

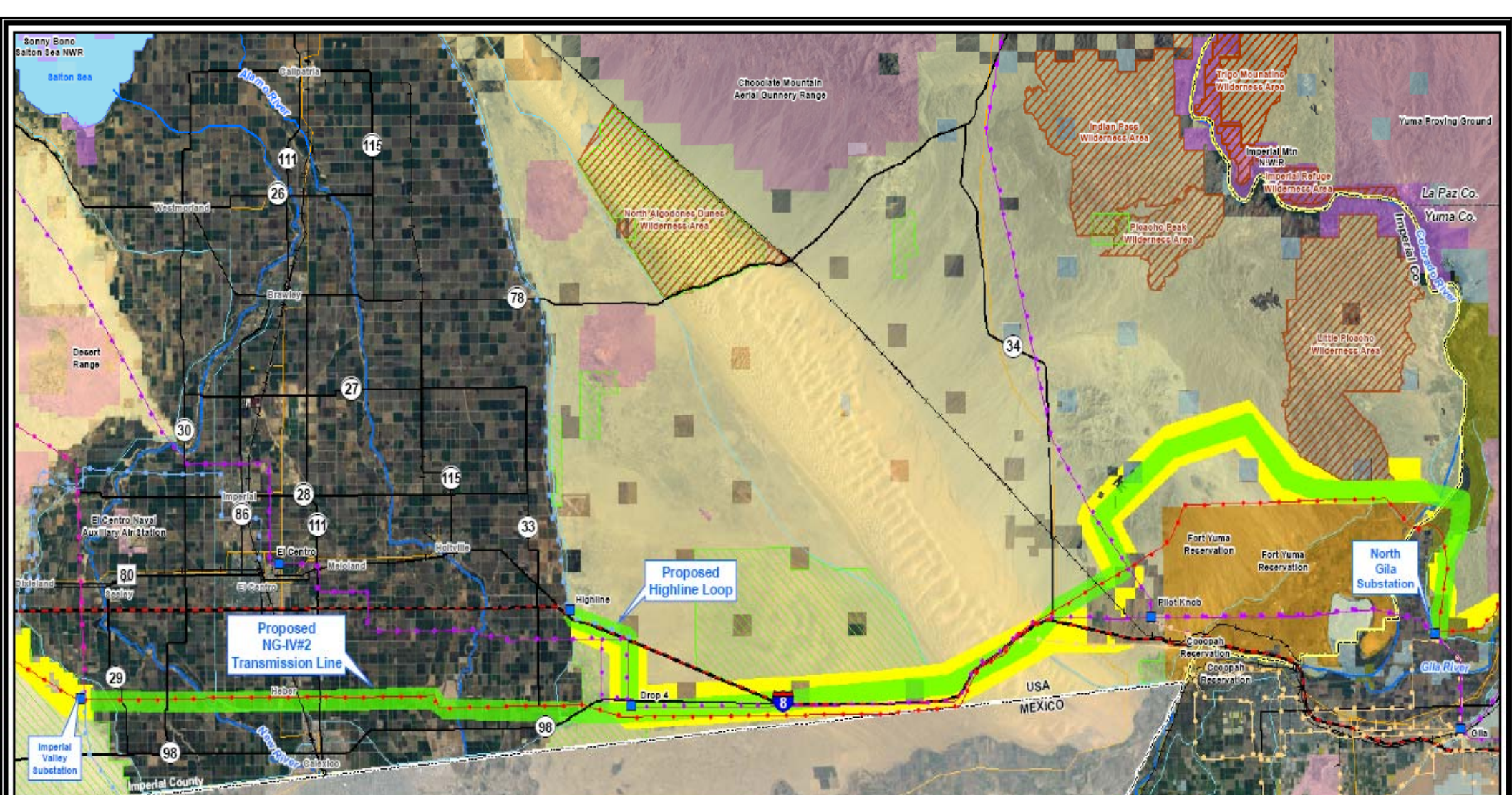


**NORTH GILA – IMPERIAL VALLEY #2
(NG-IV#2)
500 kV TRANSMISSION PROJECT**



Contents

- Project Overview
- Objectives
- Planned Path & Tower Design
- WECC Process & Project Rating
- Project Schedule
- Milestones Achieved to Date



