

## Position on Transmission Access Charge (TAC)



The [California Alliance for Community Energy](#)<sup>1</sup> calls for CAISO to fix the current Transmission Access Charge (TAC) market distortion. This distortion inhibits the community-based renewable energy development needed to achieve California's renewable energy and climate justice goals, and limits the ability of Community Choice programs to deliver environmental, economic, and social benefits to the communities they serve. In addition, we call for this TAC distortion to be corrected before California considers any regionalization of CAISO to include other states.

The growing impacts of climate change require the state to transition to a more decentralized renewable energy model, one that allows our communities to build more resilient infrastructure and economic stability. As a result, Community Choice is increasingly seen as a preferred electricity procurement model by communities across the state.<sup>2</sup>

The development of local renewable energy resources is key to many of the benefits a Community Choice program can deliver, and it contributes significantly to the long-term stability of such programs. It represents an investment in local energy assets that creates new business opportunities, local jobs, community wealth, and stronger and more resilient local economies.

In addition, Community Choice programs can rapidly reduce GHG emissions by innovating local programs to realize deep energy efficiency gains in buildings, develop local renewable energy generation assets, deploy energy storage, spread out peak loads, accelerate the adoption of electric vehicles, and integrate these and other distributed energy resources (DERs).

One of the most important advantages of local renewable energy generation is that it avoids the economic and environmental costs of inefficient long-distance transmission infrastructure. Electricity generated within the distribution grid requires neither high voltage (200+ kV) or low voltage (69-200 kV) transmission lines to deliver electricity to customers. Hence shifting from remote, centralized generation of electricity to local decentralized generation of renewable electricity could avoid billions of dollars in new and/or upgraded transmission infrastructure, providing cost-savings benefits not only to Community Choice ratepayers, but to electricity consumers throughout the state.

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<sup>1</sup> The mission of the [California Alliance for Community Energy](#) is to support and defend Community Choice energy programs in California that advance local clean energy for the environmental and economic benefit of our communities.

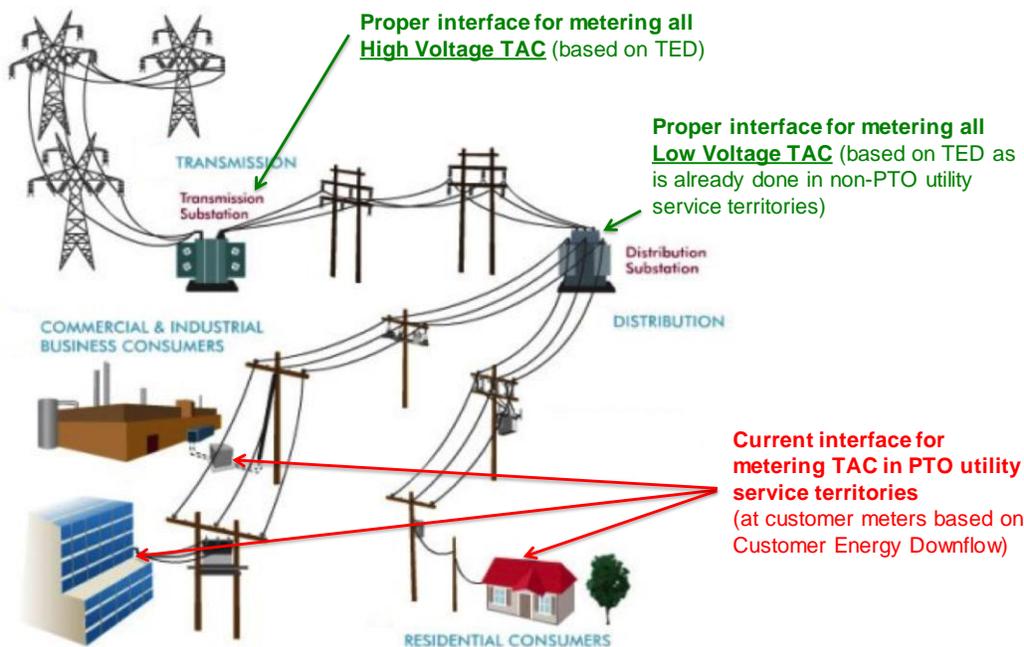
<sup>2</sup> There are currently [five operational Community Choice Energy programs](#) serving over two million Californians. According to the [Center for Climate Protection](#), by 2020, the combined population of areas with existing and about-to-launch programs, as well as large population areas considering Community Choice programs is about 17.6 million Californians. Needless to say, Community Choice Energy programs are and will become an increasingly important market player in California's energy system.

## The TAC Market Distortion and the Fix.

This intrinsic value of local renewable energy—the potential to avoid billions of dollars in new transmission infrastructure—is not, however, recognized by the State’s current method of recovering transmission infrastructure investments. Currently, all electricity customers in the service territories of the State’s investor-owned utilities are levied with a transmission access charge (TAC), even when the electricity they consume is not delivered over transmission lines.

