Hyperion Treatment Plant Digester Gas Utilization Project (DGUP)

California Environmental Quality Act (CEQA) Environmental Impact Report (EIR)

Energy and Environment Committee
City of Los Angeles
October 2, 2013

Hyperion Treatment Plant

- · Owned and operated by BOS
- Produce digester gas (digas)
 - Today: 7.2MMscf/day
 - Future: 9.6MMscf/day
- Current status:
 - Digas goes to Scattergood
 - Electricity/steam returned





- Digas is a Renewable Fuel
 - If not sent to Scattergood,
 - Digas must be used in boilers and flared on-site

Submitted in 88 Committee Council File No: 13 - 12.10

Deputy: Adam R

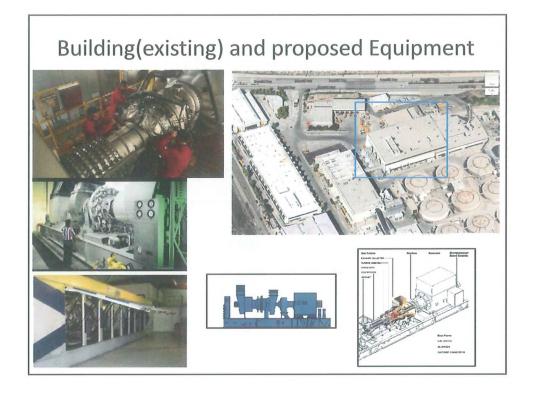
CEQA Purpose and Need (Project Objectives)

- 1. Minimize flaring
- 2. Provide all electricity and steam needs
- 3. Produce renewable energy
- 4. Maintain output of Class A biosolids & permit compliance
- 5. Enable Hyperion to operate "off the grid" in emergencies
- 6. Complies with NPDES permit requirement for 2nd feed

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Proposed Project

- Combined Heat and Power using renewable non-fossil biogas fuel
- Three gas turbine generator systems for electricity
 - 2 turbines for base load
 - 3rd turbine for peak & future digas
 - 100% digas
 - · natural gas only as needed
 - Current Demand, 22 MW (7.2 MMscfd)
 - Future Needs, 34 megawatts (9.6 MMscfd)
- Equipment to produce steam



Environmental Focus Areas

- No Impact
 - Agriculture and Forestry Resources
 - Biological Resources
 - Cultural Resources
 - Land Use Planning
 - Mineral Resources
 - Recreation

- · Less Than Significant
 - Geology/Soils
 - Hydrology/Water Quality
 - Population/Housing
 - Public Services
 - Transportation/Traffic
 - Utilities/Service Systems
- Potentially Significant Analyzed in Draft Elf
 - Aesthetics
 - Air Quality
 - Greenhouse Gases (GHGs)
 - Hazards and Hazardous Materials
 - Noise

CEQA Analysis

- Most conservative approach
 - Maximum Build out project
 - Assessed as a new source

Energy Recovery Building

Flare Location

Scattergood Turbines #1 & 2



Results

- Health Risk Assessment (HRA) = below AQMD thresholds
- Air and GHG emissions = above AQMD thresholds
 - Required further evaluation
 - Feasible measures incorporated
 - Employs Best Available Control Technology
- Note:
 - Emissions are common for projects of this type and activity
 - Project Permit applications including emission/technology specifications, in review

Project Benefits

• Existing Conditions:

- Scattergood arrangement ends Dec 31, 2016
- Outdated equipment
- Supplemental natural gas

No Project:

- No electricity
- No Renewable Energy Credits
- Flare most digas, Utilize digas in boilers
- Air emission fees

Proposed CHP Cogen:

- Utilize 100% of digas, renewable non-fossil fuel
- Satisfy HTP electricity and steam needs
- Comply with NPDES permit for 2nd feed
- Minimize flaring

Staff Recommendations

- Forward the Report to the City Council with the recommendation that the Council:
 - Certify the Final EIR;
 - Adopt the mitigation and monitoring measure as conditions of project approval;
 - Adopt the Mitigation Monitoring and Reporting Program;
 - Adopt the Findings and Statement of Overriding Considerations; and
 - Approve the project, identified as the preferred alternative in the Final EIR.

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