the California Energy Commission Power Plant Siting Regulations, Appendix B (g)(C) field surveys are required to "identify, inventory, and characterize structures and districts that appear to be older than 45 years or that are exceptionally significant." Based on the outdated information provided in the previous evaluations, it is difficult for staff to determine whether or not the resources at Hobby City are historical resources for the purposes of CEQA (Cal. Code Regs., tit. 14, section 15384(a)(1-4)).

- A25. Please provide an updated evaluation of the Hobby City complex, including an evaluation for each resource previously documented. Evaluation should include:
 - a. DPR523 Update Form for each resource documented in 2006-2007.
 - b. A CRHR evaluation of all resources on the Hobby City parcels, considering all four criteria and all seven aspects of integrity individually and as parts of a potential historic district. Historical research, fieldwork, and related data should be used to support all recommendations.
 - c. If any resources at the Hobby City site are determined to meet the criteria for listing on the CRHR, provide an assessment of impacts to each newly identified historical resource.
 - d. Proposed mitigation measures for any significant impacts to historical resources.

BACKGROUND

The AFC states that the "Barre Substation could not be accessed and remains not evaluated" (SERC 2016, Appendix 5.3B: IX).

In order to determine if a resource is a historical resource for the purposes of CEQA, staff must determine if the resource is eligible for listing on the California Register of Historical Resources (Cal. Code Regs., tit. 14, § 15384). Without more information about the Barre Substation it is difficult for staff to determine its eligibility and assess potential project impacts to it.

A26. DATA REQUESTS

- a. Request permission to access the Barre Substation. Provide copies of all communication (letters, emails, phone logs) with the owner (Southern California Edison) regarding access. Lack of access to a resource must be demonstrated.
- b. Complete DPR 523 form(s) for all resources on the parcel identified as being 45 years or older or of exceptional importance.
- c. A CRHR evaluation of all resources on the Barre Substation site, considering all four criteria and all seven aspects of integrity individually and as parts of a potential historic district. Historical research, fieldwork and related data should be used to support all recommendations.
- d. If any resources at the Barre Substation site are determined to meet the criteria for listing on the CRHR, provide an assessment of impacts to each newly identified historical resource.
- e. Propose mitigation measures for any significant impacts to historical resources.

REFRENCES

Sorrell 2007 – Sorrell, Tanya and Carmack, Shannon "Cultural Resource Assessment Report: The Hobby City Development Project." Prepared by LSA Associates, Inc., for the cities of Stanton and Anaheim, Orange County, California. July 2007

Galvin 2006 - "Historic Architectural Report for the Proposed Development of Hobby City in the Cities of Anaheim and Stanton, Orange County." Galvin Preservation Associates. February 2006

SREC 2016a – Stanton Energy Reliability Center, LLC (TN 214206-2 to 27). Application for Certification Vol.1, dated October 26, 2016. Submitted to CEC/Docket Unit on October 27, 2016

Technical Area: Hazardous Materials Management Author: Brett Fooks

BACKGROUND

Section 5.5.2.3.2 of the AFC states that the aqueous ammonia tank would be a 5,000-gallon vertical aboveground storage tank. However, the material and design of the tank is not described.

DATA REQUEST

A27. Please confirm that the aqueous ammonia tank would conform to the ASME code for Unfired Pressure Vessels, Section VIII, Division 1.

BACKGROUND

The AFC does not include a description of how aqueous ammonia deliveries would be handled at the Stanton project site when there wouldn't normally be operators on site.

DATA REQUEST

A28. Please detail how the aqueous ammonia deliveries would be handled.

Technical Area:	Noise and Vibration
Author:	Christopher Dennis

Background

It is not clear in the Application for Certification (AFC) for Stanton Energy Reliability Center (Stanton) if Stanton's combustion turbine generators (CTGs) would need to operate at night for the purpose of recharging the battery storage system, to spin their generators into the synchronous condenser mode, or for electricity generation. In these instances, Stanton may create potentially significant noise impacts during the operation of the CTGs. Thus, to fully analyze the Stanton's nighttime noise impacts at the nearby residences, staff needs to know the following information.

- A29. Please explain how many CTGs, if any, would be expected to operate between 10 p.m. and 7 a.m. in order to recharge the battery storage system.
- A30. Please explain how many CTGs, if any, would be expected to operate between 10 p.m. and 7 a.m. in order to spin their generators into the synchronous condenser mode.
- A31. Please explain if due to possible changes in the electricity market, or for any other reasons, there may be a need in the future to potentially increase operation of the CTGs between 10 p.m. and 7 a.m. more than "infrequently" as identified in the AFC (AFC § 5.7.3.3.3).

Technical Area: Public Health

Author: Huei-An Chu (Ann), Ph.D.

