DOCKETED	
Docket Number:	23-SB-100
Project Title:	SB 100 Joint Agency Report
TN #:	253121
Document Title:	Gallatin Power Partners, LLC Comments - on SB 100 Analytical Framework Workshop
Description:	N/A
Filer:	System
Organization:	Gallatin Power Partners, LLC
Submitter Role:	Public
Submission Date:	11/14/2023 4:12:37 PM
Docketed Date:	11/14/2023

Comment Received From: Gallatin Power Partners, LLC
Submitted On: 11/14/2023
Docket Number: 23-SB-100

Gallatin Power Partners, LLC Comments - on SB 100 Analytical Framework Workshop

Additional submitted attachment is included below.

November 14, 2023
California Energy Commission
715 P Street Sacramento, CA 95814

RE: Docket #: 23-SB-100: SB 100 Joint Agency Report

Gallatin Power Partners, LLC (Gallatin Power) herein submits comments in response to the October 31, 2023 presentation SB 100 Analytical Framework Workshop (Workshop) presented as part of Docket 23-SB-100

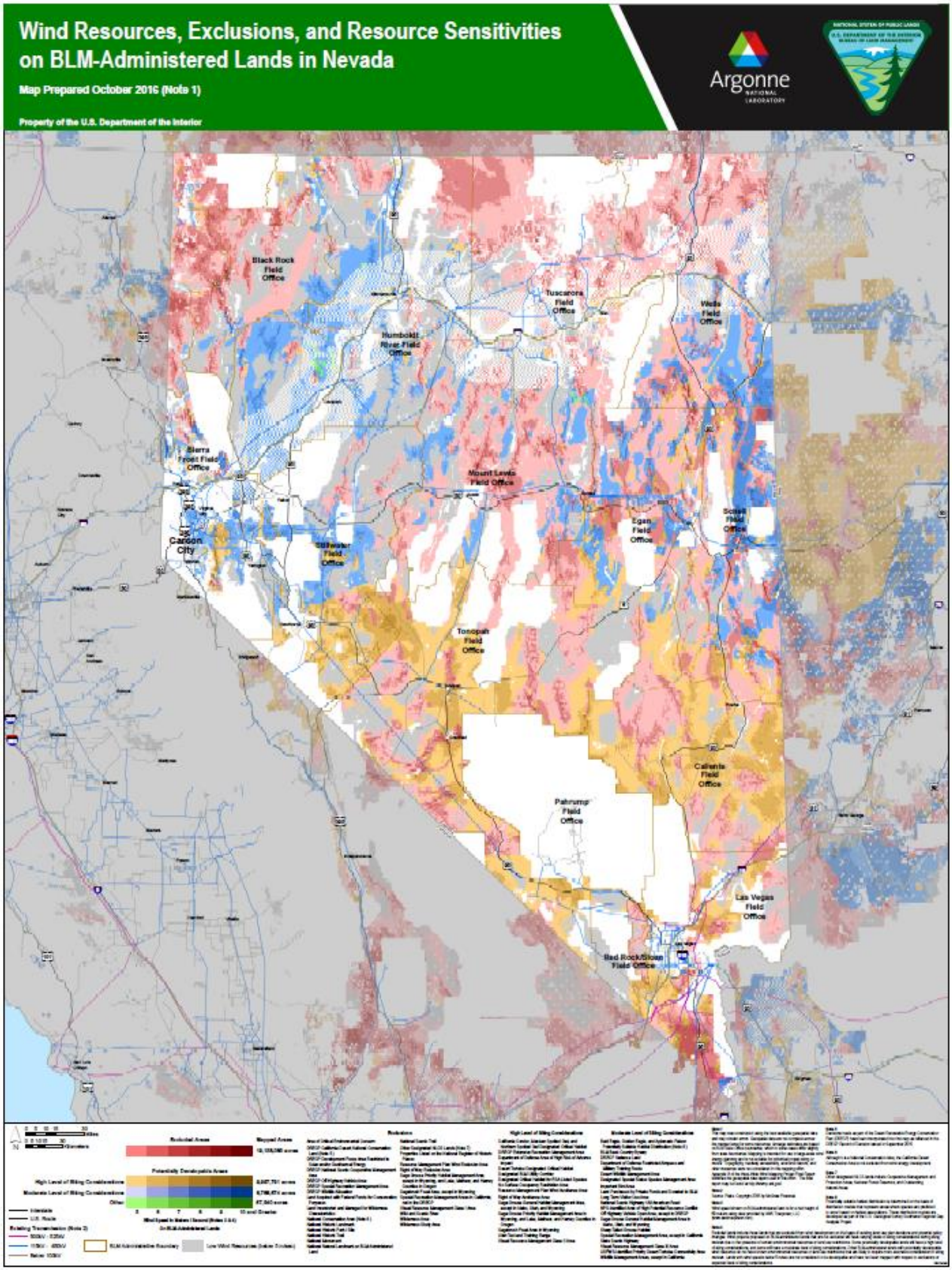
Gallatin Power strongly supports the utilization of the proposed Geographic Diversification Scenario in the 2025 SB 100 Report. Gallatin Power appreciates the work that the California Public Utilities Commission (CPUC), California Energy Commission (CEC), and California Air Resources Board (CARB), are performing to evaluate alternative scenarios around cost, technology innovation, and project development to achieve the goals outlined in SB 100. The Department of Energy (DOE) released the National Transmission Needs Study (NTNS) on October 30th, 2023. The NTNS estimates that in high load, high clean energy growth scenarios that interregional transmission will need to increase by 412% by 2035[1]. Gallatin Power recommends adding increased out of state resources to the Geographic Diversification Scenario to encourage the amount of interstate transmission identified as necessary by the NTNS. The Geographic Diversification Scenario should include increased out of state resource adoption in addition to the change in Increased Interstate Transmission and Reduced Hurdle Rates identified in the Workshop.