This means that locally generated electricity that does not use the transmission system is still required to pay transmission access charges, negating one of the most important values of locally generated electricity. This creates an unfair disadvantage for local, distributed renewable energy generation installations, which hinders development and is counterproductive to achieving many of the State’s economic, social and environmental goals.

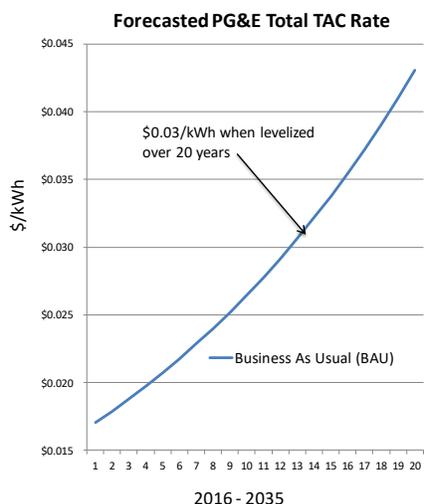
To correct this TAC market distortion, TAC should only be assessed on energy delivered through the transmission system. The Clean Coalition has proposed that CAISO assess TAC on metered transmission energy downflow, the amount of energy that down-converts from high voltage transmission, to low voltage transmission, to distribution voltages at the substations shown in the following illustration, instead of being measured at the customer meter (referred to as- customer energy downflow).



This approach—the TAC Fix—appropriately applies the “user pays” principle, allowing energy that is generated and consumed without use of the transmission grid to avoid transmission charges. This Fix would recognize the avoided-transmission-cost value of locally generated electricity. It would send proper market signals to encourage investments in energy generating facilities that supply locally produced electricity to the distribution grid, where significant energy can be generated and delivered efficiently without using the transmission system, and thereby avoiding TAC costs. In this way, the TAC Fix would also reduce transmission load and minimize the need for additional transmission capacity.

## TAC and Community Choice

Without the Clean Coalition's TAC Fix, the TAC rate is expected to grow significantly over the next twenty years, based on current projections. The TAC rate has been steadily increasing, averaging close to 15% growth per year in the past decade. CAISO and PG&E have projected a more modest 7% annual rate increase going forward, increasing PG&E's current 1.8¢/kWh TAC rate to about 4.5¢/kWh by 2036. That amounts to an estimated 3¢/kWh when levelized over 20 years (the life of long-term contracts).



The current TAC market distortion makes it difficult for Community Choice programs to realize the full value of locally-generated electricity. Smaller scale, community-based generation generally has higher installation costs than remote large-scale generation, making it difficult for local development to be competitive. However, if local development were able to benefit from the avoided transmission costs through the TAC Fix (roughly a 3¢/kWh advantage on about the 10¢/kWh levelized cost of local wholesale solar PV electricity<sup>3</sup>), it would create a significant incentive for Community Choice programs to build local generation assets, and thereby open the door for the many other benefits of local resource development.

The TAC Fix could also reduce the rates for any locally-produced clean energy offering Community Choice programs provide. For example, MCE Clean Energy's Local Sol program lets customers choose to receive 100% of their electricity from local solar photovoltaic systems for a premium rate. The TAC Fix would reduce that premium by 33%, which would make the Local Sol option more competitive thus more attractive to many customers.

The TAC Fix might also encourage investor-owned utilities to procure more local generation in their service territories, and therefore compete with Community Choice programs for local generating sources. However, the overall benefit of local resources to the utilities is probably less

<sup>3</sup> *The Padilla Report to the Legislature: Reporting 2015 Renewable Procurement Costs in Compliance with Senate Bill 836 (Padilla, 2011)*, May 2016.

[http://www.cpuc.ca.gov/uploadedFiles/CPUC\\_Website/Content/Utilities\\_and\\_Industries/Energy/Reports\\_and\\_White\\_Papers/Padilla%20Report%202016%20-Final%20-%20Print.pdf](http://www.cpuc.ca.gov/uploadedFiles/CPUC_Website/Content/Utilities_and_Industries/Energy/Reports_and_White_Papers/Padilla%20Report%202016%20-Final%20-%20Print.pdf)

Table B-1 shows a cost of energy of 6.77¢/kWh for 3-20MW-sized facilities for 2015 contracts, and Table A-2 shows a cost of energy of 13.66¢/kWh for 0-3MW-sized facilities for 2015 contracts and earlier. Hence, the 10¢/kWh figure in the text is a rough approximation of the cost of local wholesale solar PV electricity.

than for Community Choice programs, as local generation doesn't fit well into the utility business model, which is based on guaranteed returns on delivery infrastructure investments.

By providing an economic advantage for Community Choice programs to procure locally, the TAC Fix would help counter the claims of many consultants that the only way for these programs to be competitive with the investor-owned utilities is to procure remotely generated electricity, sacrificing the substantial long-term benefits that would be realized through the investment in local renewable assets for short-term advantages.