SENSITIVE RECEPTORS: BACKGROUND

The Application for Certification (AFC) and appendices to the AFC provide some information on how the applicant conducted their health risk assessment in which potential impacts associated with toxic air emissions from the proposed power plant were addressed in (Section 5.9 Public Health). This health risk assessment was prepared using guidelines developed by Office of Environmental Health Hazard Assessment (OEHHA) and California Air Resources Board (ARB), as implemented in the latest version of the HARP2 (Hotspots Analysis and Reporting Program Version 2) model.

In Table 5.9-1 of the AFC, the nearest sensitive receptors by receptor type were listed. In Table 5.1D-7, sensitive receptors in the primary impact area were also listed. However, staff was unable to identify these sensitive receptors from discrete grid receptors. Staff needs the input files which contain the information on grid identification numbers (or receptor numbers) and locations of both sensitive receptors and residential receptors to review, evaluate, and verify the applicant's health risk assessment.

DATA REQUESTS

- A32. Please specify the HARP receptor number for each receptor listed in Table 5.9-1 and Table 4.9-8.
- A33. Please confirm if the "Recp #" in Table 5.1D-7 is identical with the HARP2 receptor number.

BACKGROUND

In responses to South Coast Air Quality Management District (SCAQMD) incompleteness letters dated December 2, 2016 and February 2, 2017, the operating schedule and emissions rates during commissioning and normal operations have been revised. The air quality and health risk assessment (HRA) modeling for both periods have also been revised accordingly. Additional revisions may also be needed to address SCAQMD's additional comments in their February 24, 2017 completeness letter. Staff needs the updated modeling analyses to complete its analysis.

- A34. Please provide the updated health risk assessment (HRA) modeling files for normal operation and commissioning periods.
- A35. Please update Table 5.9-8 SERC HRA Summary if there is any revision.

Technical Area:SocioeconomicsAuthor:Ellen LeFevre and Lisa Worrall

BACKGROUND: Operations workforce

The Socioeconomics section of the Stanton Energy Reliability Center (Stanton) Application for Certification (AFC) states that the facility would not be locally staffed on a daily basis; rather, it would be remotely monitored and/or operated on a continuous basis from a remote operation center (pg. 5-10-15). Routine operations would be conducted by an offsite remote operator, an onsite technician, and/or a combination of the two. Routine maintenance would be conducted by one to three technicians who would be dispatched to the project site as needed for regular preventative maintenance, reliability and compliance operations testing and inspections, or as dispatched by the remote operator located in Sacramento.

- A36. Please clarify (a) whether any new remote offsite operations staff would be hired to monitor/operate the Stanton project and (b) if new staff is hired, how frequently would they work (e.g. full time equivalent, part-time)?
- A37. Please clarify how frequently onsite technician(s) would conduct routine operations at the Stanton facility?

Technical Area: Soil and Water Resources Author: Mike Conway and Abdel-Karim Abulaban

BACKGROUND

The Stanton Reliability Energy Center (Stanton) would be constructed in the city of Stanton, within the permit boundaries of "North Orange County," a Phase I municipal separate storm sewer system (MS4), regulated by the Santa Ana Regional Water Quality Control Board (SARWQCB). The SARWCB adopted the municipal National Pollutant Discharge Elimination System (NPDES) Permit Order No. R8-2009-0030 for the city of Stanton and other member municipalities in the North Orange County area. Priority development and redevelopment projects in the region, which include the Stanton project, are subject to the requirements contained in Orange County's 2011 Model Water Quality Management Plan (Model WQMP).

The purpose of the storm water requirements is to minimize the influence that development projects would have on water quality and regional runoff. This is referred to as Low Impact Development (LID) in the WQMP. A Priority Project can comply by developing a conceptual plan that describes which best management practices (BMPs) could be used to satisfy the requirements. The plan should describe what potential source control, hydromodification control, and treatment controls might be necessary to meet the LID requirements. The selection process is based on how each drainage area in the development handles the 2-year, 24-hour, or equivalent storm.

The Application for Certification (AFC) lacks adequate details about storm flows and site drainage. The AFC also does not include any information on what BMPs would be used to satisfy the local stormwater quality requirements. Staff requires information on the BMPs needed for project compliance with the local requirements to determine whether site design reconfiguration or structural changes to the proposed layout may be required.

- A38. Describe each discrete pre-construction drainage area (as defined by the local requirements listed above) and the volume of discharge expected during the design storm. Also describe the pre-construction time of concentration (TOC) for each drainage.
- A39. Describe each discrete post-construction drainage area (as defined by the local requirements listed above) and the volume of discharge expected during the design storm. Also describe the post-construction TOC for each drainage.
- A40. Describe how the proposed project would meet the Model WQMP postconstruction discharge requirements for volume and TOC, including a description of any source controls, hydromodification controls, or treatment controls that could be utilized to achieve that goal.
- A41. Describe where these controls would be located on the site and discuss whether they would result in a change of the project layout.

