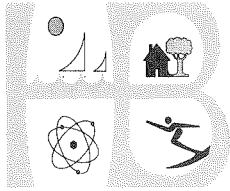


DOCKETED

Docket Number:	12-AFC-02
Project Title:	Huntington Beach Energy Project
TN #:	201173
Document Title:	City of Huntington Beach, Department of Planning and Building Comments on PSA Part A
Description:	PSA Part A comments
Filer:	Aaron Klemm
Organization:	City of Huntington Beach
Submitter Role:	Public Agency
Submission Date:	11/13/2013 10:48:04 AM
Docketed Date:	11/13/2013



City of Huntington Beach

2000 MAIN STREET

CALIFORNIA 92648

DEPARTMENT OF PLANNING AND BUILDING

www.huntingtonbeachca.gov

Planning Division

714.536.5271

Building Division

714.536.5241

November 12, 2013

Ms. Felicia Miller
California Energy Commission
Siting Project Manager
1516 Ninth Street,
Sacramento, CA 95814

**SUBJECT: CITY OF HUNTINGTON BEACH COMMENTS REGARDING
HUNTINGTON BEACH ENERGY PROJECT
PRELIMINARY STAFF ASSESSMENT – PART A
DOCKET NO. 12-AFC-02**

Dear Ms Miller:

Thank you for the opportunity to comment on the Preliminary Staff Assessment – Part A (PSA) for the proposed Huntington Beach Energy Project located within the City of Huntington Beach. The PSA was prepared by the California Energy Commission staff and docketed on October 10, 2013. The proposed project is a request to replace the existing AES power generating station with a natural gas-fired, combined cycle, air-cooled, 939-megawatt (MW) electrical generating facility on the 28.6 acre facility. HBEP would consist of two independently operating, three-on-one, combined-cycle gas turbine power blocks. Each power block will consist of three natural gas-fired combustion turbine generators, three supplemental fired heat recovery steam generators, one steam turbine generator, an air-cooled condenser, and related ancillary equipment.

The City of Huntington Beach comments on the PSA – Part A are as follows:

Executive Summary:

1. Page 1-2, first paragraph: The project area is described as industrial area. While the power plant itself is an industrial type use, a more accurate description of the area would be to describe the subject site land use as Public (General Plan) or Public-Semipublic (zoning). Land uses allowed in these categories are cultural institutions, government offices, hospitals, park and recreation facilities, public safety facilities, religious assembly, major and minor utilities, etc.
2. Page 1-9, Land Use: A statement is made that a variance to exceed maximum height requires specific findings regarding preservation and enhancement of public visual resources. Those findings are applicable only to a request to exceed the 50 ft. maximum

height limit for chimneys, vent pipes, cooling towers, flagpoles, water tanks, etc. The Executive Summary should also include the other findings required for variances as listed in the Huntington Beach Zoning and Subdivision Ordinance. The Land Use section of the PSA lists the accurate variance findings.

Introduction:

1. Page 2-4, Agency Coordination: The City of Huntington Beach maintains and operates its own Fire Department. The Huntington Beach Fire Department should not be listed as a separate agency.

Project Description:

1. Page 3-5, Noteworthy Public Benefits: The PSA concludes that the siting of the HBEP on the existing site ensures that no new site is converted to industrial use or Public Semi-public use. However, it is possible that the power plant could be constructed on existing industrial or public designated property elsewhere. Therefore it cannot be concluded that this project ensures no new site is converted. This section also states that the design of the HBEP is a smaller footprint than the existing HBGS. Without a detailed dimensioned site plan, the City cannot confirm this statement. The additional power block proposed on the east side of the facility appears to result in a larger footprint than the current facility.

Biological Resources:

1. Page 4.2-40 Lighting: This section should be more specific in describing potential 24 hour construction periods as pertaining to necessary steam blow commissioning and continuous concrete pours only. No other construction activity should be permitted beyond normal construction hours identified in the Noise section.

Land Use:

1. The Land Use section should include a discussion on the proposed off-site temporary construction worker parking locations. Each location within the Coastal Zone requires approval of a Coastal Development Permit according to the City's Local Coastal Program to utilize the site as temporary parking. Each location must also be improved in accordance with the temporary parking lot development standards (paving, dust control measures, temporary landscaping, etc.) described in Huntington Beach Zoning and Subdivision Ordinance Section 231.18 F. Loss of beach parking may require replacement or alternative means to provide access to beach open space resources.
2. City staff appreciates the PSA discussion of compliance with applicable development standards within the PS zone and CZ overlay district. There are numerous other development standards from the Huntington Beach Zoning and Subdivision Ordinance that also apply to the proposed project. These other development standards include but are not limited to, landscaping locations and percentage of site landscaping, parking stall sizes, back-up areas, and required number of parking spaces, bicycle parking, circulation patterns,

driveway widths, buffers to adjacent wetlands, relationship of improvements to property lines, and wall and fence height and locations.

