



STEVE SISOLAK
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STATE OF NEVADA
PUBLIC UTILITIES COMMISSION

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Commissioner

STEPHANIE MULLEN
Executive Director

January 31, 2019

Richard Combs, Director
Legislative Counsel Bureau
Nevada Legislature
Capitol Complex
Carson City, Nevada 89710

Re: Report to Legislature on Transmission pursuant to NRS 704.754

Dear Mr. Combs:

Pursuant to NRS 704.754, the Public Utilities Commission of Nevada (PUCN) is required on or before February 15 of each odd-numbered year to review, approve, and submit to the Director of the Legislative Counsel Bureau for transmittal to the next regular session of the Nevada Legislature a written report compiling all information about any transmission plan proposed by, adopted by, or made known to the PUCN since the last report. This Report is submitted in compliance with NRS 704.754.

The Report compiles information on projects made known to the PUCN through the Utility Environmental Protection Act (UEPA) process and utility transmission plans filed with the PUCN by regulated utilities over the last biennium. The PUCN takes no position regarding whether the projects listed in the Report will be constructed.

Please be advised that NRS 704.865(d) exempts from its requirements transmission projects involving utility facilities that will be wholly owned by cooperatives, nonprofit corporations, or associations on federal lands and are subject to the provisions of the National Environmental Policy Act of 1969, 42 U.S.C. 4321 §§ et seq. Consequently, the PUCN has not been formally noticed of such projects, and they are not included with this Report.

Finally, NRS 704.754 provides that the PUCN submit all information about any transmission plan. The PUCN respectfully submits that the transmission plans filed and discussed herein are voluminous, including detailed multi-volume engineering and environmental studies. Therefore, the PUCN has not included all of the information submitted with transmission plans. However, this information is available within the respective dockets on the PUCN's website at www.puc.nv.gov.

The PUCN will gladly provide any assistance the Legislature requires to access this information should further detail be desired.

Please contact me if you have any questions or concerns regarding the Report.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Stephanie Mullen', with a large, stylized initial 'S'.

Stephanie Mullen
Executive Director

Enc.

The Public Utilities Commission of Nevada
“Biennial Transmission Projects Report 2017-2018”
(NRS 704.754)

UEPA Application Projects

Under the UEPA, the PUCN is able to assess the siting of utility facilities in Nevada, including electric transmission facilities. Nevada Revised Statute (NRS) 704.860(2) (a) defines a transmission facility as a transmission line or substation in excess of 200 kilovolts (kV). This definition includes generation-tie (gen-tie) lines that run from the generator to a utility’s transmission grid. Gen-tie lines are not typically considered to be transmission facilities by the Federal Energy Regulatory Commission (FERC), which is responsible for the regulatory oversight of transmission facilities.

From January 1, 2017, to December 31, 2018, the PUCN has been made aware of the following UEPA projects related to new transmission projects. The PUCN does not know which of the projects listed in the UEPA applications will be permitted and constructed.

	PUCN Docket No.	Date Filed	Description of the Application/Notice
1	17-04016	4/14/2017	Application of Round Mountain Gold Corporation, under the provisions of the Utility Environmental Protection Act, for a permit to relocate approximately 13,003 feet of existing 230 kV transmission line into a proposed 230 kV Powerline Right of Way corridor to accommodate a planned mine expansion project located in Round Mountain, Nye County, Nevada.
2	17-07016	7-14-2017	Notice by Southern California Public Power Authority, under the provisions of the Utility Environmental Protection Act, of an application to a federal agency for approval to construct the Apex Transmission Line consisting of approximately 10 to 14 miles of 500 kV transmission line and associated facilities to be located in Clark County, Nevada.
3	17-07024	7/21/2017	Notice by Solar Partners XI, LLC, under the provisions of the Utility Environmental Protection Act, of an application to a federal agency for approval to construct up to a 690 MW alternating current photovoltaic solar facility and associated facilities to be located approximately 25 miles north of Las Vegas in Clark County, Nevada.