Gallatin Power recommends adding increased amount of Out of State wind, solar, geothermal and battery storage from the Central and Northern Nevada regions in the Geographic Diversification Scenario. Gallatin Power recognizes the abundance of wind, solar and geothermal resources in Nevada that can help to achieve California's decarbonization efforts at the lowest possible cost. To support this and to help further clarify the developable wind resource potential in Nevada, attached as Figure 1 is a map titled "Wind Resources, Exclusions, and Resource Sensitives on BLM-Administered Lands in Nevada" prepared by the U.S. Department of Interior (DOI), Bureau of Land Management (BLM) and Argonne National

[1] https://www.energy.gov/sites/default/files/2023-10/National_Transmission_Needs_Study_2023.pdf

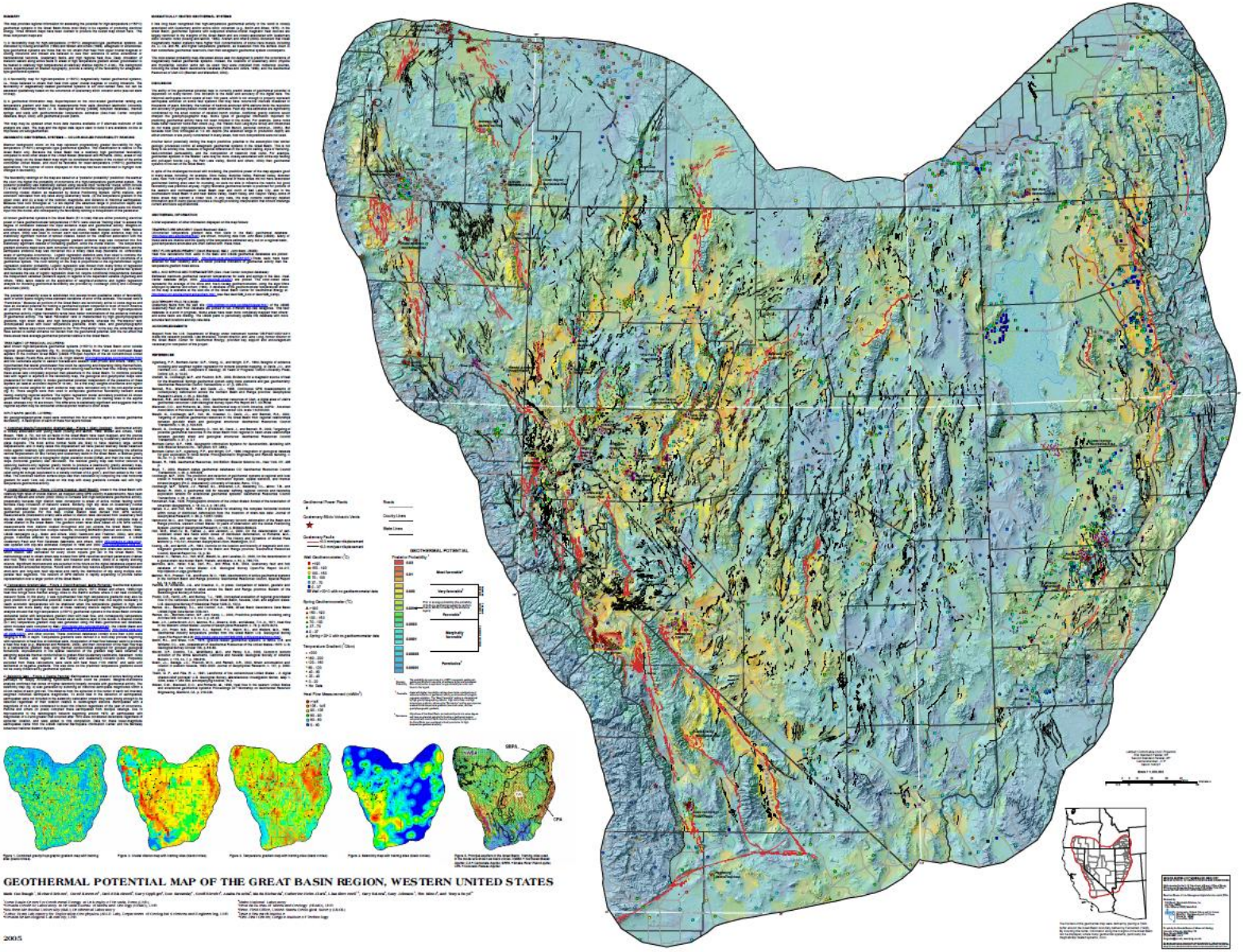
Laboratory illustrating the substantial wind potential areas in central and northern Nevada, with fewer permitting considerations than in the southern region. Although parts of southern Nevada have a strong wind resource, a significant amount of these lands are in “Excluded Areas” or identified as requiring “High Level of Siting Consideration”, which significantly limits the amount of development that can occur. Whereas, central and northern Nevada show strong wind resource with more land identified as having “Moderate Level of Siting Considerations” while also having close proximity to California. Note that the wind speed data presented in this map assumes a wind turbine hub height of 80 meters. Even with a relatively low hub height of 80m, there are 6,788,674 acres of BLM land with a wind speed of 5m/s or greater that have a “Moderate” level of siting considerations. Almost all of this land is located in central or northern Nevada.

Figure 1. Wind Resources, Exclusions, and Resource Sensitives on BLM-Administered Lands in Nevada



