

## DOCKETED

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*Comment Received From: Mark Etherton*

*Submitted On: 1/9/2017*

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## **Southwest Transmission Partners Draft Plenary Report Comments**

Southwest Transmission Partners, LLC (“STP”) respectfully submits these comments on the Draft Plenary Report (“Report”) and appreciates the opportunity to also provide an update on the proposed North Gila “Imperial Valley #2 Transmission Project (“NG-IV #2”).

*Additional submitted attachment is included below.*



January 09, 2017

California Energy Commission  
Dockets Office, MS-4  
1516 Ninth Street  
Sacramento, CA 95814-5512  
Docket 15-RETI-02

*<Submitted via online comment form>*

Re: Comments: Renewable Energy Transmission Initiative “RETI 2.0” Draft Plenary Report

Southwest Transmission Partners, LLC (“STP”) respectfully submits these comments on the Draft Plenary Report (“Report”) and appreciates the opportunity to also provide an update on the proposed North Gila – Imperial Valley #2 Transmission Project (“NG-IV #2”).

### **Transmission Assessment Focus Areas**

#### **Imperial Valley TAFE**

As discussed in the Report, the Imperial Valley TAFE has been identified as a constrained area for the delivery of renewable resources, a combination of physical and technical limitations. The constraints for this area are primarily caused by the fact that the existing North Gila – Imperial Valley 500kV line is the most critical contingency for this TAFE. Physically, east of North Gila, two 500kV lines are constructed to Palo Verde and; west of Imperial Valley, two 500kV lines are constructed towards San Diego. The outage of the single line between North Gila and Imperial Valley limits the capacity that can be transferred across the southern portion of WECC Path 46 and also additional constraints within the IID system for export.

While the Report discusses some options that address some of the barriers in delivering additional renewable energy from this TAFE, the STP proposed NG-IV #2 Project is not included as a potential option. We believe that NG-IV #2 Project will relieve congestion in this area with substantial economic benefits and added benefits for resource adequacy to the southern California electric customers as one of the major interregional transmission projects for renewable energy delivered from the solar and geothermal rich areas of Imperial Valley and Arizona.

Another limitation within this TAFE is that the IID 230kV collector transmission lines from Highline to Devers 230kV system are primarily radial in nature. This limits the capacity of renewable energy that can be delivered into and out of the region, under normal or outage conditions. STP proposes to loop the proposed NG-IV #2 Project through the Highline substation to provide an additional termination and loop service for renewable energy resources connected to the Highline to Devers 230kV system. Also, by creating a new 500kV station at the Highline substation, a future additional 500kV line from Highline to Devers could be constructed to provide additional transmission capacity for renewable energy from this TAFE.

## North Gila – Imperial Valley #2 Transmission Project Background

The NG-IV #2 Project (“Project”) is being proposed as a 500kV AC transmission project (single circuit or double circuit) between southwest Arizona and southern California. The proposed in-service date for the project is Q4 2021. The Project is being proposed by Southwest Transmission Partners, LLC (“Project Sponsor”).

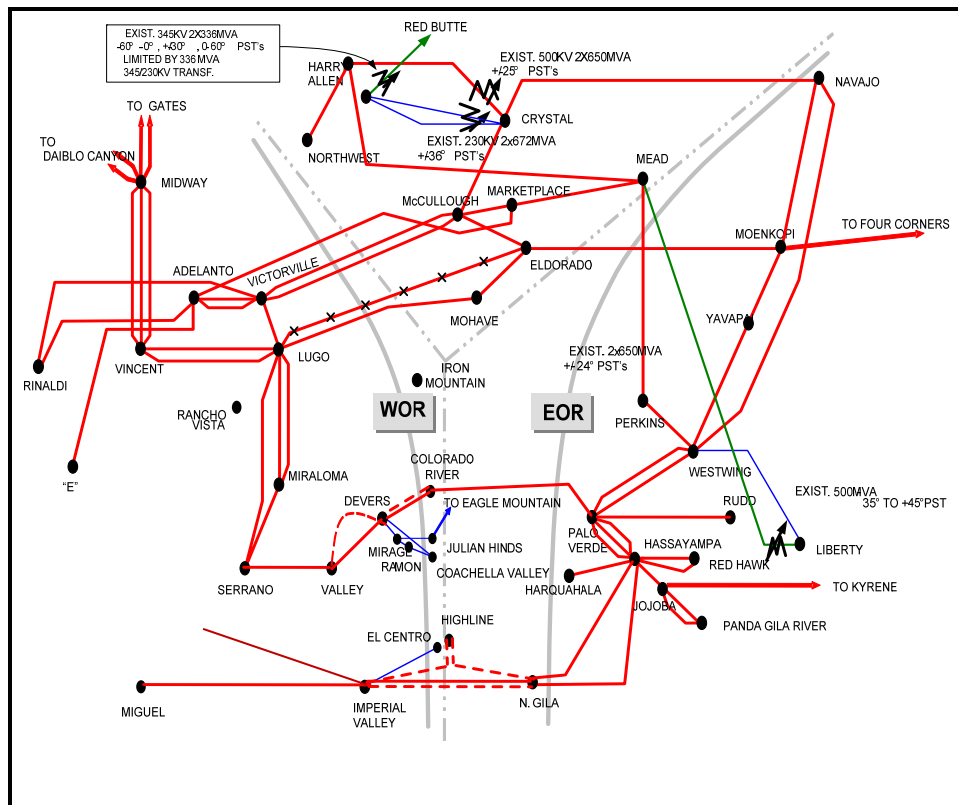
The Project is a major intertie expansion between the southern Arizona area and southern California area. It will become an additional component of the West of Colorado River (“WOR”) path (WECC Path 46) and is expected to provide the benefit of increasing reliability and transfer capability between Arizona and load centers in southern California.

