

**SDG&E's Questions
on the Clean Coalition Proposal for
Changing the CAISO's Current Transmission Access Charge (TAC) Allocation
Among CAISO Load Serving Entities (LSEs)**

Pursuant to the CAISO's September 7, 2017 market notice, SDG&E submits the following questions on the Clean Coalition's proposal for changing the CAISO's current TAC allocation among CAISO LSEs. These questions are intended strictly for the purpose of gaining a more complete understanding of the Clean Coalition proposal. The questions are not to be interpreted as any indication of SDG&E's view on the merits of the proposal.

1. Assume a Utility Distribution Company (UDC) provides distribution service to its customers through two 230/12 kV transformers, where the low side of each transformer connects to separate distribution circuits. Assume the real power flow across one transformer during the relevant TAC settlement period is 100 MWh from the 230 kV side to the 12 kV side. Assume the real power flow across the other transformer is 10 MWh from the 12 kV side to the 230 kV side. In this example would the Transmission Energy Downflow (TED) for the UDC be 100 MW or 90 MW?
2. Assume an LSE within a UDC service area has two end-use customers. If the metered end-use consumption for one customer during the relevant TAC settlement period is 1 MWh and the metered end-use consumption for the other customer is -3 MWh (because of rooftop solar), would the LSE's Customer Energy Downflow (CED) be 1 MWh or -2 MWh?
3. If the CED for an LSE's end-use customers within a given UDC is 10 MWh during the relevant TAC settlement period, and the LSE has contracted to purchase 12 MWh of output from a distribution connected generator within the same UDC during the relevant TAC settlement period, is the LSE's share of TED 0 MWh or -2 MWh?
4. Assume one LSE within a UDC service area has contracted to purchase 8 MWh of output from a distribution connected generator within the same UDC service area during the relevant TAC settlement period. Assume another LSE within the same UDC has contracted to purchase 2 MWh of output from the same distribution connected generator within the same UDC service area during the relevant TAC settlement period. How would the UDC know what portion of the output from the distribution connected generator was purchased bilaterally by the first LSE, what portion was purchased bilaterally by the second LSE and what portion may have been sold through the CAISO's wholesale markets and not subject to a bilateral contract? In other words, would all LSEs within a given UDC service area be obligated to provide the UDC with their bilateral contracts with distribution-connected generators? If so, would the UDC be obligated to interpret the bilateral contracts for purposes of determining what amounts of output from distribution-connected generators are to be associated with the different LSEs?

5. Slide 17 of Clean Coalition’s August 29, 2017 presentation entitled “Transmission Access Charges (TAC) Structure, Use Transmission Energy Downflow (TED) as the TAC Billing Determinant” states that “LSE share of TED” is equal to “LSE CED – (LSE LV and DG output)”. This calculation produces a MWh value for the relevant TAC settlement period. Is this MWh value intended to be (i) used to calculate each LSE’s *percentage share* of the High Voltage (HV) Transmission Revenue Requirement (TRR) during the relevant TAC settlement period and, in turn, each LSE’s TAC liability, or (ii) multiplied by the $\$/MWh$ HV TAC rate to calculate each LSE’s TAC liability?

SDG&E assumes it must be the former, because otherwise there would not be enough MWh against which to recover the entire HV TRR (because of distribution-connected generation and exports from NEM customers).

6. When there are multiple LSEs within the same UDC service area, Clean Coalition offers two proposals for allocating TAC between the LSEs. Slide 40 of Clean Coalition’s August 29, 2017 presentation describes an “Overcollect + Refund Method.” Under this method the UDC would collect from all LSEs an amount of money equal to each LSE’s CED (MWh) during the relevant TAC settlement period times the HV TAC rate ($\$/MWh$).

It appears the method would then have the UDC calculate the “overcollection” for each LSE by multiplying (a) the HV TAC rate, times (b) the sum of (i) Low Voltage (LV) generator output purchased by the LSE, (ii) Wholesale Distribution Generation (WDG) output purchased by the LSE, and (iii) Net Energy Metering (NEM) exports by the LSE’s end-use customers. The UDC then refunds to each LSE, the LSE’s respective “overcollection.”

- a. Slide 40 suggests that the amount of “LV output” purchased from a generator by a particular LSE during the relevant TAC settlement period would be provided to the UDC by the “scheduling coordinators reporting to the UDC.” Does this method contemplate a change in the CAISO tariff that would compel scheduling coordinators to report generator meter data to the UDC?
- b. Where the “LV output” of a particular generator is being sold to multiple LSEs within the same UDC distribution service area, how would the UDC know how much output to associate with the different LSEs? Would the UDC be required to interpret bilateral purchase power contracts to make these determinations?
- c. Assuming (i) the HV TED excludes real power flows where the flow direction is from a below 200 kV bus to an above 200 kV bus, (ii) there are generators on the lower voltage systems whose real power output is not contractually sold to LSEs within the UDC, and (iii) real power losses on the lower voltage systems are not accounted for, how does the “Overcollect + Refund Method” ensure the UDC collects from LSEs the exact amount of the HV TRR?

Said differently, the HV TAC rate (\$/MWh) is calculated by dividing the HV TRR (\$) by the HV TED (MWh). So unless the calculation of the “overcollection” ends up accounting for exactly the same volume as the HV TED, the net amount of dollars collected from LSEs within the UDC service area after issuing the overcollection rebate, will be different than the HV TRR.

(SDG&E created an example that implemented SDG&E’s understanding of the “Overcollect + Refund Method” and was unable to reach a result where the net amount of dollars collected from LSEs was equal to the HV TRR.)

7. When there are multiple LSEs within the same UDC service area, Clean Coalition offers two proposals for allocating TAC between the LSEs. Slide 41 of Clean Coalition’s August 29, 2017 presentation describes a “Proportional Collection Method.” Under this method the UDC would divide the “LSE TAC liability” (\$) for each LSE by the “LSE CED” (MWh) for each LSE to create an “LSE-specific TAC rate.” (\$/MWh).
 - a. What is the purpose for calculating an “LSE-specific TAC rate” if the methodology requires, as an input, the “LSE TAC liability?” Isn’t the “LSE TAC liability” the desired outcome to begin with?
 - b. Once the “LSE-specific TAC rate” is calculated, how is it used to determine each LSE’s TAC liability?