Date of Hearing: April 12th, 2023

ASSEMBLY COMMITTEE ON UTILITIES AND ENERGY
Eduardo Garcia, Chair
AB 580 (Bennett) – As Introduced February 9, 2023

SUBJECT: Multibenefit Land Repurposing Program: solar farms: report

SUMMARY: This bill directs the California Public Utilities Commission (CPUC) to consult relevant state agencies about challenges to developing zero-emission energy infrastructure using grant funding from the Multibenefit Land Repurposing Program (MLRP).

Specifically, **this bill**:

1) Directs the CPUC to consult by July 1, 2024, with the Department of Conservation (DOC), the California Energy Commission (CEC), and the California Independent System Operator (CAISO) about challenges to developing zero-emission energy infrastructure using grant funding from the MLRP, and to develop best practices for navigating those challenges.

2) Directs the CPUC to require a load-serving entity (LSE) to consider the best practices developed for addressing challenges to developing zero-emission energy infrastructure under the MLRP in its integrated resource plan (IRP).

3) Directs the CPUC to publish the results on the agency website by December 31, 2024, to assist MLRP funding recipients.

EXISTING LAW:

1) Requires the CPUC to review each distribution resources plan proposal submitted by an electrical corporation and approve, or modify and approve, a distribution resources plan for the corporation, as well as authorizes the CPUC to modify any plan to minimize overall system costs and maximize ratepayer benefit from investments in distributed resources. (Public Utilities Code § 769)

2) Defines LSEs as an electrical corporation, electric service provider, or community choice aggregator, but does not include a local publicly owned electric utility or The State Water Resources Development System (commonly known as the State Water Project.) (Public Utilities Code § 380)

3) Requires the CPUC to adopt a process for each LSE serving end-use customers in the state, to file an IRP and schedule periodic updates to the plan to ensure that LSEs accomplish specified objectives. Requires each LSE to prepare and file an IRP consistent with those objectives on a time schedule directed by the CPUC and subject to CPUC review. (Public Utilities Code § 454.52)

4) Requires that the IRP of each LSE contribute to a diverse and balanced portfolio of resources needed to ensure a reliable electricity supply that provides optimal integration of renewable energy resources in a cost-effective manner, meets the emissions reduction targets for greenhouse gas emissions established by the California Air Resources Board

(CARB) for the electricity sector, and prevents cost shifting among LSEs. (Public Utilities Code § 454.54)

5) Requires, pursuant to the Sustainable Groundwater Management Act (SGMA), that all groundwater basins designated as in a condition of critical overdraft by the Department of Water Resources (DWR) be managed under a groundwater sustainability plan (GSP), coordinated GSPs, or approved alternative plans by January 31, 2020. (Water Code § 10720.7)

6) Requires, pursuant to SGMA, that groundwater basins designated as high- or medium-priority basins by DWR be managed under a GSP, coordinated GSPs, or approved alternative plan by January 31, 2022, except as specified. (Water Code § 10720.7)

FISCAL EFFECT: Unknown. This bill is keyed fiscal and will be referred to the Committee on Appropriations for its review.

BACKGROUND:

Groundwater management and land fallowing. Over the past twenty years, net groundwater withdrawal in California has increased, while groundwater recharge has decreased due to a greater number of dry/drought years. Over the past 30 years, the San Joaquin Valley has been overdrafting groundwater by close to 2 million acre-feet annually, or roughly 10% of current use.[1] Even with new supply investments, at least 500,000 acres of land will likely need to come out of intensively irrigated production on a long-term basis.[2]

In the years since its passage in 2014, SGMA has provided a framework for sustainable groundwater management. SGMA requires entities in high- and medium- priority basins to establish a Groundwater Sustainability Agency (GSA) that, in turn, develops a plan (a GSP) to sustainably manage groundwater for the basin.[3] GSPs may include augmentation of supplies, reduction in water usage, or some combination of the two. GSPs must achieve sustainability by 2040 for critically over drafted basins, and 2042 for the remaining high and medium priority basins.

During periods of groundwater recharge, land can either be strategically managed or left unmanaged while idle. Land taken out of production without strategic management could result in idle lands with dust and weed problems, compromising air quality, neighboring farmland, and increasing the difficulty of conversion to some future use. One option for maintaining land in working condition is to convert high-water demand, tree crop land to low-water demand grazing or flexible use land.

Land can also be converted to multi-benefit use land, providing a variety of functions including: improving water quality, increasing water supplies or water supply reliability, preserving, enhancing, or restoring wildlife habitat, and preserving or enhancing recreational opportunities. Conversion of land to provide these valuable, but often non-profit yielding functions, requires

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[1] Public Policy Institute of California (PPIC); "Priorities for California's Water"; November 2022
[2] PPIC; "Water and the Future of the San Joaquin Valley"; February 2019
[3] California Department of Water Resources; "Sustainable Groundwater Management Act (SGMA)"; https://water.ca.gov/programs/groundwater-management/sgma-groundwater-management

funding, often through grants to local agencies (GSAs, counties, and other entities) to be subsequently awarded to local farmers and applied towards land conversion. Multiple-benefit land management enables maximization of land opportunities while minimizing the hazards of idle land.