Technical Area:Traffic and TransportationAuthor:Ashley Gutierrez

BACKGROUND: Existing Roadway Segment AM/PM LOS Data

AFC Section 5.12.1.2, "Existing Traffic Conditions and Level of Service Analysis," provides a discussion of the Stanton project's traffic analysis data collection and the methodologies used. The AFC states annual average daily traffic (AADT) data for 2014 were obtained from Caltrans Traffic Data Branch for I-5, I-405, SR 22 and Beach Boulevard; and average daily traffic (ADT) data were obtained from the Orange County Transportation Authority for the local study roadways.

AFC Table 5.12-5, "Existing (2015) Intersection LOS Summary", provides AM and PM peak hour intersection capacity utilization (ICU) and level of service (LOS) data for intersections along Beach Boulevard. The primary site entrance (Parcel 1) and the proposed parking area at the Bethel Romanian Pentecostal Church is located along Dale Avenue. Construction worker vehicles and delivery/haul trucks would primarily use the Dale Avenue entrance to access the site.

Staff's analysis requires LOS data for all potentially affected roadway intersections, including Dale Avenue and Katella Avenue, and Dale Avenue and West Cerritos Avenue. Furthermore, the AFC did not provide a table for existing intersection LOS summary plus project construction trips.

- A42. Please explain how AADT was converted to ADT and provide data calculations.
- A43. Please provide an appendix of traffic calculations for the Traffic and Transportation AFC section.
- A44. Please provide an updated, "Existing (2015) Intersection LOS Summary" table. In this table include the type of control (e.g. signal, stop sign), AM and PM peak LOS and ICU for all intersections. In addition, include the intersections of Dale Avenue and Katella Avenue and Dale Avenue and West Cerritos Avenue.
- A45. Please provide a table labeled, "Existing (2015) Intersection LOS Summary Plus Project Construction". In this table include the type of control (e.g. signal, stop sign), AM and PM peak ICU and LOS for all intersections and include construction traffic. Include the intersections of Dale Avenue and Katella Avenue and Dale Avenue and West Cerritos Avenue.

BACKGROUND: Heavy Haul Route

AFC Section 5.12.1.3, "Truck Routes- Weight and Load Limitations," states large and heavy components (e.g. CTGs, components of the HRSGs, transformers, and other oversized and heavy components) will be transported to the site by truck.

DATA REQUEST

A46. Please provide a detailed heavy haul route indicating the point of origin, truck route, and the project entrance (Parcel 1- Dale Avenue or Parcel 2- Fern Avenue and Pacific Street) to be used for oversized project components.

BACKGROUND: Fern Avenue (Parcel 2) Entrance

AFC Section 5.12.1.3, "Truck Routes- Weight and Load Limitations", Section 5.12.2.3 "Transport of Hazardous Materials," and Section 5.12.2.6, "Emergency Vehicle Access," identifies Fern Avenue (Parcel 2) as a secondary entrance to the Stanton project site. Trucks utilizing West Cerritos Avenue (eastbound) will turn right (southbound) on to either Fern Avenue or Dale Avenue. Trucks utilizing Fern Avenue will enter Parcel 2 at the intersection of Fern Avenue and Pacific Street.

Staff would like more information about the utility bridge that would link Parcel 1 and Parcel 2 for construction worker onsite circulation.

DATA REQUESTS

- A47. Please provide a detailed discussion of the oversized/heavy components and hazardous materials deliveries that would require the use of the Parcel 2 entrance.
- A48. Please provide design specifications of the utility bridge including, dimensions, weight capability (ability to support vehicles), and bridge purpose (e.g. infrastructure support, worker pedestrian, vehicle access).
- A49. Please provide a construction schedule for the utility bridge.

BACKGROUND: Construction Traffic Generation

AFC Section 5.12.2.1.2, "Construction Traffic Generation", Construction Trip Generation Table 5.12-6 includes a row "Workers (1.5 passengers/car)". Staff is unsure if the applicant is referring to Passenger Car Equivalent (PCE) or the 16 percent carpool estimate.

DATA REQUEST

A50. Please provide clarification for the "Workers (1.5 passengers/car)" row in Table 5.12-14.

BACKGROUND: FAA determination and Orange County Airport Land Use Commission Notification

AFC Section, 5.12.2.5 "Air Traffic", states that Stanton will notify the Airport Land Use Commission (ALUC) for Orange County of the proposed project and provide findings of the FAA Determination.

