

Date of Hearing: April 6, 2022

ASSEMBLY COMMITTEE ON UTILITIES AND ENERGY

Eduardo Garcia, Chair

AB 2143 (Carrillo) – As Amended March 24, 2022

SUBJECT: Net energy metering

SUMMARY: Requires prevailing wage to be paid for the installation of specified electric generating systems and the reporting of growth and location of residential renewable systems. Specifically, **this bill:**

- 1) Expands the definition of “public works,” for the purpose of the payment of prevailing wages, to also include the installation of any renewable electrical generation sized over 15 kilowatts (kW) installed by a customer of an electrical corporation with more than 100,000 service connections, after December 31, 2023.
- 2) Requires the California Public Utilities Commission (CPUC) to annually report on the progress made to grow the use of distributed energy resources in disadvantaged communities, and list, by census tract, all renewable electric generation facilities which take service under a net energy metering tariff (NEM).

EXISTING LAW:

- 1) Excludes from the definition of public works, work done directly by a public utility company pursuant to an order of the Public Utilities Commission or other public authority. (Labor Code § 1720 [a][1])
- 2) Requires all qualified line clearance tree trimmers to be paid no less than the prevailing wage rate for a first period apprentice electrical utility lineman as determined by the Director of the Department of Industrial Relations (DIR). (Public Utilities Code § 8386.6)
- 3) Defines an eligible customer-generator, for the purposes of net energy metering tariffs, as a residential customer, small commercial customer or commercial, industrial, or agricultural customer, the Department of Corrections, and a United States Armed Forces base or facility, of an electric utility. (Public Utilities Code § 2827)
- 4) Requires the CPUC to submit an annual assessment to the Legislature of the success of the California Solar Initiative program with specified data including the number of residential and commercial sites that have installed solar thermal devices for which an incentive payment was made to a customer. (Public Utilities Code § 913.7¹)
- 5) Requires each electrical investor-owned utility (IOU) to offer a NEM tariff with a credit for all electricity generated by a customer-owned renewable resource against the

¹ The most recent study, *2021 California Solar Initiative: Annual Program Assessment*, June 2021, is at <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/office-of-governmental-affairs-division/reports/2021/2021-csi-apa.pdf>

customer's usage of electricity sold by the utility, on a kilowatt-hour basis (kWh) – net energy metering (NEM). (Public Utilities Code §§ 2827, 2827.1)

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

BACKGROUND:

Net Energy Metering – California’s NEM program started in 1997, prompted by SB 656 (1995, Alquist). It allows customers who install eligible renewable electrical generation facilities to serve onsite energy needs and receive credits on their electric bills for surplus energy sent to the electric grid. Most customer-sited, grid-connected solar in California is interconnected through NEM tariffs. Enrollment in the first NEM program, now colloquially known as “NEM 1.0”, continued and was phased out between 2016 and 2017.

The Legislature called for the revision of NEM 1.0 per AB 327 (2013, Perea) primarily to address the cost shifting associated with the full retail credits available under the tariff and the CPUC responded with what is commonly referred to as NEM 2.0 in 2016. Customers taking service under that tariff – NEM 2.0 – pay the cost to connect to the grid; take service on a “time-of-use” rate plan; and pay “non-bypassable” charges that are not offset with surplus energy credits. The CPUC has issued a proposed decision² to further address the cost-shifts of NEM 2.0 and develop a successor tariff commonly referred to as NEM 3.0.