The Multibenefit Land Repurposing Program (MLRP). The MLRP, administered by the Department of Conservation, seeks to increase regional capacity to repurpose agricultural land to reduce reliance on groundwater while providing community health, economic wellbeing, water supply, habitat, and climate benefits. Established by the Legislature in SB 170 (Committee on Budget, Chapter 240, Statutes of 2021) and extended under AB 211 (Committee on Budget, Chapter 574, Statutes of 2022), the program supports coordinated, regional and basin-scale efforts to achieve groundwater sustainability in critically overdrafted basins and in high and medium priority basins where a state emergency drought declaration has been declared.[4] Proposals eligible for funding through the MLRP, as expressed in SB 170, include, but are not limited to, projects which create or restore permanent wildlife habitat, create or restore seasonal wetland habitat that provides aquifer replenishment, improves groundwater supply and recharge, or convert land to less intensive water use. Following the budgetary authorization in 2021, DOC released program guidelines that characterized the objectives of the MLRP as to "increase regional capacity to repurpose agricultural land to reduce reliance on groundwater while providing community health, economic wellbeing, water supply, habitat, renewable energy, and climate benefits."[5] No justification was given for the expansion of the program to include renewable energy projects. From 2021-2022, the MLRP was provided with $90 million from the General Fund.[6] Four projects were funded last year that directly focused on groundwater recharge, habitat conservation, and floodplain restoration.[7]

California Public Utilities Commission (CPUC). The CPUC is the state agency responsible for regulating LSEs and electric power generation in California. The CPUC uses public input, data provided by the utilities, the CEC, the CAISO, existing regulations and statute, and input from the Federal Energy Regulatory Commission to evaluate the need for additional power generation by the regulated utilities in both the long and short term. In regulating electricity generation development, the CPUC considers both the amount of power and how it can be used. As the percentage of renewable resources increases in California, the need for flexible power—which can ramp up and down to supplement solar and wind generation—increases. Additionally, there are load pockets in the state which need to be evaluated separately from the total load to assure local area reliability and local flexibility.[8]

COMMENTS:

1) *Author's Statement.* According to the author, "It is an unfortunate fact that cutting down on water use means that many farmers will need to fallow their agricultural land. This has

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[4] DOC; "Multibenefit Land Repurposing Program – Final Solicitation and Application"; January 2023
[5] DOC; "Multibenefit Land Repurposing Program –Solicitation and Application, Public Comment Draft"; Pg. 1; December 2021
[6] $50 million in 2021; $40 million in 2022
[7] DOC; "Multibenefit Land Repurposing Program – Regional Block Grant Project Summary"; https://www.conservation.ca.gov/dlrp/grant-programs/Documents/grant/2022%20MLRP%20Project%20Summaries.pdf
[8] CPUC; "Electric Power Procurement and Generation"; https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/electric-power-procurement

already begun to happen and you can see examples across the state. Programs that allow farmers to repurpose their fallowed ag land deserve our support because they are doing their part to conserve water. My bill requires that the PUC provide real support to farmers who want to convert their fallowed ag land to solar fields. It is important that we support farmers in every way we can during these unprecedented times."

2) *Barriers to developing energy generation on fallowed land*. Developing distributed zero-emission energy generation projects is an intensive process. Longstanding barriers to energy generation development can range from financing and economics to policy, and include challenges associated with integrating new resources into the electrical grid.[9] With the emergence of additional challenges in recent years, including supply chain issues and even more substantial delays in interconnection to the electrical grid, concern over these barriers preventing the repurposing of fallowed land to support energy generation are valid.[10] The CPUC already reviews proposals for the development of energy resources, suggesting that they would be able to effectively implement the study proposed by this bill.[11]

3) *Is energy development in line with the objectives of the MLRP?* The ultimate goal of the MLRP is to reduce groundwater use through the repurposing of agricultural land and to maximize additional benefits from the repurposed land. Specified approaches to repurposing land include creating or restoring wildlife habitat and wildlife connectivity, including seasonal wetland habitat to replenish aquifers. A few examples of such uses include habitat restoration, floodplain planning, and groundwater recharge. No projects awarded MLRP funds thus far have focused on the development of energy resources, though DOC program guidelines allow for such projects to be eligible. Using project funding to develop energy generation or transmission may fall under the broad scope of the project and could lead to reduction of water usage on farmland, but such use of funds would represent a departure from the legislative intent for the program which sought to support with state dollars water recharge projects that would otherwise be difficult to finance or lacking a sustained revenue stream once the land was fallowed.[12] This is not generally the case with energy development, where the land may be leased by the farmer to an energy developer (earning income off the lease) or an arrangement for the farmer to receive some percentage of the energy generation profits may occur (earning income off the energy sales).