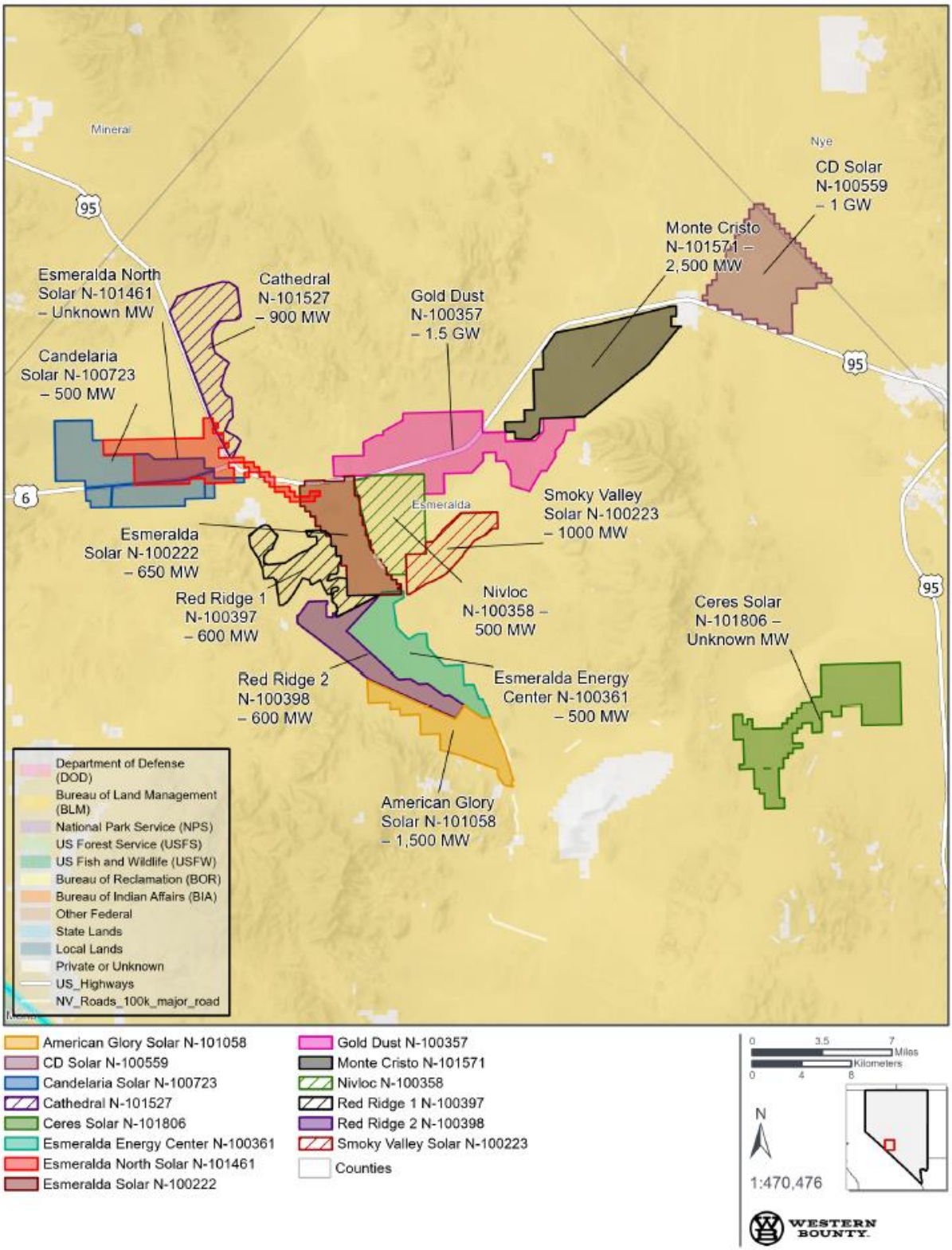
Central and northern Nevada also have substantial potential for geothermal energy. A map prepared by the Nevada Bureau of Mines and Geology titled “Geothermal Potential Map of the Great Basin Region, Western United States”, included below as Figure 2, depicts favorability for Geothermal Potential in the greater Nevada area. Favorability is generally greatest in northwestern Nevada, with high favorability ratings beginning in Esmeralda County and northwest Nye County and continuing to the north. Esmeralda County can be viewed as the gateway for California into the strongest geothermal potential area in Nevada, directly abutting Mono and Inyo counties to the east, and lying only ~50 miles from the SCE Control Substation near Bishop, California.

