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HECO's Shift and Save Program—What's Going On Here?

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Hawaiian Electric (HECO) recently implemented a Shift and Save (S&S) pilot program with the pitch that you can save on your electric bill. But can you? A more forthright description might be "shift or pay more."

If ever there was a pilot program that you should pay attention to, this is it. Readers should understand the less-than-obvious, but hugely impactful, implications of the program.

Why? Because according to HECO, "S&S Is expected to be introduced to all customers in 2025," most likely tweaked by the Public Utility Commission (PUC). So a tiny pilot program of 4% of Oahu and Big Island customers, some 15,000 in total, hold the fate of the other 96% in their hands. Once understood by all, we think all ratepayers should revolt.

First, some background on this complicated scheme. Rather than all residential and small commercial customers paying the same rate, three new rates are established. For simplicity, we'll discuss the new Oahu rates, with a comparison to a recent 40¢ per kilowatt hour (kWh) rate. The evening rate, from 5 PM to 9 PM, increases by 30% to 52¢/kWh. The overnight rate, from 9 PM to 9 AM, drops 13% to 35¢/kWh. The daytime rate, from 9 AM to 5 PM, drops by 58% to *a customer-subsidized* 17¢/kWh.

HECO has stated that S&S will be revenue neutral to them. HECO surely knows that 17¢/kWh is unsustainable if reliability, distribution, and administration are included. Somebody has to subsidize this rate, but who? Under S&S there will be many customers who will lose most of their contract "entitlement" value and customers who will be unlikely to offset the onerous challenge of the 30% rate increase by changing their behavior. Let's start with the losers.

Biggest loser: Net energy metering (NEM) customers without a battery. HECO has some 80,000 solar NEM customers with a contractual relationship. Currently, excess electricity they generate during the day is sent to HECO and, in effect, a like amount of power is available to them 24/7. What happens with S&S is that the credit for exporting excess daytime electricity to HECO drops to 17¢--a 58% reduction in NEM value, with solar production effectively sequestered in the 9 to 5 time slot. Ouch. Then, insult to injury, the cost of electricity drawn from the grid for evening usage increases to 52¢. Double ouch. What was previously a break-even proposition becomes a 3-to-1 proposition *against* non-battery NEM contract holders. While an all but well-disguised contract breach, this is very much like a real estate "taking."

Next biggest loser: day-shift working families—whether they have solar or not--most of whom aren't home between 9 AM and 5 PM. HECO and the PUC want them to delay pushing the button on their washers, dryers, or other appliances to 9:01 PM or to a weekend day, challenging them to try to offset the 30% rate increase. But do the math, they would actually have to shift 70% of their normal evening use to the nighttime rate to break even. Unachievable. Or 35% of their normal evening usage to daytime (e.g. a weekend day) to break even. How can they possibly do either? The 5 PM to 9 PM evening slot is when they need electricity the most—when they turn the lights on, cook dinner, watch TV, and perhaps run the air conditioner. Common sense, and experience elsewhere, would say that most customers won't be able to dig out of the punishing 30% rate-increase dungeon.

The losers subsidize the winners under this scheme, so who wins?

Biggest winner: small to medium non-solar commercial customers. These customers receive a huge 58% reduction in their electricity rate, to the extent that their power usage is from 9 AM to 5 PM--which is much if not most of their consumption. Wow. While we all want small businesses to succeed, should it be on the backs of the residential customers cited above? The S&S scheme is a disincentive for commercial customers to invest in a non-battery solar system when exactly the opposite is what's needed: more customer-sited solar in already urbanized Oahu to help reduce the thousands of acres that would otherwise be gobbled up for utility solar farms. Since they already have the best possible rate with shifting not applicable, the only reason to install solar plus battery is to game the system for profit.

Next biggest winner: residential rooftop customers who have the Battery Bonus plan. Why? Because the value of their excess daytime power doesn't get sequestered in the 9 to 5 time slot. Under the S&S scheme, when HECO draws down from Battery Bonus customers during the peak time period between 6 PM and 8:30 PM, such customers are credited with the newly inflated evening retail rate of 52¢. This amounts to a 30% windfall in the value of excess daytime electricity vs. pre-S&S, and *three times better* than non-battery customers (52¢ vs. 17¢). Grand slam home run.

What's driving this scheme? Our view is that HECO knows that it is prohibitively expensive to deliver utility-level solar power plus utility-level battery storage for 24/7 reliability. Therefore, HECO is doing their own shifting--of the cost of batteries to single-family homeowners by promulgating lucrative rate-of-return schemes like S&S evening pricing. Incredibly, HECO's cost to implement battery grant programs is repaid, plus interest, by all ratepayers and thus *subsidized by ratepayers unable to install solar.* How can this possibly be equitable public policy since it is clearly regressive relative to lower income individuals and families who rent an apartment or townhouse with no chance to benefit from HECO's battery grant programs.

The underlying policy on all of this is the state law mandating 100% renewable power by 2045. So long as this law stays on the books for Oahu, HECO and the PUC will be on a costly quest to make solar power available evenings, meaning costly batteries, and on overcast days, meaning costly batteries. Ratepayers want reliable power that is affordable. We should encourage maximum practical solar power on Oahu, either customer-sited or by committing a prudent amount of land for solar farms. But we don't want complicated schemes that mask other motives and drive up the cost of electricity for all. To make solar power reliable, there is a better option than costly batteries, namely dispatchable low-cost natural gas (LNG) power.

While we've outlined the losers and winners under the S&S scheme, those selected or volunteering for S&S should monitor their bills closely to better understand how they're being affected. Take the time to write to the PUC—the rest of us are counting on you. And for the other 96% of customers, make your voice known to the PUC as well. Scrap this plan. It is ill-conceived, unjust, and unfair.