## **Implementing the TAC Fix**

For Community Choice programs to realize the benefits of the TAC fix, changes will be required in how TAC charges are collected by CAISO, and the investor-owned utilities will need to adopt an accounting system to ensure that avoided transmission costs are properly attributed to the load-serving entities in their service territories. For example, if CAISO doesn't bill the adjusted TAC to a Community Choice program directly, then the program would need to be reimbursed for excess TAC currently collected from its customers, depending on the amount of energy the Community Choice program procured locally. This transmission cost correction could be used by the Community Choice program to reimburse its customers or to invest in program development.

It is worth mentioning that CAISO already assesses TAC for municipal utilities based on metered transmission energy downflow—municipal utilities only pay TAC on energy delivered across the transmission system. Hence the TAC Fix merely puts in place for Community Choice programs the same rules that apply to municipal utilities in California. The TAC Fix also complies with the Federal Energy Regulatory Commission (FERC) Order 1000 regarding user-pays cost allocation principles, by which parties benefitting from transmission usage should incur the charges.<sup>4</sup>

It is also worth mentioning that a successful TAC Fix would help shift electrical generation to local facilities, reducing the need for costly transmission infrastructure. This, in turn, would reduce the TAC over time, lowering the avoided costs of locally generated electricity. It might even result in an end to the costly construction of new transmission infrastructure, and support an accelerated evolution to a more efficient and sustainable decentralized energy system in California.

## **CAISO Delay and Regionalization Undermine a Decentralized Energy Model**

The Clean Coalition's TAC Fix was proposed to CAISO over a year and a half ago, and despite a number of hearings and proceedings, CAISO has not moved forward on the proposed Fix. Most recently, on September 26, CAISO pushed the issue back to midyear 2017,<sup>5</sup> without a resolution expected in the foreseeable future.

In the meantime, CAISO is rushing forward with an initiative to replace CAISO with a multi-state regional system operator. The plan would merge California's grid with PacifiCorp, a utility owned by Warren Buffett that operates in Utah, Oregon, Wyoming, Idaho, Washington and a small part of California. Proponents of the plan tout the potential savings that an integrated

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<sup>4</sup> Order Number 1000, *Transmission Planning and Cost Allocation*, 136 FERC paragraph 61051, pg. 585 (2011)

<sup>5</sup> <http://www.caiso.com/Documents/ReviewTransmissionAccessChargeWholesaleBillingDeterminant-StatusUpdatePosted-InitiativeClosed.html>

western grid could have as California and other states accelerate the development of renewable energy generation to meet higher renewable portfolio standard goals.

One problem: PacifiCorp is by far the largest owner of coal power plants in the Western United States. In late May CAISO released a study showing that the proposed regionalization of CAISO would lead to a near-term bump in coal generation across the west; as much as a 3% increase in some scenarios. Even in the longer-term scenarios that looked out to 2030 and assumed a massive infusion of new renewable energy onto the system, CAISO's models predicted that PacifiCorp's coal units would continue to operate at current levels rather than being driven off the market. In fact, CAISO's studies suggested that PacifiCorp's coal plants could receive a much-needed boost if they got access to California's markets.<sup>6</sup> In other words, California's market could rescue those coal plants and de-incentivize the adoption of renewables.

The regionalization proposal leaves uncertain whether California can maintain its existing environmental policies in a regional market, let alone develop policy solutions for problems that have yet to be addressed or anticipated.

Californians have shown strong support for transcending the traditional regulatory model of an investor-owned, top-down, centralized utility industry in favor of a more competitive, democratically-created, community-inspired public system, as indicated by the number of Community Choice initiatives being established across the state. It is estimated that as many as 60 percent of utility customers could depart to Community Choice during the next five years,<sup>7</sup>

Accompanying this strong movement is a shift to the deployment of distributed energy resources: an integrated set of demand reduction, local generation, storage, demand response and other technologies that provide communities with a cost-effective way to address climate change and capture new value streams through local initiative.

California, and its regulatory bodies have not yet come to terms with the need to support these new energy models. CAISO, as a case in point, is dragging its feet on the TAC Fix, a small but important component of the shift to distributed energy resources.

In fact, CAISO's regionalization proposal—based on the outdated traditional, centralized energy model, and a regional ISO concept that would undermine state initiative—does not advance California's efforts to address climate change by empowering communities.

In effect, regionalization is putting the TAC Fix and other key California initiatives on hold, hindering and undermining the progress that the state has made, and must continue to make before such a regionalization proposal is considered.

The California Alliance for Community Energy therefore calls for a suspension of the CAISO regionalization effort, and for CAISO to strengthen the climate action of our communities by supporting the development of distributed energy resources in general, and implementing the TAC Fix in particular.

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<sup>6</sup> Travis Ritchie, *California Taps the Brakes on Merger with Coal-Heavy PacifiCorp*, August 16, 2016, <http://www.sierraclub.org/planet/2016/08/california-taps-brakes-merger-coal-heavy-pacificorp>

<sup>7</sup> "Meet the latest disruption for utilities: community power," *EnergyWire*, June 9, 2016, <http://www.eenews.net/stories/1060038517>.