Figure 2. Geothermal Potential Map of the Great Basin Region, Western United States



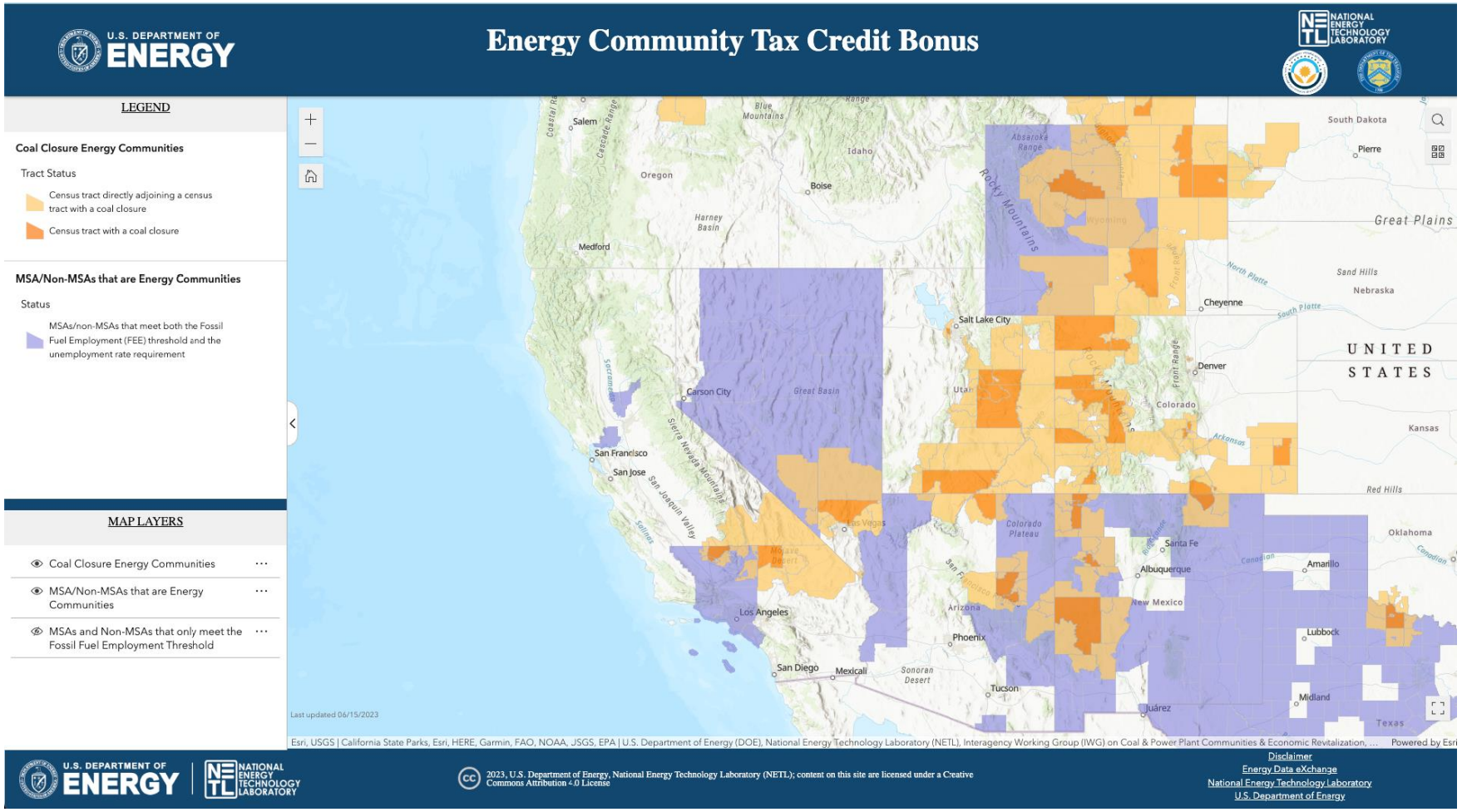
Esmeralda County is also a center for solar development in Nevada. As of November 2023, there are 14 active applications for large-scale solar and storage facilities on BLM lands in Esmeralda County, totaling over 11,000MW. A map depicting these facilities is included below as Figure 3. This area is particularly attractive for solar development due to its strong solar resource, low environmental and cultural sensitivity and the low-cost land lease rates available on BLM lands. Gallatin Power suggests that this development is a reflection of the commercial interest in the area and that increasing amounts of Nevada solar from central and northern Nevada be included in the Geographic Diversification Scenario.

