

Ocotillo Modernization Project

Reliability, Location, Technology

Tempe City Council
September 2014



Purpose

- Overview
- Needs and Benefits
- Proposed Future Views
- Milestones
- Summary

Project Overview

History of Ocotillo Power Plant

- Played significant role in bringing power to growing Phoenix area
- 1960: Steam generators begin operation
- 1970s: Gas turbines added in early 1970s
- Used today primarily for summer peak



- Current plant capacity: 330 MW
 - Two 110 MW gas-fired steam units
 - Two 55 MW gas-fired turbine units

Ocotillo Project Overview

- Retire existing steam units (220 MW)
- Replace aging steam units with modern gas turbines
 - Install five GE LMS100 gas turbines – 102 MW each
 - Net site capacity increased by 290 MW to 620 MW total
- Responsive unit operations
 - Quick starting and ramping
 - Benefits renewables integration
- Maintain Valley reliability
 - Generation in metro area
 - Contingency and voltage support
- Environmental attributes
 - Lower emission rates
 - Lower water-use rates
- In-service planned for summer 2018



Project Need and Benefits

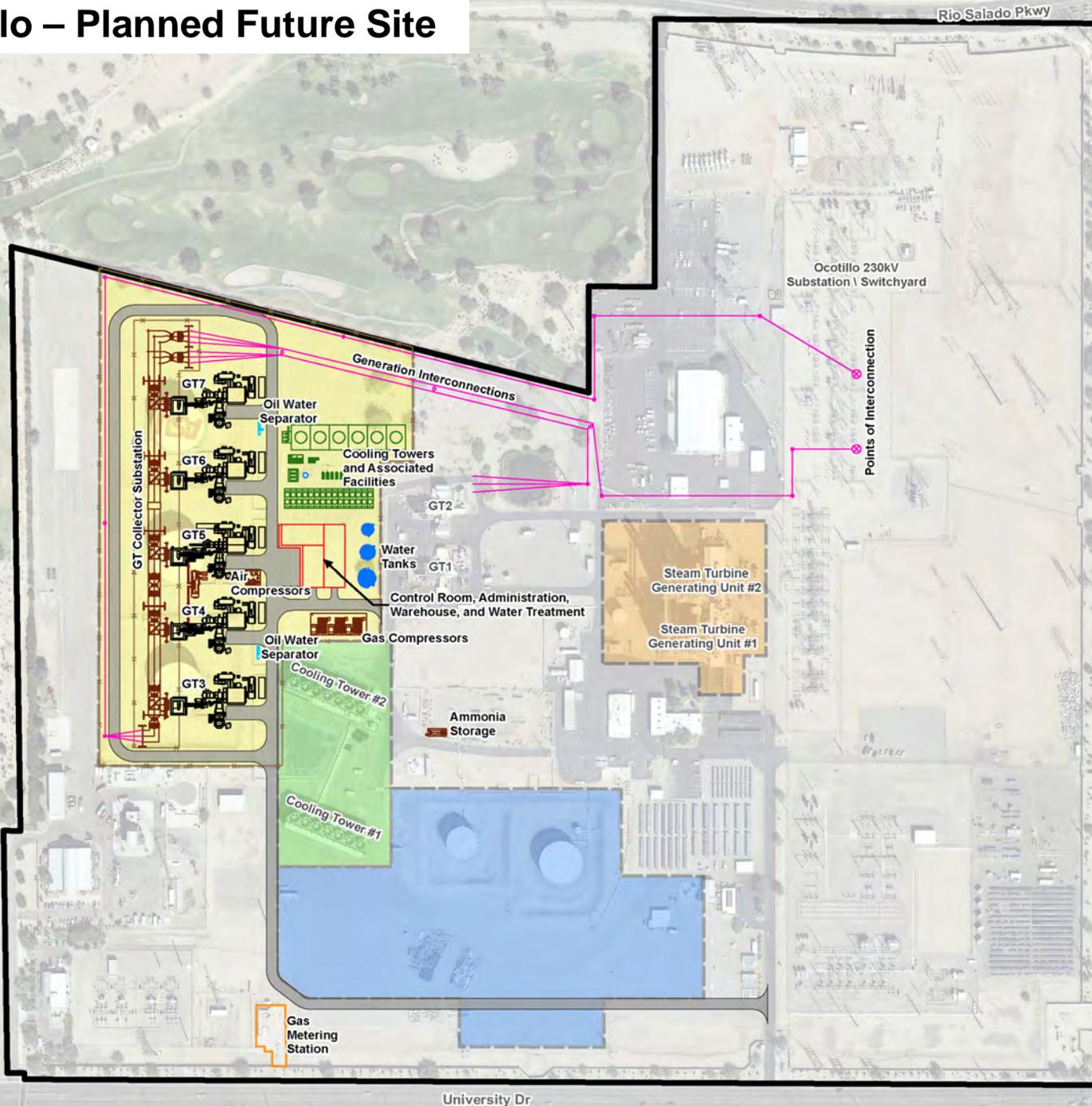
Existing Site and Infrastructure

- Uses existing APS property
- Uses existing infrastructure
 - Transmission
 - Natural gas
 - Water supply
 - Buildings
- Cost effectiveness
- Environmentally compatible
- Located within Phoenix metro area

Ocotillo – Current Plant Site



Ocotillo – Planned Future Site



Ocotillo – Proposed Future Condition



View from top of existing Steam Unit

Ocotillo – Proposed Future Condition



View from University Drive looking north

Project Milestones

- Permitting Activities
 - Air Permit: Submitted to Maricopa County - April 2014
 - CEC Application: Submitted to ACC - July 2014
 - City of Tempe: Ongoing meetings for local site/use permits
- Public Hearing
 - Line Siting Committee: Sept. 16-18, 2014 at Tempe Embassy Suites
- Engineer, Procure & Construction Contract
 - Request for Proposal: Released to 5 companies - August 2014

Project Summary

- Meets need for increased flexibility, responsiveness
- Maintains system reliability in Phoenix metro area
- Uses existing land use, infrastructure
- Lowers emission and water use rates
- Reduces visual impact to surrounding area
- Provides construction jobs and increases tax revenues
- For more information, please visit: azenergyfuture.com/ocotillo