Renewable Generation Example

*Data provided by CAISO 4/6/17*
Description of Hometown BioEnergy

- Anaerobic Digestion Facility
  - Agricultural and Food Processing Streams
- 8 MW Electric Generation
- 20 Million Gallons Effluent Storage
Overview

Key to Facility Features
1. Admin Building
2. Process Building
3. Liquid Biomass Pre-Tank
4. Digester No. 1
5. Digester No. 2
6. Gas Holder No. 1
7. Gas Holder No. 2
8. Gas Holder No. 3
9. Gas Cleaners
10. Make-Up Water Tank
11. Genset Blowers
12. Flare
13. Flare Blowers
14. Fire Pump Enclosure
15. Fire Water Tank
16. Dump Coolers
17. Hot Water Tank
18. Biofilter
19. Stormwater Infiltration Pond
20. Electrical Enclosures
21. Electrical Transformer
22. Lagoon Valve Shed
23. By-Product Storage Lagoon No. 1
24. By-Product Storage Lagoon No. 2
Hometown BioEnergy
Receiving Hall
Automated Monorail Crane
Generators
Load vs. Renewable Generation

*Data provided by CAISO 4/6/17*
Duck Curve

*Data provided by CAISO*
HTBE Efficiency

• Produces On-Peak Electricity
  – Gas Storage Needed
• Recovers Heat from Generation
  – To Heat Process and Building
• Connected at Distribution Level
• Digestate used as soil amendments for local farmers