Figure 3. Active Esmeralda, NV Area Solar Developments



Furthermore, Gallatin Power would like to draw attention to the Energy Community designation for almost the entire state of Nevada, with the exception of the southern tip and the northwestern border of the state. This classification renders the region eligible for bonus Investment Tax Credit (ITC) and Production Tax Credit (ITC) under the Inflation Reduction Act. Included below Figure 4 is a map depicting the designated Energy Communities in the western United States, as of November 2023. Leveraging the federal Energy Community bonus incentive would lead to lower cost renewable energy resources for California ratepayers when compared to resources in states without Energy Community status, such as Idaho.

Figure 4.


U.S. DEPARTMENT OF ENERGY
Energy Community Tax Credit Bonus
NATIONAL ENERGY TECHNOLOGY LABORATORY
LEGEND
Coal Closure Energy Communities
Tract Status
Census tract directly adjoining a census tract with a coal closure
Census tract with a coal closure
MSA/Non-MSAs that are Energy Communities
Status
MSAs/non-MSAs that meet both the Fossil Fuel Employment (FEE) threshold and the unemployment rate requirement
MAP LAYERS
Coal Closure Energy Communities
MSA/Non-MSAs that are Energy Communities
MSAs and Non-MSAs that only meet the Fossil Fuel Employment Threshold
Salem
Oregon
Boise
Idaho
Medford
Harney Basin
Blue Mountains
Cascade Range
Coastal Range
Absaroka Range
Rocky Mountains
Great Plains
South Dakota
Pierre
Nebraska
Sand Hills
Cheyenne
North Platte
South Platte
Salt Lake City
Utah
Denver
Front Range
Colorado
UNITED STATES
Kansas
Arkansas
Red Hills
Oklahoma
Carson City
Great Basin
Sierra Nevada Mountains
San Francisco
San Jose
San Joaquin Valley
Salinas
Las Vegas
Mojave Desert
Colorado Plateau
Santa Fe
Albuquerque
Amarillo
New Mexico
Arizona
Los Angeles
Phoenix
Lubbock
San Diego
Mexicali
Sonoran Desert
Tucson
Midland
Juárez
Texas
Last updated 06/15/2023
Esri, USGS | California State Parks, Esri, HERE, Garmin, FAO, NOAA, JSGS, EPA | U.S. Department of Energy (DOE), National Energy Technology Laboratory (NETL), Interagency Working Group (IWG) on Coal & Power Plant Communities & Economic Revitalization, ...
Powered by Esri
U.S. DEPARTMENT OF ENERGY
NATIONAL ENERGY TECHNOLOGY LABORATORY
2023, U.S. Department of Energy, National Energy Technology Laboratory (NETL); content on this site are licensed under a Creative Commons Attribution 4.0 License
Disclaimer
Energy Data eXchange
National Energy Technology Laboratory
U.S. Department of Energy

Finally, Gallatin Power would like to call attention to the cost uncertainty of the resources included in the Resource Diversification Scenario, particularly Offshore Wind. According to BloombergNEF, "The levelized cost of electricity of a subsidized US offshore wind project has increased to $114.20 per megawatt-hour in 2023, up almost 50% from 2021 levels in nominal terms, according to BloombergNEF calculations[2]." Gallatin Power recommends including recently updated and regionally relevant cost information for these emerging technologies, particularly for Offshore Wind in the Proposed Scenario. Gallatin Power believes that including increased amounts of Offshore Wind at the expense of traditional, onshore generation could have the effect of limiting development of onshore renewable developments at the expense of unproven, and economically risky offshore wind developments.

In conclusion, Gallatin Power appreciates the opportunity to comment on the SB 100 Analytical Framework Workshop. Gallatin Power firmly believes that including additional central and northern Nevada wind, solar and geothermal resources, coupled with the transmission enhancements already included in the Geographic Diversification Scenario, will allow the upcoming SB 100 Report to evaluate the amounts of required interregional transmission required to bring low cost, reliable renewable resources to California.

Dated: November 14, 2023

Respectfully submitted,

Marian Bonar
Gallatin Power Partners, LLC
marian@gallatinpower.com

[2] https://about.bnef.com/blog/soaring-costs-stress-us-offshore-wind-companies-ruin-margins/