Noise:

1. The City appreciates the recommended Noise Conditions to protect our residents and sensitive receptors from construction and operational noise. However, Noise-6 seems to limit only “heavy equipment operation and noisy construction work,” to restricted hours. All construction work should be limited to comply with local LORS in this regard. Since AES anticipates the need for occasional nighttime activity due to critical construction needs (concrete pours), mitigation measures should be strengthened to reduce potential impacts to sensitive receptors to the maximum extent feasible. Mitigation measures should strictly limit nighttime activity, no construction staging, warm-up activity, arrival of construction workers on-site, or queuing outside the facility should begin before 7:00 AM. These limitations should also apply to any proposed parking facilities adjacent to residential.

Visual Resources

1. Page 4.12-30, first paragraph: The proposed Poseidon Seawater Desalination Project is not a City proposed project and should not be identified as such. The desalination plant is a project proposed by a private desalination company on a property within the city boundaries.
2. Page 4.12-45, VIS-1: The proposed parking lot screen fencing should be a maximum height of six feet, should meet corner visibility requirements (25 ft. by 25 ft. corner visibility triangle), and should not be composed of chain link alone.

Worker Safety and Fire Protection:

1. Page 4.14-13, Compliance with LORS: Currently, the Fire Department Access to the project does not comply with LORS. Figure 2-1.1 shows the proposed Fire Access Road which currently does not comply with the access road requirements identified below. To comply with the turnaround requirements in City Specification #401, a looped 26 foot wide Fire Department Access Road is required around Power Block 1 (please see HBFD marked up Figure 2-1.1 attached). All portions of the fire access road are required to meet the turning radius, width, and signage requirements indicated in the attached Fire Department Code Requirements. The Fire Access Road is required to extend within 150 feet of all portions of the first floor of any proposed structures as per Section 503 of the California Fire Code and Section 503 of the Huntington Beach Fire Code.

Thank you for the opportunity to review and provide these initial staff comments on this important project in the City of Huntington Beach. We are committed to participating in the CEC processing of the application to ensure a high quality outcome for the citizens of Huntington Beach. Please do not hesitate to contact Aaron Klemm at 714- 536-5537 or Jane James at 714-536-5596 if you have any questions or need any additional information.

Sincerely,



Aaron Klemm
City Manager's Office
Energy Project Manager



Jane James
Planning and Building Department
Planning Manager

Attachment: Fire Department Code Requirements dated November 7, 2013

cc: Fred Wilson, City Manager
Ken Domer, Deputy City Manager
Scott Hess, Director of Planning and Building
Bill Reardon, Fire Battalion Chief
Joe Morelli, Fire Protection Analyst
Debbie DeBow, Principal Civil Engineer
Steve Bogart, Senior Civil Engineer
Darren Sam, Transportation Division
Mark Carnahan, Permit and Plan Check Manager
Tom Donnelly, Police Lieutenant
Dave Dominguez, Facilities, Development & Concessions Manager



HUNTINGTON BEACH FIRE DEPARTMENT

PROJECT IMPLEMENTATION CODE REQUIREMENTS

DATE: November 7, 2013

PROJECT NAME: AES HUNTINGTON BEACH ENERGY PROJECT (HBEP)

PLANNING APPLICATION NO. 2012-0152

ENTITLEMENTS: APPLICATION FOR CERTIFICATION (12-AFC-02)

DATE OF PLANS: OCTOBER 2013

PROJECT LOCATION: 21730 NEWLAND STREET

PLAN REVIEWER: JOE MORELLI; FIRE PROTECTION ANALYST

TELEPHONE/E-MAIL: 714-536-5531

PROJECT DESCRIPTION: To replace the existing AES power generating station with a natural gas-fired, combined cycle, air-cooled, 939-megawatt (MW) electrical generating facility on the 28.6 acre facility. HBEP would consist of two independently operating, three-on-one, combined-cycle gas turbine power blocks. Each power block will consist of three natural gas-fired combustion turbine generators, three supplemental fired heat recovery steam generators, one steam turbine generator, an air-cooled condenser, and related ancillary equipment.

The following is a list of code requirements deemed applicable to the proposed project based on plans stated above. This list of code requirements is not an all inclusive but is intended to assist the applicant by identifying the most common requirements which must be satisfied during the various stages of project permitting and implementation. If you have any questions regarding these requirements, please contact the Plan Reviewer.

PRIOR TO DEMOLITION, GRADING, SITE DEVELOPMENT, ISSUANCE OF GRADING PERMITS, BUILDING PERMITS, AND/OR CONSTRUCTION, THE FOLLOWING SHALL BE REQUIRED:

As indicated on page 4.14-13 of the document titled "Huntington Beach Energy Project Preliminary Staff Assessment - Part A", the HBFD provided comments identifying which specific requirements (City of Huntington Beach Municipal, Fire Code, and City Specifications) would apply to the specific project.