Proposed NG-IV#2 Transmission Line

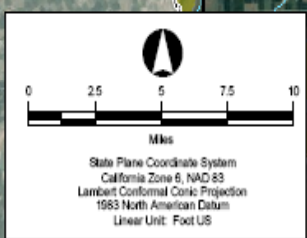
Proposed Highline Loop

Imperial Valley Substation

North Gila Substation

Legend

- | | | |
|-----------------------------------|------------------------------------|--|
| Substation | Major Road | Major Water Body |
| Existing 500 kV Transmission Line | Railroad | Jurisdictional Land Ownership |
| Existing 230 kV Transmission Line | International Boundary | Bureau of Land Management Land |
| Existing 161 kV Transmission Line | State Boundary | Department of Defense Land |
| Existing 92 kV Transmission Line | County Boundary | U.S. Fish and Wildlife Land |
| Existing 88 kV Transmission Line | Proposed NG-IV#2 Transmission Line | Bureau of Reclamation Land |
| Existing Natural Gas Pipeline | BLM Designated Utility Corridor | State Land |
| Major River | Municipality | Indian Land |
| Dam and/or Canal | Federal Wilderness Area | Area of Critical Environmental Concern |



NG-IV#2

OVERVIEW MAP

Map Extent: Imperial County, California
and Yuma County, Arizona

Date: 09.29.09	Author: sjw
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Project Overview

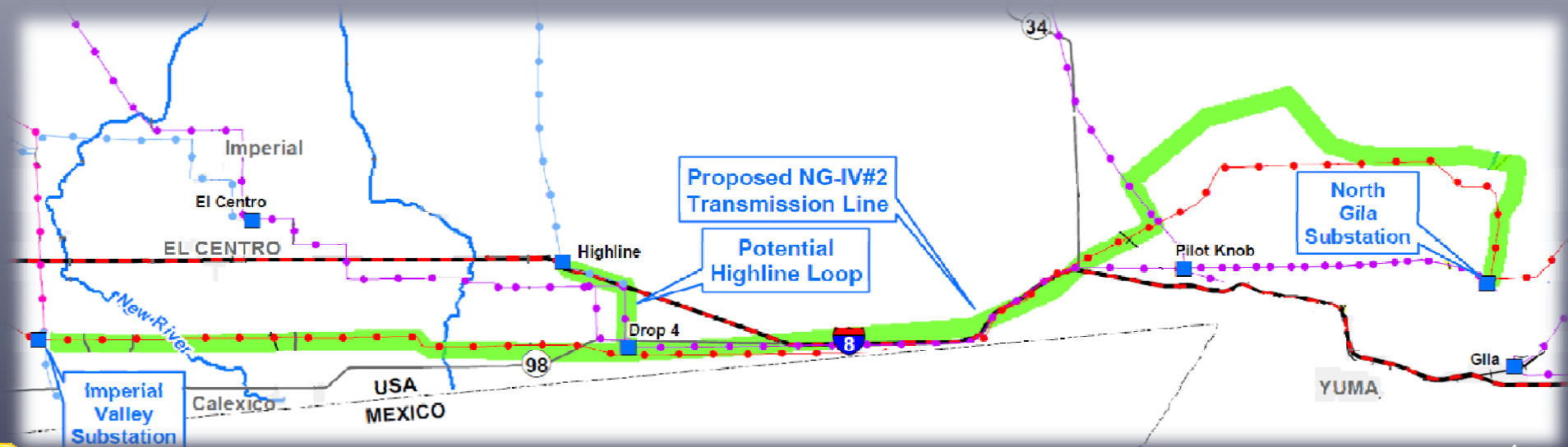
Major Project Elements (Double Circuit Construction)

- Circuit One: Construct new 85 Mile NG-IV 500 kV AC Double-Circuit Line with 50% Series Compensation
- Circuit Two: "Loop In" to the Existing IID-Owned Highline 230kV Substation (potentially 500kV)

Anticipated Rating (TTC) Increase

- Depending on Where New Generation is Integrated
- An Increase of Path 46 (West Of River) by 2400 MW
- An Increase of Path 49 (East Of River) by 1200 MW

