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8-16-2021

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Repository Citation

Thymianos, K., Salahi, S., Brown, W. E. (2021). Operating Solar Projects in Nevada, 2021. *Environment Fact Sheet No.* 51-3.

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OPERATING SOLAR PROJECTS IN NEVADA, 2021

Environment Fact Sheet No. 5 | August 2021

Prepared by: Kristian Thymianos, Saha Salahi, and William E. Brown, Jr.

PURPOSE:

The U.S. Energy Information Administration $(EIA)^1$ and the Solar Energy Industries Association $(SEIA)^2$ both provide national databases that contain comprehensive lists of active solar projects in the United States. This fact sheet provides a list of operating solar projects in the State of Nevada.

ABOUT THE DATA:

The data collected from EIA and SEIA include information such as the solar project's name, the county where the solar project is located, how the solar energy is generated, and each project's megawatt (MW) capacity. Below are five key terms that define the metrics related to the state's solar projects.

Solar Power	Energy from the sun that is converted into thermal or electrical energy.
Megawatt (MW)	A unit for measuring power that is equivalent to one million watts of electricity.
Operating Solar Projects	Projects that are in efficient condition and are being used for power production.
Photovoltaic (PV)	Devices that generate electricity directly from sunlight through an electronic process that occurs naturally in certain types of material.
Concentrated Solar Power (CSP)	Plants that use mirrors to concentrate the sun's energy to drive traditional steam turbines or engines that create electricity.

*Definitions from Solar Energy Industries Association, (2017).

KEY FINDINGS:

- 1. Seven counties in Nevada have solar projects: Clark (37), Churchill (5), Nye (3), Washoe (3), Lyon (2) Mineral (1), and Storey (1).
- 2. Eight of the top ten projects with the highest megawatt capacity are in Clark County.
- 3. Nine of the top ten projects are powered by photovoltaic devices.
- 4. In Nevada 49 out of the 52 solar projects are operated by photovoltaic devices.
- 5. Of the 17 counties in Nevada, 10 do not have any listed operating solar projects.

¹U.S. Energy Information Administration for Nevada State Profile and Energy Estimates, 2019. (https://www.eia.gov/state/?sid=NV)

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Table 1 lists 52 operating solar projects in Nevada and the county location, the megawatt capacity, whether a project utilizes PV or CSP, and if the project was found in the EIA or SEIA dataset. The top ten solar projects all have a capacity of at least 100 megawatts. Eight of the top ten MW capacities are in Clark County and nine of the top 10 are PV projects.

Solar Project Name	County	Megawatt Capacity	PV/CSP	EIA	SEIA
Copper Mountain Solar	Clark	552.0	PV		✓
Copper Mountain Solar 3	Clark	255.0	PV	\checkmark	
Moapa Southern Paiute	Clark	250.0	PV	\checkmark	✓
Silver State Solar Power South	Clark	250.0	PV	\checkmark	✓
Techren	Clark	250.0	PV		✓
Techren Solar II LLC	Clark	200.0	PV	\checkmark	
Copper Mountain Solar 2	Clark	154.0	PV	\checkmark	
Crescent Dunes Solar Energy	Nye	110.0	CSP	\checkmark	✓
Sunshine Valley Solar	Nye	103.5	PV	\checkmark	
Boulder Solar Power, LLC	Clark	100.0	PV	\checkmark	✓
Playa Solar 2	Clark	100.0	PV		✓
Techren Solar I LLC	Clark	100.0	PV	\checkmark	
Copper Mountain Solar 4, LLC	Clark	93.6	PV	\checkmark	
Playa Solar 1, LLC	Clark	78.0	PV	\checkmark	
Nevada Solar One	Clark	75.7	CSP	\checkmark	✓
Silver State Solar Power North	Clark	52.0	PV	\checkmark	✓
Boulder Solar II, LLC	Clark	50.0	PV	\checkmark	✓
Luning	Mineral	50.0	PV	\checkmark	✓
CM48	Clark	48.0	PV	✓	✓
Spectrum Solar PV Power Project	Clark	30.0	PV	✓	✓
Stillwater Facility	Churchill	24.0	PV		✓
Fort Churchill (Apple Portion)	Lyon	22.0	PV		✓
Apex Solar PV Power Project	Clark	20.0	PV	✓	✓
EGP Stillwater Solar PV II, LLC	Churchill	20.0	PV	✓	✓
Mountain View Solar	Clark	20.0	PV	✓	✓
Wynn Solar Facility	Churchill	20.0	PV		✓
Fort Churchill PV	Lyon	19.9	PV		✓
Searchlight Solar	Clark	17.5	PV	✓	✓
Nellis Solar PV II	Clark	15.0	PV	✓	
NVSS-II	Nye	15.0	PV	\checkmark	✓
River Mountains Solar, LLC	Clark	14.4	PV	✓	
Nellis Air Force Base Solar Array	Clark	14.0	PV	✓	✓
Nevada Solar One Expansion	Clark	11.0	CSP		✓
Patua Acquisition Project, LLC	Churchill	10.6	PV		✓
CM10	Clark	10.0	PV	✓	✓
Turquoise Liberty Solar	Washoe	10.0	PV	✓	✓
MGM Resorts	Clark	8.3	PV		✓
Tungsten	Churchill	7.3	PV		✓
MGM Resorts	Clark	6.4	PV		✓
NRG Solar Las Vegas MB-1	Clark	5.0	PV	✓	✓
Las Vegas WPCF Solar Plant	Clark	3.3	PV	\checkmark	✓

Table 1: Operating Solar Projects in Nevada, 2021

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Solar Project Name	County	Megawatt Capacity	PV/CSP	EIA	SEIA
Dignity-San Martin	Clark	1.7	PV	✓	✓
NRG Solar Las Vegas MB-2	Clark	1.5	PV	\checkmark	✓
Amazon	Washoe	1.4	PV		✓
Dignity - Siena Campus	Clark	1.4	PV	\checkmark	✓
Brookfield Properties Retail	Clark	1.1	PV		\checkmark
Amazon	Clark	1.1	PV		\checkmark
Faith Lutheran JR/SR High School	Clark	1.1	PV		✓
Edward C. Reed High School	Washoe	1.0	PV		\checkmark
Ikea	Clark	1.0	PV	✓	\checkmark
Mars	Clark	1.0	PV		✓
Western 102 Power Plant	Storey	1.0	PV		✓

*Adapted from U.S. Energy Information Administration, "Nevada State Profile and Energy Estimates," (2019) and Solar Energy Industries Association Database, (2017).