The HBFD acknowledges and appreciates the following response (on page 4.14-13 of the document titled "Huntington Beach Energy Project Preliminary Staff Assessment - Part A") to the previously provided Huntington Beach Fire Department (HBFD) comments:

“Response: Staff agrees and notes that the project would be built to comply with all local laws, ordinances, regulations, and standards (LORS). Notations to the local LORS have been added to the LORS table (**Worker Safety and Fire Protection Table 1**) in this staff assessment.”

This document, HBFD Project Implementation Code Requirements (dated 11-7-13), is provided to re-iterate the previously provided specific requirements mentioned above.

Currently, the Fire Department Access to the project does not comply with the local laws, ordinances, regulations, and standards (LORS). Figure 2-1.1 shows the proposed Fire Access Road which currently does not comply with the access road requirements identified below. To comply with the turnaround requirements in City Specification #401, a looped 26' wide Fire Department Access Road is required around Power Block 1 (please see HBFD marked up Figure 2-1.1 attached). All portions of the fire access road are required to meet the turning radius, width, and signage requirements indicated below. The Fire Access Road is required to extend within 150' of all portions of the first floor of any proposed structures as per Section 503 of the California Fire Code and Section 503 of the Huntington Beach Fire Code.

Applicable Codes: Compliance with the following is required:

- N.F.P.A. Standards, including but not limited to N.F.P.A. 850 Recommended Practice for Fire Protection for Electric Generating Plants and High Voltage Direct Current Converter Stations.
- 2010 California Fire Code and referenced standards (i.e. NFPA 13, NFPA 24 and NFPA 72 [currently adopted editions], etc.)
- Huntington Beach Municipal Code Chapter 17.56 (Huntington Beach Fire Code)
- 2011 Huntington Beach Fire Code
- Huntington Beach Fire Department City Specifications 401, 403, 407, 409, 410, 415, 418, 420, 421, 422, 423, 424, 425, 427, 428, 429, 431-92, and 434.

Fire Protection Consultant: A Fire Protection Consultant qualified to design and prepare Fire Protection plans for power plants, shall submit plans to the H.B.F.D. showing compliance with the above codes and the requirements below.

Inspections: Inspections shall be coordinated with the Huntington Beach Fire Department, and inspection approval obtained by the H.B.F.D., to verify compliance with the approved plans and requirements contained within these Project Implementation Code Requirements and the aforementioned applicable codes.

Fire Apparatus Access

Fire Access Roads shall be provided and maintained in compliance with City Specification # 401, *Minimum Standards for Fire Apparatus Access*. Driving area shall be capable of supporting a fire apparatus (75,000 lbs and 12,000 lb point load). Fire access roads fronting commercial

buildings shall be a minimum width of twenty-six feet (26') wide, with thirteen feet six inches (13' 6") vertical clearance. For Fire Department approval, reference and demonstrate compliance with City Specification # 401 *Minimum Standards for Fire Apparatus Access* on the plans. (FD)

Fire Access Road Turns and Corners shall be designed with a minimum inner radius of seventeen feet (17') and a minimum outer radius of forty five feet (45') per City Specification # 401 *Minimum Standards for Fire Apparatus Access*. For Fire Department approval, reference and demonstrate compliance with City Specification # 401 *Minimum Standards for Fire Apparatus Access* on the plans. (FD)

No Parking shall be allowed in the designated 24 foot wide fire apparatus access road or supplemental fire access per City Specification # 415. For Fire Department approval, reference and demonstrate compliance with City Specification # 415 *Minimum Standards for Fire Apparatus Access* on the plans. (FD)

Fire Lanes, as determined by the Fire Department, shall be posted, marked, and maintained per City Specification #415, *Fire Lanes Signage and Markings on Private, Residential, Commercial and Industrial Properties*. The site plan shall clearly identify all red fire lane curbs, both in location and length of run. The location of fire lane signs shall be depicted. No parking shall be allowed in the designated 24 foot wide fire apparatus access road or supplemental fire access per City Specification # 415. For Fire Department approval, reference and demonstrate compliance with City Specification # 401 *Minimum Standards for Fire Apparatus Access* on the plans. (FD)

Secured Vehicle Entries shall utilize KNOX® activated access switches (Knox switches for automated gates, Knox padlocks for manual gates), and comply with City Specification #403, *Fire Access for Pedestrian or Vehicular Security Gates & Buildings*. Reference compliance in the plan notes. (FD)

Hazardous Materials

- a. **Flammable or Hazardous Materials Storage.** The storage of hazardous materials requires disclosure. Quantities of flammable liquids and other chemicals may be regulated by the Fire Code. Contact the Huntington Beach Fire Department Hazardous Materials Division (714-536-5676) regarding:

- Disclosure of on-site chemicals. Detail volume and types of materials.
- Compliance with HBFD Fire Code Chapter 27 – Hazardous Materials.
- Compliance with HBFD Fire Code Chapter 6 – Stationary Lead-Acid Battery Systems.
- Request information for the proper NFPA 704 signage and postage requirements.