4	17-08003	8/07/2017	Notice by Sandstone Solar Energy, LLC, under the provisions of the Utility Environmental Protection Act, of an application to a federal agency for approval to construct an up to 1,600 MW concentrating solar power electric generation facility and associated facilities to be located north of Tonopah in Nye County, Nevada.
5	17-08013	8/18/2017	Notice by GridLiance West Transco LLC, under the provisions of the Utility Environmental Protection Act, of an application to a federal agency for approval to construct an up to 4.5-mile long 230 kV transmission line and associated facilities to be located in Boulder City, Clark County, Nevada.
6	17-09013	9/15/2017	Application of ORNI 41 LLC, under the provisions of the Utility Environmental Protection Act, for a permit to construct the McGinness Hills III Project consisting of an approximately 0.5 mile long 230 kV gen-tie transmission line and associated facilities, including a 62 MW geothermal energy generating facility, to be located approximately 10 miles northeast of Austin in Lander County, Nevada.
7	18-02004	2/01/2018	Notice by Aurora Solar, LLC, under the provisions of the Utility Environmental Protection Act, of an application to a federal agency for approval to construct a 120 kV generation-tie line and access road associated with the Iron Point Solar Project, to be located approximately 30 miles east of Winnemucca, Humboldt County, Nevada.
8	18-04002	4/04/2018	Notice by Aurora Solar, LLC, under the provisions of the Utility Environmental Protection Act, of an application to a federal agency for approval to construct a 120 kV generation-tie line and access road associated with the Iron Point Solar Project, to be located approximately 30 miles east of Winnemucca in Humboldt County, Nevada.
9	18-04003	4/04/2018	Notice by Magnolia Lands, LLC, under the provisions of the Utility Environmental Protection Act, of an application to a federal agency for approval to construct the Magnolia Solar Project consisting of an up to 100 MW photovoltaic solar electric generating facility and associated facilities to be located in Clark County, Nevada.
10	18-04004	4/04/2018	Notice by Red Valley Lands, LLC, under the provisions of the Utility Environmental Protection Act, of an application to a federal agency for approval to construct the Red Valley Solar Project consisting of an up to 200 MW photovoltaic solar electric generating facility and associated facilities to be located in Clark County, Nevada.

11	18-04005	4/04/2018	Notice by Red Flats Lands, LLC, under the provisions of the Utility Environmental Protection Act, of an application to a federal agency for approval to construct the Red Flats Solar Project consisting of an up to 500 MW photovoltaic solar electric generating facility and associated facilities to be located in Clark County, Nevada.
12	18-05021	5/17/2018	Application of Nevada Power Company d/b/a NV Energy, under the provisions of the Utility Environmental Protection Act, for a permit to construct a 230/138kV autotransformer and associated facilities at the McDonald Substation located in Clark County, Nevada
13	18-06023	6/14/2018	Notice by Fish Springs Ranch, LLC, under the provisions of the Utility Environmental Protection Act, of an application to a federal agency for approval to construct a 34.5 kV collection line and an access road to be located in Washoe County, Nevada.
14	18-06024	6/14/2018	Notice by Dodge Flat Solar, LLC, under the provisions of the Utility Environmental Protection Act, of an application to a federal agency for approval to construct a 34.5 kV collection line and an access road to be located in Washoe County, Nevada.
15	18-10003	10/08/2018	Application of Nevada Power Company d/b/a NV Energy, under the provisions of the Utility Environmental Protection Act, for a permit to construct a steel double-circuit 230kV transmission structure, approximately 500 feet of double-circuit 230kV overhead transmission line, and associated facilities to be located in Clark County, Nevada.
16	18-10013	10/15/2018	Application of Lovelock Solar Energy LLC, under the provisions of the Utility Environmental Protection Act, for a permit to construct the Lovelock Solar Energy Project consisting of an approximately 190 MW alternating current photovoltaic solar electric generating facility and associated facilities to be located east of Oreana in Pershing County, Nevada.
17	18-10030	10/29/2018	Notice by GridLiance West LLC, under the provisions of the Utility Environmental Protection Act, of an application to a federal agency for approval to construct the Carpenter Canyon Substation, consisting of a 230 kV substation and associated facilities, to interconnect an existing 230 kV transmission line with the ARES Nevada LLC Regulation Energy Management project to be located east of Pahrump in Nye County, Nevada.