The project is envisioned to provide the following benefits:

- 1) Provides California additional access to export/import from generation resource zones where limited transmission access exists
- 2) Increases diversity of the regional energy resource zones
- 3) Increases the reliability and import capability to the Southern California Import Transmission system
- 4) Make efficient use of existing available transmission corridors

A one-line diagram for the Project is depicted in Figure 1.

**FIGURE 1: NORTH GILA-IMPERIAL VALLEY #2 500 kV ONE-LINE DIAGRAM**



The Project will comprise of a 90-mile 500 kV single or double circuit line from the existing North Gila 500 kV switching station to the existing Imperial Valley 500 kV substation with a possible 500/230 kV intermediate transformation at IID's existing Highline 230 kV substation near Holtville, California. The NG-IV #2 Project will initially parallel the existing North Gila – Imperial Valley 500 kV line before turning north to loop in and out of a proposed 500 kV substation to be constructed immediately adjacent to Highline 230 kV substation. The minimum separation between the proposed line and the existing North Gila to Imperial Valley 500 kV line is expected to be at least 250 feet. The North Gila to Highline segment of the Project, which measures about 55-miles, will have up to 70% series compensation in order to balance the flows with the existing Southwest Power Link. The series compensation will be located at the proposed Highline 500 kV substation. The Highline to Imperial Valley segment of the Project measures about 35-miles. It is also important to note that all of the permitting efforts to date have included an option for a second circuit, either at 500kV or 230kV, on the same set of structures.

The Project's proposed plan of service includes:

- New 500 kV substation (Highline 500 kV substation) to be located adjacent to IID's existing 230 kV Highline substation.
- New 1120 MVA, 500/230 kV transformer at Highline
- New 55-mile 2x 2156 ACSR 500 kV line from the existing North Gila 500 kV switching station to proposed Highline 500kV with 70% series compensation.
- New 35-mile 2x 2156 ACSR 500 kV line from proposed Highline 500kV to existing Imperial Valley 500 kV substation.

Technical study results as a single circuit 500kV, and submitted to WECC as the Comprehensive Progress Report ("CPR") have demonstrated that the proposed Project is feasible of increasing the non-simultaneous rating of WECC Path 46 by **1,250 MW**; from the existing rating of 11,200 MW to 12,450 MW while complying with NERC reliability standards and WECC system performance criteria. In a double circuit configuration and the addition of the second circuit at 230kV, an additional 400 to 800MW transmission capacity would be added to the Project rating.

The estimated cost of the Project is **\$300M** for a single-circuit project, or **\$400M** for a double-circuit project.