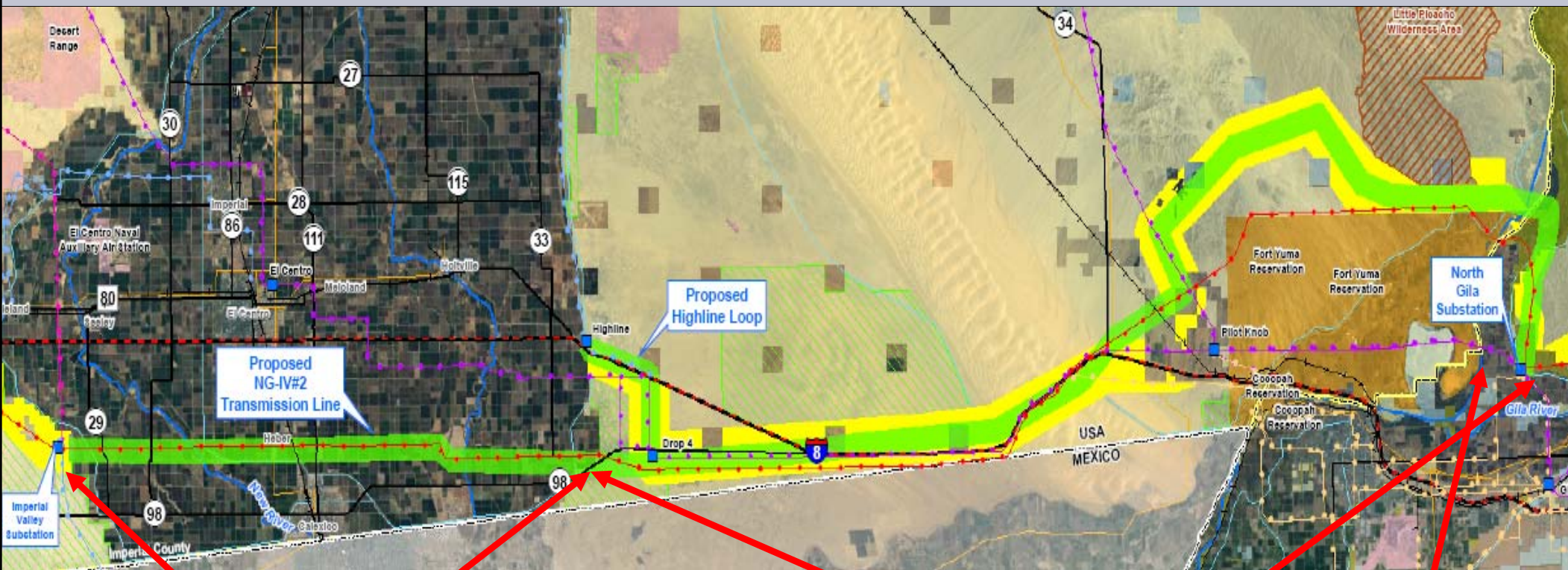
Anticipated Operating Date 2015



Objectives

- Increase Reliability of Existing AZ & Southern CA Transmission
- Provide Regional Access to Renewable Energy (Solar, Geothermal, Wind, etc.)
- Integrate Renewable Generation in AZ & Southern CA
- Support and Promote Interconnections of Existing Generation Facilities & Transmission in CA and AZ
- Provide Additional Import Capability to the Southern CA Transmission System:
 - Path 46 (West of River)
 - Path 49 (East of River)
- Align with Existing Southern CA and AZ Plans (Southwest Area Transmission Planning)

Planned Path



Imperial County, CA

- Approximately 35 miles
- Private / Agricultural Lands
- County Plan Encourages Co-locating

BLM Land (Light Yellow)

- Approximately 50 miles
- All Within Designated Corridor (Bright Yellow)
- Short Distance at IV Sub

CA/AZ Border

- CA-Imperial County
- AZ-Yuma County



Double Circuit 500 kV Tower Design

- Planned construction using lattice steel structures and monopole steel structures
- Preferred structure will be determined by which is more suitable for the region along the route



WECC Regional Planning & Three Phase Rating Process

- NG – IV #2 is a Component of the WECC Path 46: “West of Colorado River” (WOR) Scheduling Path
- Initial Analysis Indicates
 - An Increase of Path 46 (WOR) by **2400 MW**
 - An Increase of Path 49 (EOR) by **1200 MW**
- WECC Regional Planning to be Initiated – Spring 2011
- WECC Comprehensive Progress Report and Proposed Rating to be Issued by Q4 2011

Project Schedule

	2009				2010				2011				2012				2013				2014				2015			
TASK NAME	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1.0 PROJECT DEVELOPMENT		■			■				■				■															
2.0 PERMITTING			■		■				■																			
3.0 ENGINEERING													■				■											
4.0 CONSTRUCTION & OPERATION																									■			◆

Milestones Achieved to Date

Planning

- Completed Preliminary Routing Study
- Developed Detailed Maps & GIS Database
- Developed Permitting Plan

Permitting

BLM

- Submitted and Accepted 299 Application
- Executed CRA/MOU & Funded CRA
- Submitted Detailed Plan of Development (POD)

Counties

- Conducted Multiple Meetings
- Confirmed Procedures & Joint Process with Imperial County (CEQA) and BLM (NEPA) for a joint CEQA/NEPA Process

CAISO

- Completed Technical Feasibility Analysis
- Completed Economic Feasibility Analysis
- Submitted CAISO Filing November 2009, and CTPG May 2010

IID

- Discussed Involvement in 2nd Circuit to Highline Substation with IID

Customers

- Preliminary Discussions with Potential Renewable Energy Customers

