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Comment Received From: Monica Schwebs
Submitted On: 12/21/2017
Docket Number: 17-IEPR-01


Additional submitted attachment is included below.
December 21, 2017

Via E-Comment

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


Dear Commissioners and Energy Commission Staff:

ITC Grid Development, LLC (“ITC Grid Development”) appreciates the opportunity to file comments in the Draft Integrated Energy Policy Report (“Draft IEPR”) and, in particular, on Chapter 5 of the report entitled “Strategic Transmission Plan and Landscape-Scale Planning.” ITC Grid Development recognizes that the filing deadline for these comments has passed, but files these comments in the hope that they may be of use to the California Energy Commission (“Commission”) as it finalizes the IEPR and implements its recommendations.

Background

ITC Grid Development is a part of ITC Holdings Corp. (“ITC Holdings”), which invests in the electricity transmission grid to improve reliability, expand access to markets, lower the costs of delivered energy and allow new generating resources to interconnect to its transmission systems.1 ITC Holdings, the largest independent electricity transmission company in the country, operates in Michigan’s Lower Peninsula and portions of Iowa, Minnesota, Illinois, Missouri, Kansas, and Oklahoma. As the development arm of ITC Holdings, ITC Grid Development focuses on new areas where significant transmission system improvements are needed.

ITC Grid Development believes that as the California Independent System Operator (“CAISO”) transitions from studying the transmission impact of a 33% RPS to a 50%

1 ITC Holdings was recently acquired by Fortis, Inc., a Canadian company. Fortis is a leader in the North American regulated electric and gas utility industry with total assets of approximately C$47 billion as of September 30, 2017. The Corporation’s more than 8,000 employees serve utility customers in five Canadian provinces, nine U.S. states and three Caribbean countries.
RPS it will become apparent that one of the areas in California where new transmission will be needed is in the Imperial Valley of California. Thus, ITC Grid Development recently partnered with Southwest Transmission Partners to develop the North Gila-Imperial Valley No. 2 transmission line ("NG-IV No. 2"). The line is being designed to both import and export electricity from the Imperial Valley in order to increase transmission transfer capacity between Arizona and southern California, and provide access to additional renewable resources to meet increasing RPS in the state. NG-IV No. 2 also has the potential to improve transmission system reliability while providing economic benefits through reduced Local Capacity Requirements in the San Diego area.

The line will run between the existing North Gila Substation east of Yuma, Arizona, and the existing Imperial Valley Substation southwest of El Centro, California, and is expected to include a loop-in project to the existing Highline substation in Imperial County. The project will interconnect with the transmission system of Arizona Public Service ("APS") at the North Gila substation, with the transmission system of San Diego Gas & Electric ("SDG&E") at the Imperial Valley Substation, and with the transmission system of the Imperial Irrigation District ("IID") at the Highline Substation.

Further information regarding both ITC Grid Development and the planned NG-IV No. 2 project is provided in the attached power point.

Comments on the Draft IEPR

ITC Grid Development has reviewed the Draft IEPR and, in particular, Chapter 5 of the report entitled “Strategic Transmission Plan and Landscape-Scale Planning.” On the whole, ITC Grid Development agrees with the Commission’s approach toward strategic transmission planning and its efforts to facilitate landscape-scale planning.

1. **ITC Grid Development Supports Efficient Use of Existing Transmission Grid**

ITC Grid Development agrees with the observation in the Draft IEPR that the starting point for transmission planning should be the efficient use of existing transmission grid. See Draft IEPR at 151-155 (section on efficient use of the transmission grid). In particular, ITC Grid Development agrees that in transmission planning it is appropriate to consider use of advanced transmission technologies, application of transmission rightsizing, and increased regional coordination. Draft IEPR at 151.

To the maximum extent possible, the NG-IV No. 2 line will make use of existing transmission corridors. The portion of the line from the California border to the Imperial Valley Substation is expected to be in a right-of-way adjacent to the existing Southwest Power Link ("SWPL"), which should minimize environmental impacts. Moreover, it is expected that the line will be built such that it will be possible to string a second line on
the same poles so that if additional transmission capacity is needed in the future, the cost and environmental impact of increasing the transmission capacity will be minimized.

The NG-IV No. 2 line will also facilitate regional coordination since it will facilitate imports and exports between the CAISO and neighboring balancing authority areas including the APS, IID, and Western Area Power Administration (“WAPA”) balancing authority areas. The NG-IV No. 2 line will also add reliability benefits to the surrounding grid, as well as unlock additional transmission line capacity on existing transmission lines (Hassyampa-North Gila 2 - HANG 2). This is supportive of the objective to efficiently utilize the existing transmission system.

2. **ITC Grid Development Supports Landscape-Scale Planning for Renewables and Transmission**

The Commission has done a great deal of landscape-scale planning which will be directly relevant to development of the NG-IV No. 2 project. In particular, development of the project in an environmentally appropriate way will be greatly facilitated by the Commission’s work on Desert Renewable Energy Conservation Plan (“DRECP”) and its efforts to work with the U.S. Bureau of Land Management (“BLM”) on its Section 368 Corridors. Most of the line will be sited on land that is either covered by the DRECP and/or part of a Section 368 corridor.