For Fire Department approval, reference compliance with the following in the plan notes:

- Disclosure of on-site chemicals,
- HBFD Fire Code Chapter 27 – *Hazardous Materials*,

- NFPA 704 signage and postage requirements,
- HBFD Fire Code Chapter 6 – *Stationary Lead-Acid Battery Systems*.
(FD)

Environmental

Environmental

- a. ***Methane Mitigation District Requirements.*** The proposed construction is within the City of Huntington Beach Methane Mitigation District and compliance with City Specification 429 is required. Soil gas testing for methane gas is required. A methane sample plan shall be submitted to the fire department for review and approval, prior to the commencement of sampling.

If methane gas is discovered in the soil, the following City Specification would be applicable and the grading, building, and methane plans must reference that a sub-slab methane barrier and vent system will be installed per City Specification # 429, *Methane District Building Permit Requirements* prior to plan approval. Additional methane mitigation measures may be required by the fire department.

Methane safety measures per *City Specification # 429, Methane District Building Permit Requirements* shall be detailed on a separate sheet titled "METHANE PLAN" and three copies submitted to the Fire Department for approval. (FD)

- b. ***City Specification # 431-92 Soil Clean-Up Standards testing is required.*** Based on site characteristics, suspected soil contamination, proximity to a producing/abandoned oil well, or Phase I, II, or III Site Audit, soil testing conforming to City Specification # 431-92 Soil Clean-Up Standards is required.

All soils shall conform to City Specification # 431-92 Soil Clean-Up Standards prior to the issuance of a building permit. Building plans shall reference that "All soils shall conform to City Specification # 431-92 Soil Clean-Up Standards" in the plan notes.

Note: Grading Plans must be approved by the Fire Department prior to issuance of a Public Works grading permit. Standard Fire Department notes are required to be on the plans on oil industry impacted sites.

Soil testing results must be submitted, and approved by the Fire Department prior to issuance of a building permit. (FD)

- c. ***"Remediation Action Plan"*** If contamination is identified, provide a Fire Department approved Remediation Action Plan (RAP) based on requirements found in Huntington

Beach City Specification #431-92, Soil Cleanup Standard. Upon remediation action plan approval, a rough grading permit may be issued. (FD)

- d. **Discovery of soil contamination/pipelines**, etc., must be reported to the Fire **THE FOLLOWING CONDITIONS SHALL BE COMPLETED PRIOR TO ISSUANCE OF A BUILDING PERMIT:**
- e. **CURRENT or FORMER GAS STATION OR UST SITE (Underground Storage Tanks)**. Based on site characteristics, suspected soil contamination, hydraulic hoists, or proximity to former gas station, or underground storage tanks, the following is required:

“Soil Testing”.

- A soil testing plan conforming to *City Specification #431-92 Soil Clean-Up Standards* shall be submitted and approved by the Fire Department.
- All soils shall conform to *City Specification #431-92 Soil Clean-Up Standards*, and testing results must be submitted, and approved by the Fire Department prior to issuance of a grading or building permit.
- Reference that all soils shall be in compliance with *City Specification #431-92 Soil Clean-Up Standards* in the plan notes. (FD)

“Remediation Action Plan” If contamination is identified, provide a Fire Department approved Remediation Action Plan (RAP) based on requirements found in Huntington Beach *City Specification #431-92, Soil Cleanup Standard*. Upon remediation action plan approval, a rough grading permit may be issued. (FD)

- f. **Proof of OCHCA Site Closure or Corrective Action Plan.** Removal of flammable or combustible liquid underground storage tanks (UST) requires the applicant to submit one of the following to the Huntington Beach Fire Department:
- i. An approved Orange County Health Care Agency UST **Site Closure Letter**, or
 - ii. Provide an Orange County Health Care Agency UST **Corrective Action Plan** and written permission for co-existence.

If OCHCA requires on-going remediation and co-existence with the proposed development is permissible, a copy of the approved Orange County Health Care Agency plan and written permission for co-existence must be submitted in order to obtain Huntington Beach Fire Department approval. Each site will be evaluated on an individual basis.

Prior to building construction, all soils shall conform to *City Specification #431-92 Soil Clean-Up Standards*, and testing results must be submitted, and approved by the Fire Department prior to issuance of a grading permit. **(FD)**

- g. ***Proof of South Coast Regional Water Quality Control Board Site Closure or Corrective Action Plan.*** Removal of flammable or combustible liquid underground storage tanks (UST) requires the applicant to submit one of the following to the Huntington Beach Fire Department:
- a. An approved South Coast Regional Water Quality Control Board UST ***Site Closure Letter***, or
 - b. Provide a South Coast Regional Water Quality Control Board UST ***Corrective Action Plan*** and written permission for co-existence.