18	18-11007	11/14/2018	Notice by 325MK 8me LLC, under the provisions of the Utility Environmental Protection Act, of an application to a federal agency for approval to construct an approximately 12.4-mile 230 kV generation-tie transmission line to connect a 300 MW photovoltaic solar facility with the Reid Gardner Substation, to be located in Clark County, Nevada.
19	18-12004	12/07/2018	Notice by Crescent Valley Solar Energy LLC, under the provisions of the Utility Environmental Protection Act, of an application to a federal agency for approval to construct a 34.5 kV generation-tie transmission line and access road associated with a photovoltaic solar electric generation facility, to be located in Lander County, Nevada.
20	18-12005	12/07/2018	Notice by Candela Renewables, LLC, under the provisions of the Utility Environmental Protection Act, of an application to a federal agency for approval to construct the Newlands Solar Project consisting of an up to 500 MW photovoltaic solar electric generating facility, a 345 kV transmission line, and associated facilities, to be located in Churchill County, Nevada.

Transmission Projects Approved by the PUCN and Project updates

From January 1, 2017, to December 31, 2018, the PUCN processed applications addressing the following transmission projects. The following projects are current projects that have been brought to the PUCN by Nevada Power Company (NPC) and Sierra Pacific Power Company (SPPC) for approval:

21	17-11003	11/01/2017	Application of Sierra Pacific Power Company d/b/a NV Energy for approval of the second amendment to its 2017-2036 Integrated Resource Plan as it relates to an updated long-term base load forecast, two new renewable power purchase agreements, one transmission project, and certain projects in its generation capital budget plan for 2018.
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SPPC requested and received approval for the East Tracy Substation Transformer. SPPC needs the additional transformer to ensure reliable service in the Tracy area due to increased load and demand. The projected is estimated to cost \$10 million.

22	17-11004	11/01/2017	Application of Nevada Power Company d/b/a NV Energy for approval of the third amendment to its 2016-2035 Integrated Resource Plan as it relates to an updated long-term base load forecast, a new renewable power purchase agreement, two transmission projects, and certain projects in its generation capital budget plan for 2018.
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NPC requested and received approval for the McDonald 230/138 kV substation project. The project is required to alleviate overloads on the 138 kV system due to load growth in the area. The project includes the installation of a 230/138 kV transformer, substation infrastructure and the necessary communication and safety equipment. The estimated cost of the project is \$12.7 million.

23	18-06003	6/01/2018	Joint Application of Nevada Power Company d/b/a NV Energy and Sierra Pacific Power Company d/b/a NV Energy for approval of their 2019-2038 Triennial Integrated Resource Plan and 2019-2021 Energy Supply Plan.
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NV Energy requested and received approval for four network upgrade transmission projects. These are transmission projects to support the connection of photovoltaic resources to the electric transmission system. The photovoltaic resources are associated with purchased power agreements approved by the PUCN and include: Dodge Flat Solar, Fish Springs Ranch, Eagle Shadow Mountain Solar and Copper Mountain. The cost of these projects is estimated to be \$23 million. The PUCN also authorized approval to re-conductor 1.45 miles of a segment of the 230 kV transmission line from Arden to McDonald. The new conductor allows NV Energy to meet expected growth in a reliable manner. The cost of this project is estimated to be \$720,000.

Other Developments

The projects discussed below were not brought before the PUCN for approval. Even though these projects were included in the previous Transmission Report, they are important projects that are expected to affect future economic benefits to the state Nevada. Consequently, updates to these projects align with the intent of this transmission report and, therefore, a refreshed update is provided below.

TransWest Express Transmission Project: Planning for this project began in 2007 with the goal of transporting Wyoming renewable energy to the southwest states. The project is now touted as having the ability to send and receive power from/to the Rocky Mountain region. The project is an interconnection project that extends from Wyoming through Utah and then to the Market Place transmission hub in southern Nevada, which provides interconnection into Nevada, Arizona, and

California. On December 13, 2016, following environmental review, the project received approval from the Bureau of Land Management. The TransWest Express Project, per the project website, is currently expected to be constructed in the 2020-2022 timeframe.

DesertLink Transmission Project: In December 2014, the California ISO (CAISO) Board of Governors approved the 60 mile 500 kV line between the Harry Allen Substation and the Eldorado Substation as part of the 2013-2014 Transmission Plan. The project was estimated to cost \$182 million and was to be paid for by CAISO customers. In 2016, following a competitive bid process, DesertLink, LLC, a wholly-owned subsidiary of LS Power Associates, was approved to finance, construct, own, operate, and maintain the Harry Allen–Eldorado project. This project will allow greater access to generation resources located in Nevada. Construction of the project per the DesertLink website is set to begin in Q3 of 2018, with a planned in service date of Q2 2020.