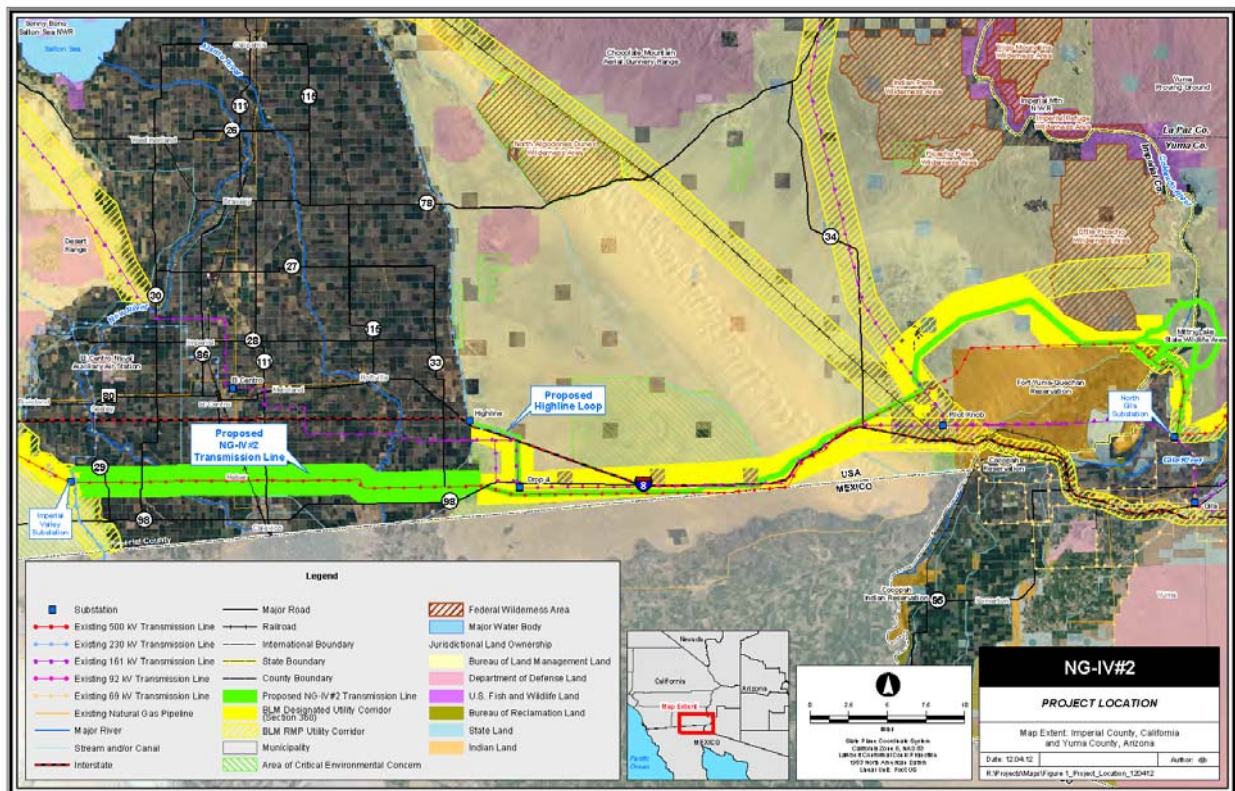
A primary permit required for the Project is the right-of-way (ROW) Grant from the Bureau of Land Management (BLM) who will serve as Federal Lead Agency. The ROW application was submitted in **2009** and accepted. The Cost Recovery Agreement (CRA) and Memorandum of Understanding (MOU) needed to prepare the required Environmental Impact Statement (EIS) to comply with National Environmental Policy Act (NEPA) were also executed and funded. The Draft Plan of Development (POD) was developed and a National Project Manager to the Project was assigned by BLM. Multiple coordination meetings were held with BLM and cooperating agencies to discuss the Project and planning options. This work included route alternative tours with agencies and local tribal officials. STP expects to kick off Scoping of the Project in 2017.

Permitting the portion of the line in the state of California will require compliance with California Environmental Quality Act (CEQA) requiring the issuance of an Environmental Impact Report (EIR). This document will use the same information required for the EIS. A qualified agency is required to be the lead for the EIR efforts and, the Sponsors have discussed an approach where either Imperial Irrigation District (IID) or Imperial County would be the lead for the EIR (depending on IID's participation in the Project). It is also possible that the California Public Utility Commission (CPUC) could be asked to possibly lead the EIR efforts but it is expected that the CEQA process would require additional time and cost with the CPUC as the lead. Considerations for the CEQA lead and acceptance of any portion of the Project within the cost recovery of the CAISO will need to be evaluated before a final decision is made.

Permitting the portion of the line in the state of Arizona will require a Certificate of Environmental Compatibility (CEC), issued by the Arizona Corporation Commission (ACC). To date, at the Project has been included in their Biennial Ten-Year Transmission Planning evaluations. The CEC process is expected to be initiated upon completion of the draft EIS.

The following map, Figure 2, is the current potential corridor (mostly within the BLM Designated 368 Corridor 115-238) under evaluation for the NG-IV#2 Project.

**FIGURE 2: NORTH GILA-IMPERIAL VALLEY #2 500 kV POTENTIAL CORRIDOR**



We appreciate the opportunity to submit our comments and provide an update on the NG-IV #2 Project. Please give me a call if you have any questions regarding this submission and we would request that additional discussions take place regarding this interregional approach.

Sincerely,

A handwritten signature in blue ink that reads "Mark Etherton". The signature is written in a cursive, flowing style.

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cc: Southwest Transmission Partners, LLC