If SCRWQCB requires on-going remediation and co-existence with the proposed development is permissible, a copy of the approved SCRWQCB plan and written permission for co-existence must be submitted in order to obtain Huntington Beach Fire Department approval. Each site will be evaluated on an individual basis.

California Regional Water Quality Control Board – Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3348
Phone: (951) 782-4497
FAX: (951) 781-6288

(FD)

Conformance to City Specifications **DOES NOT** relieve the developer's responsibility regarding other concerned agency notification and/or approval (South Coast Regional Water Quality Control Board, South Coast Air Quality Management District, Department of Toxic Substance Control, County of Orange Health Care Agency, etc.).

SITE DEVELOPMENT

Fire Hydrants and Water Systems

Fire Hydrants are required. Hydrants must be portrayed on the site plan. Hydrants shall be installed and in service **before** combustible construction begins. Installation of hydrants and service mains shall meet NFPA 13 and 24, Huntington Beach Fire Code Appendix B and C, and City Specification # 407 Fire Hydrant Installation Standards requirements. Maximum allowed velocity of fire flow in supply piping is 12 fps. Plans shall be submitted to Public Works and approved by the Public Works and Fire Departments. For Fire Department approval, portray the fire hydrants and reference compliance with NFPA 13 and 24, Huntington Beach Fire Code Appendix B and C, and City Specification #407 Fire Hydrant Installation Standards in the plan notes. **(FD)**

Private Fire Service Piping (FSP) Application for permit shall be made for private on-site Fire Service Piping (FSP), including but not limited to, private fire service mains and underground sprinkler laterals. Maximum allowed velocity of fire flow in supply piping is 12 fps. Additionally, application for permit shall be made for fire protections systems (sprinklers, alarms, chemical, fire pumps, etc.) as applicable.

Permits may be obtained at the City of Huntington Beach Department Fire Department by completing a Fire Permit Form (available at Fire Administration) and submitting such plans and specifications as required by the bureau of fire prevention. A permit constitutes permission to begin work in accordance with approved plans and specifications. The permit fee includes plan checking and inspections by an authorized fire prevention inspector. Development reviews/approvals by the bureau of fire prevention during planning do not constitute approval to perform FSP or fire protection system work, unless otherwise noted. **(FD)**

Private Fire Service Connection to the Public Water Supply - Separate plans shall be submitted to the Public Works Department detailing the connection, piping, valves and back-flow prevention assembly (DDCA) for approval and permits. Approval by Public Works and the Fire Department must be completed prior to issuance of a grading permit. The dedicated private fire water service off-site improvements shall be shown on a precise grading plan, prepared by a Licensed Civil Engineer. **(FD)**

Fire Protection Systems

Fire Alarms

Fire Alarm System is required per the California Fire Code. For Fire Department approval, shop drawings shall be submitted to the Fire Department as separate plans for permits and approval. For Fire Department approval, reference and demonstrate compliance with the California Fire Code and referenced standards. A C-10 electrical contractor, certified in fire alarm systems, must certify the system is operational annually. **(FD)**

Fire Sprinklers

Automatic Fire Sprinklers and Special Extinguishing Systems are required in accordance with NFPA13, the California Fire Code (and referenced Standards), N.F.P.A. 850, and other applicable codes..

Separate plans (two sets) shall be submitted to the Fire Department for permits and approval. The system shall provide water flow, tamper and trouble alarms, manual pull stations, interior and exterior horns and strobes, 24-hour central station monitoring, and other components deemed necessary for fire and life safety.

Automatic fire sprinkler systems and Special Extinguishing Systems must be maintained operational at all times, with maintenance inspections performed in accordance with the California Fire Code (and referenced standards) and other applicable codes.

NOTE: When buildings under construction are more than one (1) story in height and required to have automatic fire sprinklers, the fire sprinkler system shall be installed and operational to protect all floors lower than the floor currently under construction. Fire sprinkler systems for the current floor under construction shall be installed, in-service, inspected and approved prior to beginning construction on the next floor above. **(FD)**

Annual and Five Year Certification. Automatic fire sprinkler systems must be maintained operational at all times, with Inspection, Testing, and Maintenance performed in accordance with the California Fire Code, NFPA 25, and other applicable codes.

