

# Cogeneration Facility Technology Update

TPAC Meeting  
November 14, 2013



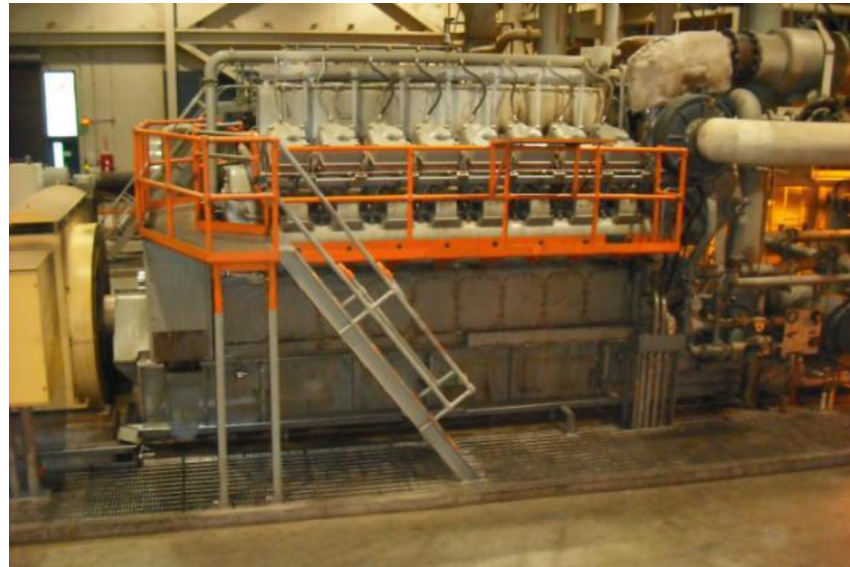
San José-Santa Clara  
Regional Wastewater Facility



# Background

- Aging infrastructure
- Inefficient engines
- Increasing reliability issues
- TPAC and City Council direction

*Engine E-2  
In operation since 1956*



# Existing Power and Heat Equipment

- **P&E Bldg**  
5 Generators  
51 - 60 yrs old



- **SBB Bldg**  
6 engine blowers  
51 yrs old  
2 Boilers for heat



- **Bldg 40**  
3 Generators  
Approx 30 yrs old



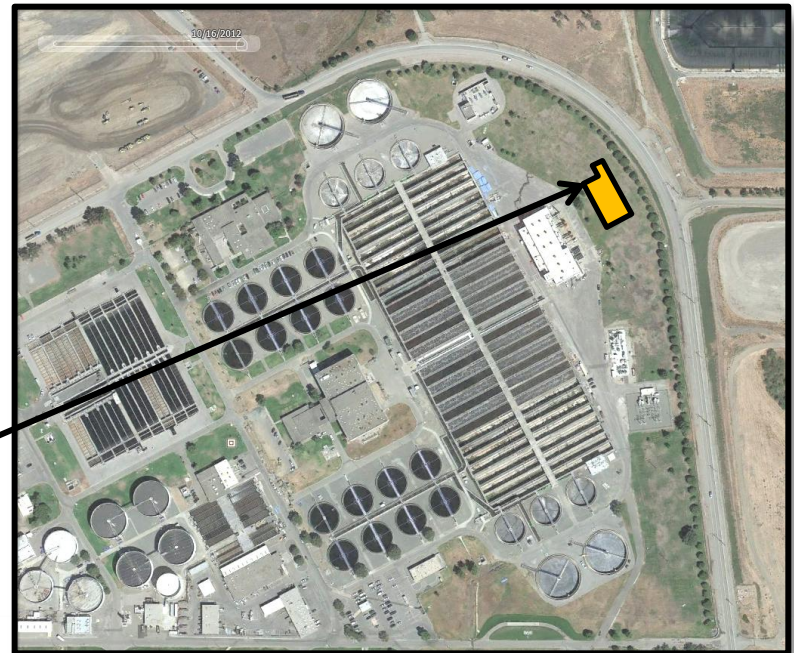
# Operational Goals

- Reliability
- Flexibility
- Maximize utilization of biogas
- Produce power and heat
- Energy efficiency
- Cost-effective operations
- Low emissions
- Decommission old equipment

# New Cogeneration Facility

- Located east of Bldg 40
- 4 engines
- Heat recovery
- Gas treatment
- Emission controls

Proposed Cogeneration Facility



# Process to Select Engine Technology

- Extensive collaboration
- Evaluated 22 criteria
- Considered variety of operating conditions
- Comparable facility reviews

*New engines in a layout  
similar to RWF*



# Next Steps

- Project Definition Report – December 2013
- CEQA Review complete – February 2014
- Design-Build RFQ/RFP – May 2014
- Design-Build Start – January 2015
- Anticipated Completion – 2017

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