ITC Grid Development is pleased that the Commission is now turning its attention to the use of platforms and analytic tools for landscape planning. ITC Grid Development is a community-focused transmission project developer, so the availability of such platforms and tools could greatly facilitate its efforts to involve all stakeholders in project planning.

3. **ITC Grid Development Notes that NG-IV No. 2 Was Omitted from the Draft IEPR**

The Draft IEPR refers to the Renewable Energy Transmission Initiative 2.0 (“RETI 2.0”) Final Report. See, e.g., Draft IEPR at 158-160. The Draft IEPR also presents information regarding the transmission line projects identified in the RETI 2.0 report in Appendix E. While the Draft IEPR’s discussion of the RETI 2.0 Final Report appears to be accurate, it is important for the Commission to recognize that the RETI 2.0 list of projects was incomplete.

With respect to the Imperial Valley, the Draft IEPR discusses SDG&E’s proposed conversion of the SWPL line, which runs from the North Gila Substation to the Imperial Valley Substation, into a high-voltage direct current (“HVDC”) line. See Draft IEPR at 153, F-25. The Draft IEPR description of the transmission projects in Imperial Valley is consistent with the RETI 2.0 Final Report, which also discusses SDG&E’s proposed conversion of the SWPL line. See RETI 2.0 Final Report, Appendix A, at A-15, A-51,
and A-52. For unknown reasons, however, both the Draft IEPR and the RETI 2.0 Final Report omit any mention of the proposed NG-IV No. 2 line, an AC line which would also go from the North Gila substation to the Imperial Valley Substation.\(^2\)

ITC Grid Development assumes that by including some projects in the Draft IEPR and RETI 2.0 report but not others, the Commission does not intend to endorse the projects it included over other projects it did not include. ITC Grid Development is concerned, however, that members of the public may believe that by including one project, while omitting mention of another project in the same corridor, the Commission has implicitly endorsed the project which was mentioned over the project which was omitted. Thus, ITC Grid Development requests that the Commission make it clear in the final IEPR report, or otherwise, that by including particular projects in the IEPR, the Commission is not endorsing those projects over other projects which have been omitted.

**Conclusion**

ITC Grid Development appreciates the opportunity to provide comments on the Draft IEPR and looks forward to participating in future Commission proceedings.

Sincerely,

/s/ Andrew M. Jamieson  
Andrew M. Jamieson  
Counsel – Regulatory & Legislative  
ITC Holdings Corp.

Attachment

\(^2\) Southwest Transmission Partners filed comments in the RETI 2.0 proceeding in which it noted the omission of the NG-IV No. 2 line from the Draft RETI 2.0 Report. These comments are available at [http://docketpublic.energy.ca.gov/PublicDocuments/15-RETI-02/TN215204_20170109T190723_Mark_Etherton_Comments_Southwest_Transmission_Partners_Draft_P.pdf](http://docketpublic.energy.ca.gov/PublicDocuments/15-RETI-02/TN215204_20170109T190723_Mark_Etherton_Comments_Southwest_Transmission_Partners_Draft_P.pdf).
NORTH GILA IMPERIAL VALLEY #2

500 kV TRANSMISSION PROJECT
(NG-IV#2 Project)
AGENDA

- Introductions
- ITC Grid Development Background
- Project Overview and Current Status
- Joint Transmission Planning with SDGE and IID
PROJECT STATUS AND OVERVIEW

- New Development Partner – ITC Grid Development, LLC
- Single circuit configuration confirmed for initial project, with loop into the IID Highline substation to establish a 500/230kV and a reliable outlet for IID to export up to 1000MW of renewables
  - Establish a future take off from Highline to Midway to Devers 500kV line
  - A segment of the long-term plan developed from the Imperial Valley Study Group (CEC sponsored analysis)
- Ultimate permitting is still anticipated to include up to a double circuit (likely a 500/230kV)
- Planned transmission project submittal to CAISO, March 2018
  - EIS/EIR will be initiated in Q2 2018, permitting will include the option for double circuit
ITC – WHO WE ARE

LEADER IN GRID DEVELOPMENT

OWNER & OPERATOR

GENERATOR CONNECTIONS

PREFERRED TRANSMISSION PROVIDER

NON-TRADITIONAL INFRASTRUCTURE

Customer-Focused Solutions
OUR IMPACT TO DATE

2005
ITC Holdings Corp. becomes first publicly-traded independent transmission company

2007
ITC Midwest formed through acquisition of transmission assets of Interstate Power & Light

2010
MISO releases RGOS study, validating ITC’s Green Power Express vision

2013
ITC marks 10th anniversary, with system reliability at top quartile or better performance

2015
• ITC announces HVDC Lake Erie Connector project

2003
Company established as ITC Transmission with the acquisition of DTE transmission assets

2006
• Greenfield development activities begin: ITC Great Plains established
• Company acquires Michigan Electric Transmission Company (METC) from Consumers Energy

2009
ITC announces Green Power Express wind-energy transmission vision as catalyst to advance regional transmission in upper Midwest