- A51. Please provide a copy of the submitted FAA Form 7460-1, as well as the FAA's Determination prior to staff's publication of the Preliminary Staff Assessment.
- A52. Please submit the Stanton project notification letter sent to the ALUC and the ALUC's response prior to staff's publication of the Preliminary Staff Assessment.

Technical Area: Worker Safety and Fire Protection Author: Brett Fooks

BACKGROUND

Section 2.1.7 of the AFC states that the fuel gas compressor would be located outdoors and would be housed in an acoustical enclosure to reduce the compressor noise level. Staff needs to have more information on the construction of the acoustical enclosure to determine whether or not an explosion risk would exist.

DATA REQUESTS

- A53. Please describe the materials and design of the gas compressor's acoustical enclosure, including any gas shutoff and fire protection provisions.
- A54. Please include any currently available preliminary drawings for the acoustical enclosure.

BACKGROUND

Section 2.2.2.2, Table 2.2-1 Major Equipment Redundancy, lists the number of fire protection main connections as two.

DATA REQUESTS

- A55. Please provide a written narrative clarifying if the Stanton facility would have two fire protection main connections to the same municipal supply provided by the Golden State Water Company.
- A56. Please provide a site plan indicating where each connection to the Golden State Water Company would be located and where the connections would feed into the project's fire protection loop.
- A57. Please provide a written narrative demonstrating that the Golden State Water Company's supply pressure to the fire protection loop would be adequate for the site's fire protection needs without the addition of an on-site fire pump.

BACKGROUND

Section 5.16.2.3.2 of the AFC provides a sufficient sample list of the operational health and safety programs that the Stanton project would follow. However, staff does not understand how the training would happen in practice given that the site would be normally unmanned.

- A58. Please provide a written narrative clarifying how all of the operation and safety programs would be administered and to whom the site specific training would be given.
- A59. Please provide a narrative explaining where the site-specific Safety Data Sheets would be kept on site.

A60. Please provide a written narrative detailing how the Lock Out/Tag Out program would be administered on site given that there does not appear to be a control room or central command location on site.

BACKGROUND

Section 5.16.2.4 of the AFC states that the Stanton project site would be in compliance with the current California Fire Code. Section 2.1.13 of the AFC lists the fire protection requirements for the equipment planned for the project site. However, neither section details the fire protection requirements for the lithium-ion battery storage installation.

- A61. Please provide a written narrative detailing what fire protection and life safety systems would be provided for the lithium-ion battery installations.
- A62. Please provide a written narrative of the general procedures and life safety measures that would be provided to help prevent and control any incipient fires in the lithium-ion battery installation.

Technical Area: Transmission System Engineering Author: Sudath Edirisuriya and Mark Hesters

INTRODUCTION

Staff needs to determine the system reliability impacts of the project interconnection and to identify the interconnection facilities including downstream facilities needed to support the reliable interconnection of the proposed Stanton Energy Reliability Center (Stanton). The interconnection must comply with the Utility Reliability and Planning Criteria. North American Electric Reliability Council (NERC) Planning Standards, NERC/Western Electricity Coordinating Council (WECC) Planning Standards, and California Independent System Operator (California ISO) Planning Standards. In addition, the California Environmental Quality Act (CEQA) requires the identification and description of the "Direct and indirect significant effects of the project on the environment." For the compliance with planning and reliability standards and the identification of indirect or downstream transmission impacts, staff relies on the California ISO or the interconnecting utility Phase I or Phase II Interconnection Study Reports as well as review of these studies by the agencies responsible for insuring the adjacent interconnecting grid meets reliability standards; in this case, Southern California Edison Company (SCE) and/or California ISO. The studies analyze the effect of the proposed project on the ability of the transmission and distribution network to meet reliability standards. When the studies determine that the project will cause the transmission to violate reliability requirements the potential mitigation or upgrades required to bring the system into compliance are identified. The mitigation measures often include modification and construction of downstream transmission and distribution facilities. CEQA requires environmental analysis of any downstream facilities for potential indirect impacts of the proposed project.

BACKGROUND

Staff requires the Queue Cluster 7 Phase II Interconnection Study Reports to identify potential downstream Transmission/Distribution facilities that may be required due to interconnection of the Stanton project to the California ISO grid and to determine whether the interconnection would comply with the NERC/WSCC and /or Utility planning standards and reliability criteria.

DATA REQUESTS

A63. Provide a complete Queue Cluster 7 Phase II report that includes study of the 10-MW battery storage. The distribution analysis part of the report should be coordinated with SCE and approved by the California ISO for interconnection of nominal output of a 98 MW generation plant. The study should include a distribution analysis of the SCE system with the proposed project and a mitigation plan for any identified sub-transmission and distribution reliability criteria violations. Also, identify the reliability and planning criteria utilized to determine the reliability criteria violations.