Renewable Systems Over & Under 15 kW – As a result of the California Solar Initiative, data on the interconnection of all customer renewable generating facilities has been tracked and updated on a regular basis. Three percent of the large, IOU-interconnected, NEM systems are greater than 15 kW in size:

<i>IOU</i>	<i>Number of Interconnected NEM Systems ≥ 15 kW AC</i>	<i>Number of Total Interconnected NEM Systems</i>	<i>Percentage of all NEM systems ≥ 15 kW AC</i>
PG&E	21,947	605,827	3.6%
SCE	11,276	449,590	2.5%
SDG&E	5,707	224,923	2.5%
Total	38,930	1,280,340	3.0%

Source Data³

² See *Decision Revising Net Energy Metering and Subtariffs*, CPUC, December 13, 2021, at: <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M430/K903/430903088.PDF>

³ *California Distributed Generation Statistics* is the official public reporting site of the California Solar Initiative (CSI), presented jointly by the CSI Program Administrators, GRID Alternatives, the California Investor Owned Utilities, and the California Public Utilities Commission, and is available at: <https://www.californiadgstats.ca.gov/downloads/>

Prevailing Wage – All workers employed on public works projects must be paid the prevailing wage determined by the Director of the DIR, according to the type of work and location of the project. In California, the prevailing wage rate is an hourly rate paid on public works projects that is often set in the terms of a collective bargaining agreement.

According to the DIR, the wage rate relies upon such factors as “the particular craft, classification or type of work within the locality and in the nearest labor market area (if majorities of such workers are paid at a single rate). If there is no single rate paid to a majority, then the single or modal rate being paid to the greater number of workers is prevailing.”⁴

The policy behind paying a prevailing wage is to ensure that contractors are not awarded public works contracts by virtue of paying low wages and undercutting competitors who provide higher compensation. Prevailing wage creates a level playing field by requiring an across-the-board rate for all bidders on publically subsidized projects.

COMMENTS:

- 1) *Author’s Statement.* AB 2143 will require prevailing wage on solar projects over 15 kW, that opt-in to receive net energy metering, ensuring fair wages in a growing clean, green energy economy. As California has charted a pathway to create 100% renewable clean energy by 2045, prevailing wage for larger solar projects brings economic prosperity to a clean energy workforce transition from fossil fuels. Additionally, with a lens of energy equity, AB 2143 would require the CPUC to produce a census tract report on residential rooftop solar installation so that the CPUC and the Legislature have the data needed to address inequities, and create opportunities for resources and parity between homeowners, renters and low income households.

As the Green New Deal continues to be discussed in Congress, AB 2143 offers the state an opportunity to continue to lead in making a clean, green energy future for all Californians a reality. Moreover, the bill ensures equity, transparency and accountability are at the heart of a sustainable clean, green economy in which climate change, environmental goals and worker protections go hand-in-hand.

- 2) *The Solar Industry & Prevailing Wage.* Although the prevailing wage provisions of this bill apply to any customer’s *renewable* electrical generating facilities and associated batteries, the impacts will affect some very large residential customers but likely fall primarily on non-residential customers. The California Solar & Storage Association (CSSA) which is opposed to this bill, reports that “[s]ince 2015, the average residential solar system has increased in size by 20% to a statewide average size of nearly 7 kW in 2021. Inland areas with hotter temperatures see bigger systems, with Fresno averaging 8 kW.”

As reflected in the chart in the background section at page 3, three percent of customer renewable generating facilities are sized over 15 kW and interconnected under a NEM tariff.

⁴ California Department of Industrial Relations Webpage. *Frequently asked questions-Prevailing Wage*. March 2022.

The opponents also opine that prevailing wage will make systems more expensive and “increase costs for affordable housing projects, farms and other business customers.” However, research from the UC Berkeley Labor Center, citing the National Renewable Energy Laboratory, finds that “solar installation labor costs represent a small percentage of total costs. In the residential market, installation labor ranges from 7 - 11% of total project costs, depending on location.”⁵ The study further reported:

Prevailing wage would likely have the greatest impact on total costs in the residential sector. Because of the wage differential, our analysis shows that prevailing wage in the residential sector could increase total project costs by 5 - 9% (before accounting for productivity and other cost savings). In the commercial sector, prevailing wage could increase project costs by up to 2 - 5%. On utility-scale projects, the cost impacts are 1 - 2%

and concludes that “prevailing wage actually accelerates in-state solar development.”