Class 1 Standpipes (2 ½" NFH connections) are required at each stairway. The standpipe system in stairwells cannot protrude into, impede, or compromise the H.B.B.C. "Exit Width" requirements. For Fire Department approval, reference and portray Class 1 standpipes at each stairway in the plan notes. **(FD)**

Fire Sprinkler Supply

Fire Department Connections (FDC) to the automatic fire sprinkler systems shall be located to the front of the building, at least 25 feet from and no farther than 150 feet of a properly rated fire hydrant. **(FD)**

NFPA 13 Commercial Fire Sprinkler Systems Supply shall be from a dedicated fire water service installed per Fire Department, Public Works, and Water Division Standards. The dedicated fire water service connection shall be a minimum of four inches (4") in size. Depending on fire sprinkler system demands, larger water service may be required. Separate plans shall be submitted to the Public Works Department for approval and permits, and must be completed prior to issuance of a grading permit. The dedicated fire water service off-site improvements shall be shown on a precise grading plan, prepared by a Licensed Civil Engineer. Contact Huntington Beach Public Works Department (714-536-5431) for offsite water improvement requirements. **(FD)**

Fire Sprinkler Underground

On-Site Fire Service Piping (FSP) Application for permit shall be made for on-site Fire Service Piping (FSP), including but not limited to, private fire service mains and underground sprinkler laterals. Maximum allowed velocity of fire flow in supply piping is 12 fps. Additionally, application for permit shall be made for fire protections systems (sprinklers, alarms, chemical, fire pumps, etc.) as applicable.

Permits may be obtained at the City of Huntington Beach Department Fire Department by completing a Fire Permit Form (available at Fire Administration) and submitting such

plans and specifications as required by the bureau of fire prevention. A permit constitutes permission to begin work in accordance with approved plans and specifications. The permit fee includes plan checking and inspections by an authorized fire prevention inspector. Development reviews/approvals by the bureau of fire prevention during planning do not constitute approval to perform FSP or fire protection system work, unless otherwise noted. **(FD)**

Connection to the Public Water Supply - Separate plans shall be submitted to the Public Works Department detailing the connection, piping, valves and back-flow prevention assembly (DDCA) for approval and permits. Approval by Public Works and the Fire Department must be completed prior to issuance of a grading permit. The dedicated private fire water service off-site improvements shall be shown on a precise grading plan, prepared by a Licensed Civil Engineer. **(FD)**

Fire Protection Systems

Fire Extinguishers shall be installed and located in all areas to comply with Huntington Beach Fire Code standards found in *City Specification #424*. The minimum required dry chemical fire extinguisher size is 2A 10BC and shall be installed within 75 feet travel distance to all portions of the building. Extinguishers are required to be serviced or replaced annually. **(FD)**

Fire Master Plan: Provide a Fire Master Plan showing the location of the following:

1. Buildings
2. Hydrants (public and private) and FDC's (and actual travel distance for a person between)
3. DCDA's and Sprinkler Risers
4. Horizontal Exits and other exits
5. Standpipe Hose Connections (with dimensions shown)
6. All Fire Protection Systems (reflect what areas each serves)
7. FACP (Fire Alarm Control Panel)
8. Knox box and key switches
9. Electrical Rooms
10. Elevator Machine Rooms
11. Gate locations
12. Fire lane dimensions, lengths, signage and striping, turning radii at corners and turn-arounds.
13. Fire Department Access paths (for hose pulls and access in and around building) called out
14. Stair locations, and floors served called out
15. Fire Extinguishers
16. Any hazardous materials
17. Fire Lane Signage (no parking), red curbing, any proposed Fire Lane Striping, etc.

Addressing and Street Names

Structure or Building Address Assignments. The Planning Department shall review and make address assignments. The individual dwelling units shall be identified with numbers per City Specification # 409 Street Naming and Address Assignment Process. For Fire Department approval, reference compliance with City Specification #409 Street Naming and Address Assignment Process in the plan notes. **(FD)**

Commercial Building Address Numbers shall be installed to comply with City Specification #428, Premise Identification. Building address number sets are required on front and rear of the structure and shall be a minimum of six inches (6") high with one and one half inch (1 ½") brush stroke. Note: Units shall be identified with numbers per City Specification # 409 Street Naming and Address Assignment Process. Unit address numbers shall be a minimum of four inches (4") affixed to the units front and rear door. All address numbers are to be in a contrasting color. For Fire Department approval, reference compliance with City Specification #428 Premise Identification in the plan notes and portray the address location on the building. **(FD)**

GIS Mapping Information

- a. **GIS Mapping Information** shall be provided to the Fire Department in compliance with GIS Department CAD Submittal Guideline requirements. Minimum submittals shall include the following:
- Site plot plan showing the building footprint.
 - Specify the type of use for the building
 - Location of electrical, gas, water, sprinkler system shut-offs.
 - Fire Sprinkler Connections (FDC) if any.
 - Knox Access locations for doors, gates, and vehicle access.
 - Street name and address.

Final site plot plan shall be submitted in the following digital format and shall include the following:

- Submittal media shall be via CD rom to the Fire Department.
- Shall be in accordance with County of Orange Ordinance 3809.
- File format shall be in .shp, AutoCAD, AUTOCAD MAP (latest possible release) drawing file - .DWG (preferred) or Drawing Interchange File - .DXF.
- Data should be in NAD83 State Plane, Zone 6, Feet Lambert Conformal Conic Projection.
- Separate drawing file for each individual sheet.
In compliance with Huntington Beach Standard Sheets, drawing names, pen colors, and layering convention. and conform to *City of Huntington Beach Specification # 409 – Street Naming and Addressing*.