2012
ITC completes KETA transmission line in Kansas

2014
ITC completes Kansas V-Plan project in partnership with Sunflower Electric Power Corp.

2016
• ITC Holdings Corp. becomes a subsidiary of Fortis Inc.
• ITC Midwest advances four MISO MVP projects through regulatory and construction phases

NG-IV#2 500kV Transmission Project
ITC TODAY

$6.5B INVESTED IN INFRASTRUCTURE SINCE 2003

- 4 Subsidiaries in 8 states
- 15,800 Circuit miles
- 90,000 Square mile service territory
- 600+ Employees
- Member of 4 RTOs:
  - MISO, SPP, PJM, NYISO
- Geographically flexible business model
- A Fortis company
  - Fortis is a leader in the North American regulated electric and gas utility industry with total assets of approximately C$47 billion as of September 30, 2017. The Corporation’s more than 8,000 employees serve utility customers in five Canadian provinces, nine U.S. states and three Caribbean countries.
NG-IV#2 PROJECT: THE NEED

- Rapid population growth and increasing energy demands in the Southwest require additional transmission grid capacity.

The North Gila Imperial Valley #2 transmission line:

- Provides IID and CAISO additional import/export access from generation resource zones where transmission access currently is limited
- Increases diversity, reliability and efficiency of the regional grid
- Enables more renewable energy developers to tap into the regional grid
- Provides support to greenhouse gas (GHG) reduction targets
NG-IV#2 PROJECT OVERVIEW

Permitted Up to a Double-Circuit 500kV or 230kV Transmission Line
- Between existing North Gila Substation east of Yuma, AZ and the existing Imperial Valley Substation southwest of El Centro, CA
- One circuit to loop into the existing Highline Substation (IID) (500kV or 230kV)
- North Gila – Highline 500kV: ~61 miles, 2x2156 ACSR, up to 45% series comp (at Highline and to balance the flow on NGIV2 and SWPL)
- Highline – Imperial Valley 500kV: ~36 miles, 2x2156 ACSR
- Highline 500/230kV: 1120MVA
- 250 foot separation from existing SWPL

Anticipated Rating Increase
- Will depend on final configuration (single or double circuit)
- Comprehensive Project Report (Phase 1 Study, single 500kV config.)
- An Increase of Path 46 (West Of River) +1250MW (single circuit, 500kV), total of 12,450MW
- An Increase of Path 49 (East Of River) to be determined
NG-IV#2 500kV Transmission Project

PROJECT ONE-LINE DIAGRAM

Imperial Valley 500 kV Bus

36 Miles

Highline 500 kV Bus

61 Miles

North Gila 500 kV Bus

- 75 MVAR 525kV BASE
- 10%

Series Cap 44% Compensation
2700 Amp
x=0.0100

- 75 MVAR 525kV BASE

500kV BASE

NORTH GILA - HIGHLINE (36 miles)
Z: (p.u.) R = 0.000026, X = 0.01431, B = 1.09465

HIGHLINE - IMPERIAL VALLEY (36 miles)
Z: (p.u.) R = 0.000066, X = 0.00867, B = 0.542641
SINGLE VS. DOUBLE-CIRCUIT TOWER DESIGN

- Planned construction using lattice steel structures (public lands) and/or monopole steel structures (private lands)

- Structure type will be determined by suitability for each portion of route (single vs. double, 500kV vs. 230kV) ROW width is the same

- Project estimate: $250M to $400M
MAJOR ENVIRONMENTAL PERMITS

STATUS

ROW Grant from BLM
- ROW application submitted and accepted (CRA funding in place)
- Developed draft Plan of Development (POD)
- Environmental Impact Statement (EIS) required to comply with National Environmental Policy Act (NEPA)
  - BLM will be lead agency for EIS, national PM assigned
  - Work initiated in late 2013, Scoping in Q2 2018 (anticipated)
  - Multiple meetings with agencies, tribes to confirm route alternatives

CEQA Compliance for Portions in CA
- Environmental Impact Report (EIR) required

Certificate of Environmental Compatibility in AZ
Imperial County
- ~35 miles
- Private / Agricultural lands

BLM Land
- ~55 miles, all within designated corridor
- Also at IV Sub
WECC Three-Phase Rating Process

- Granted Phase 1 Status, September 2011
- Issued WECC Phase 1 CPR February 18, 2016
- Granted Phase 2 Status, September 2016
- Targeting to have an Accepted Rating complete in 2018 for 1250MW

Participative with CAISO, WECC, WestConnect

- WestConnect (TPPL) and CAISO planning efforts
  - Anticipating submittal of project proposal into 2018-2019 Western Interconnection Interregional Transmission Coordination process
  - Anticipating submittal of project into CAISO 2018-2019 Transmission Planning Process
- Joint Planning Study with SDGE for a hybrid analysis of the HVDC (IV to Miguel only) and NGIV2
- Working with IID on multiple benefits for the IID (reliability, increase capacity, O&M services, etc.)
# PROPOSED PROJECT SCHEDULE

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QUESTIONS?