- 3) *Prevailing Wage Not Limited to NEM.* The requirement that prevailing wage apply to any solar or other renewable generating facility and associated batteries that *are eligible to receive service* under a NEM tariff could be interpreted as casting a net wider than NEM installations and include all systems connected under Rule 21 or even those not connected to the grid at all. This is because all renewable facilities of any size are *eligible* for a NEM tariff for customers of large IOUs, but not all renewable facilities actually take service under NEM. *To ensure that the bill meets the author’s intent, the committee may wish to consider amending the bill to require prevailing wage for those systems that receive service under a NEM tariff.*
- 4) *Racial & Ethnic Disparities.* This bill requires that the CPUC include in an existing annual report the “progress made to grow the use of distributed energy resources among residential customers in disadvantaged communities.” Two studies highlight disparities in deployment of rooftop solar among residential customers. A 2019 study in *Nature Sustainability*⁶ revealed “racial and ethnic injustice in rooftop solar participation.” The study results were reported across the states; it does not appear that the authors reported separately on California. A 2021 study done by *Electricity Markets & Policy, Berkeley Lab*,⁷ reported that “[s]olar adopters generally skew towards higher incomes, though that trend continues to diminish over time” and “tend to live in neighborhoods with relatively high non-Hispanic White and Asian populations, and with relatively low Hispanic and Black populations.” This study focused on “national and state-level trends, with an emphasis on PV systems installed in 2019.”

⁵ *Prevailing Wage in Solar Can Deliver Good Jobs While Keeping Growth on Track*, Betony Jones, November 12, 2020, available at: <https://laborcenter.berkeley.edu/prevailing-wage-in-solar-can-deliver-good-jobs-while-keeping-growth-on-track/>

⁶ See *Disparities in Rooftop Photovoltaics Deployment in the United States by Race and Ethnicity*, Nature Sustainability, January 2019, <https://rael.berkeley.edu/wp-content/uploads/2019/01/Sunter-Castellanos-Kammen-Nature-SustainabilityDisparitiesPVDeploymentRaceEthnicity.pdf>

⁷ *Residential Solar-Adopter Income and Demographic Trends*, Electricity Markets & Policy, Lawrence Berkeley National Laboratory, April 2021, available at: <https://emp.lbl.gov/publications/residential-solar-adopter-income-and>

These studies show a snapshot in time and do not provide sufficient data on a regular basis upon which policy makers can assess the distribution of customer-sited renewable generation.

- a. The first requirement directs the CPUC to report on the progress made to grow the use of distributed energy resources in disadvantaged communities. *The committee may wish to consider expanding this requirement to also include low-income customers which are not always captured by limiting reporting to disadvantaged communities.*
 - b. The second requirement is a list, by census tract, of all renewable electrical generating systems taking new service under a NEM tariff in the prior year. A “list” may not provide the detail needed to comprehend disparities in deployment of the systems. Additionally, discussions with the author and supporters have noted the value of data by zip code as well. *The committee may wish to consider ensuring anonymity by reporting the data in the aggregate, by census tract and zip code, since one could infer that a listing of systems could require the disclosure of addresses. The committee may also wish to require that the census tracts and zip codes be analyzed by median household income, home ownership, and racial composition as was done in the national study.*
- 5) Prior Legislation.

AB 1139 (L. Gonzalez/Carrillo) required the CPUC to develop a new NEM tariff to take effect no later than July, 2022 with specified conditions. Status: Died on Inactive file, January, 2022.

AB 2582 (Carrillo) required the CPUC to develop a successor NEM tariff not later than July 1, 2021. Status: Held in Assembly Utilities & Energy Committee, 2020.

AB 327 (Perea) instituted several rate reforms and required the CPUC to adopt a successor NEM tariff no later than December 31, 2015. Status: Chapter 611, Statutes of 2013.

REGISTERED SUPPORT / OPPOSITION:

Support

California Labor Federation, AFL-CIO
 California State Association of Electrical Workers
 Coalition of California Utility Employees
 State Building & Construction Trades Council of California

Oppose

California Solar & Storage Association

Analysis Prepared by: Kellie Smith / U. & E. / (916) 319-2083