For specific GIS technical requirements, contact the Huntington Beach GIS Department at (714) 536-5574.

For Fire Department approval, reference compliance with *GIS Mapping Information* in the building plan notes. **(FD)**

THE FOLLOWING CONDITIONS SHALL BE MAINTAINED DURING CONSTRUCTION:

- a. Fire/Emergency Access And Site Safety shall be maintained during project construction phases in compliance with HBFC Chapter 14, Fire Safety During Construction And Demolition. **(FD)**

OTHER:

- a. Discovery of additional soil contamination or underground pipelines, etc., must be reported to the Fire Department immediately and the approved work plan modified accordingly in compliance with City Specification #431-92 Soil Clean-Up Standards. **(FD)**
- b. Outside City Consultants The Fire Department review of this project and subsequent plans may require the use of City consultants. The Huntington Beach City Council approved fee schedule allows the Fire Department to recover consultant fees from the applicant, developer or other responsible party. **(FD)**

Fire Department City Specifications may be obtained at:
Huntington Beach Fire Department Administrative Office
City Hall 2000 Main Street, 5th floor
Huntington Beach, CA 92648

or through the City's website at **www.surfcity-hb.org**

If you have any questions, please contact the Fire Prevention Division at (714) 536-5411.

NO.	DESCRIPTION	QUANTITY	UNIT
1	CONCRETE	100	YD
2	STEEL	50	TONS
3	BRICK	1000	1000
4	GLASS	1000	SQ FT
5	PAINT	100	GALLONS
6	WATER	1000	CU YD
7	CEMENT	100	YD
8	AGGREGATE	100	YD
9	INSULATION	100	YD
10	ROOFING	100	YD
11	MECHANICAL	100	YD
12	ELECTRICAL	100	YD
13	PLUMBING	100	YD
14	LANDSCAPE	100	YD
15	UTILITIES	100	YD
16	CONCRETE	100	YD
17	STEEL	50	TONS
18	BRICK	1000	1000
19	GLASS	1000	SQ FT
20	PAINT	100	GALLONS
21	WATER	1000	CU YD
22	CEMENT	100	YD
23	AGGREGATE	100	YD
24	INSULATION	100	YD
25	ROOFING	100	YD
26	MECHANICAL	100	YD
27	ELECTRICAL	100	YD
28	PLUMBING	100	YD
29	LANDSCAPE	100	YD
30	UTILITIES	100	YD
31	CONCRETE	100	YD
32	STEEL	50	TONS
33	BRICK	1000	1000
34	GLASS	1000	SQ FT
35	PAINT	100	GALLONS
36	WATER	1000	CU YD
37	CEMENT	100	YD
38	AGGREGATE	100	YD
39	INSULATION	100	YD
40	ROOFING	100	YD
41	MECHANICAL	100	YD
42	ELECTRICAL	100	YD
43	PLUMBING	100	YD
44	LANDSCAPE	100	YD
45	UTILITIES	100	YD
46	CONCRETE	100	YD
47	STEEL	50	TONS
48	BRICK	1000	1000
49	GLASS	1000	SQ FT
50	PAINT	100	GALLONS
51	WATER	1000	CU YD
52	CEMENT	100	YD
53	AGGREGATE	100	YD
54	INSULATION	100	YD
55	ROOFING	100	YD
56	MECHANICAL	100	YD
57	ELECTRICAL	100	YD
58	PLUMBING	100	YD
59	LANDSCAPE	100	YD
60	UTILITIES	100	YD
61	CONCRETE	100	YD
62	STEEL	50	TONS
63	BRICK	1000	1000
64	GLASS	1000	SQ FT
65	PAINT	100	GALLONS
66	WATER	1000	CU YD
67	CEMENT	100	YD
68	AGGREGATE	100	YD
69	INSULATION	100	YD
70	ROOFING	100	YD
71	MECHANICAL	100	YD
72	ELECTRICAL	100	YD
73	PLUMBING	100	YD
74	LANDSCAPE	100	YD
75	UTILITIES	100	YD
76	CONCRETE	100	YD
77	STEEL	50	TONS
78	BRICK	1000	1000
79	GLASS	1000	SQ FT
80	PAINT	100	GALLONS
81	WATER	1000	CU YD
82	CEMENT	100	YD
83	AGGREGATE	100	YD
84	INSULATION	100	YD
85	ROOFING	100	YD
86	MECHANICAL	100	YD
87	ELECTRICAL	100	YD
88	PLUMBING	100	YD
89	LANDSCAPE	100	YD
90	UTILITIES	100	YD
91	CONCRETE	100	YD
92	STEEL	50	TONS
93	BRICK	1000	1000
94	GLASS	1000	SQ FT
95	PAINT	100	GALLONS
96	WATER	1000	CU YD
97	CEMENT	100	YD
98	AGGREGATE	100	YD
99	INSULATION	100	YD
100	ROOFING	100	YD