   Incorporating energy development into the MLRP would likely divert public dollars from otherwise difficult-to-finance projects to directly subsidize for-profit energy development. If the MLRP was struggling to attract applications and at risk of being

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[9] CPUC; "Biennial Report on Impacts of Distributed Generation"; May 2013
[10] Reuters; "Wind, solar builders adapt power contracts as market risks swirl"; February 2022
[11] CPUC; "Distribution Resource Plan"; https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/infrastructure/distribution-resource-plan
[12] DOC; "Multibenefit Land Repurposing Program – Final Solicitation and Application"; January 2023

underutilized, an expansion of potential funding uses might be justified. However, in addition to the four projects funded in 2022, eight additional projects included in the 2022 MLRP award summary were not recommended for funding, suggesting that the program is successfully soliciting a healthy stream of grant applications and is being adequately utilized.[13]

4) *Refocusing and expanding the assessment*. The potential development of zero-carbon energy generation resources on fallowed agricultural land presents an opportunity to simultaneously address groundwater depletion and the availability of zero-emission energy, two key challenges facing California. However, routing this effort through a relatively small program intended to fund water conservation and habitat restoration-focused projects may adversely affect the MLRP and could inadvertently limit the scope of the CPUC study. Decoupling the CPUC assessment from the MLRP and expanding the scope to consider farmers who may want to develop energy generation on their fallowed land statewide could address both concerns. *As such, the author and committee may wish to consider amendments to remove reference to the MLRP or "grant recipients," and instead have the bill focused on a CPUC assessment of barriers to farmers for developing renewable resources on their properties.*

5) *Change of plans*. The Integrated Resource Plan (IRP) framework requires each LSE to contribute to a diverse and balanced portfolio of resources to support electricity supply reliability, optimize the integration of renewable energy resources, and meet greenhouse gas emissions reduction targets established by CARB. The process is largely unrelated to the potential challenges to electrical generation development on fallowed land. *As such, the author and committee should consider an amendment to remove any reference to the IRP by striking 913.2. (b) (2) from the bill.*

6) *Asking Food for thoughts?* This bill operates at the scale of individual grant recipients and zero-emission electrical generations projects in the $10 million range.[14] The CEC should be able to provide sufficient consultation to the CPUC on these projects, whereas CAISO generally operates on a larger scale, assessing transmission projects and balancing electrical generation and load statewide. However, the focus on fallowed agricultural land and the need to outreach to the farming community about potential barriers suggests that the perspectives of experts on agricultural issues may be valuable to the assessment process. *As such, the author and committee may wish to consider amendments to strike "the Independent System Operator" from 913.2. (b) (1) and add "the Department of Food and Agriculture" to the same section.*

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[13] DOC; "Multibenefit Land Repurposing Program – Regional Block Grant Project Summary"; https://www.conservation.ca.gov/dlrp/grant-programs/Documents/grant/2022%20MLRP%20Project%20Summaries.pdf

[14] DOC; "Multibenefit Land Repurposing Program – Regional Block Grant Project Summary"; https://www.conservation.ca.gov/dlrp/grant-programs/Documents/grant/2022%20MLRP%20Project%20Summaries.pdf

7) *Prior Legislation.*

AB 211 (Committee on Budget), allocates $40 million from the General Fund to the DOC for continued funding of the MLRP, with similar program guidelines as provided under SB 170 (Committee on Budget, Chapter 240, Statutes of 2021). Status: Ch. 574, Statutes of 2022.

SB 170 (Committee on Budget) allocates $50 million from the General Fund to the DOC for the MLRP, to implement groundwater sustainability projects that reduce groundwater use, repurpose irrigated agricultural land, and provide wildlife habitat. Projects may support implementation of the Sustainable Groundwater Management Act (Part 2.74 (commencing with Section 10720) of Division 6 of the Water Code). Eligible project expenditures include, but are not limited to, the following: projects that create or restore permanent wildlife habitat, create or restore seasonal wetland habitat that provides aquifer replenishment, improve groundwater supply, and projects that convert land to less intensive water uses while maintaining natural and working lands. Status: Chapter 240, Statutes of 2021.

AB 2642 (Salas, 2020) would have established the Multibenefit Land Conversion Incentive Program at DOC. Status: Held on the Assembly Appropriations suspense file.

AB 1739 (Dickinson), Chapter 347, Statutes of 2014, SB 1168 (Pavley), Chapter 346, Statutes of 2014, and SB 1319 (Pavley, Chapter 348), collectively known as SGMA, set forth the governance of groundwater in California.

REGISTERED SUPPORT / OPPOSITION:

Support

Intersect Power

Opposition

None on file

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