- SEE SHEET FOR BLOCK 1 IS 4"
- — — — — SEE SHEET FOR BLOCK 2 IS 4"
- — — — — SEE SHEET FOR BLOCK 3 IS 4"
- ■ ■ ■ ■ CONSTRUCTION MATERIALS & STORAGE

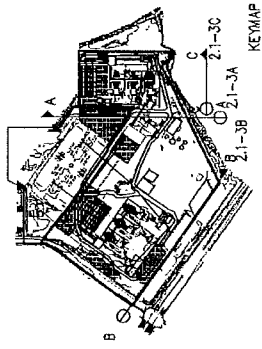
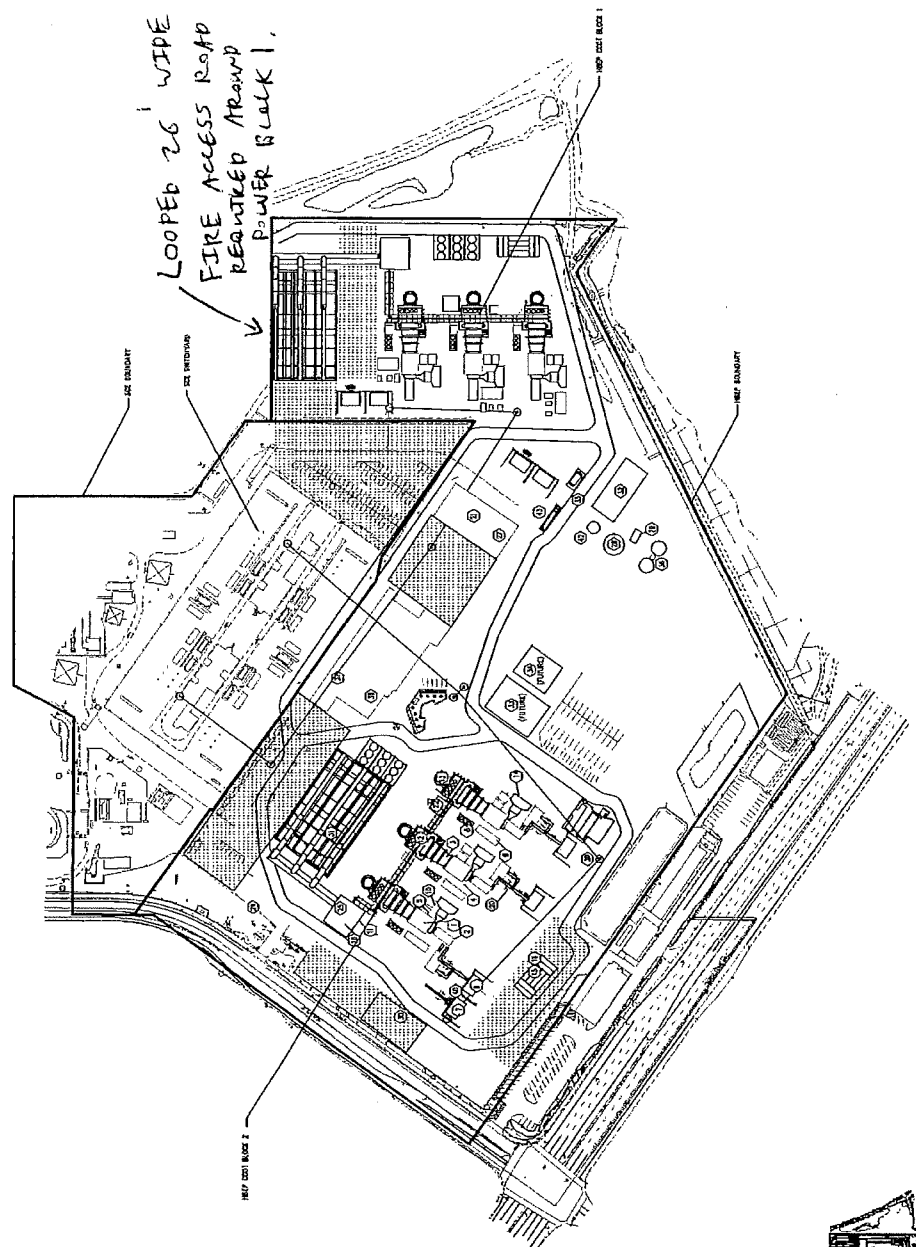


FIGURE 2.1-1
General Arrangement/Site Plan
 AES Huntington Beach Energy Project
 Huntington Beach, California

GH2MHILL