The Friday Burrito

As The Paint Dries

"Art is either plagiarism or revolution."

Paul Gauguin

"I like constructive criticism from smart people." Prince "Some say we are responsible for those we love. Others know we are responsible for those who love us." Nikki Giovanni Do y'all remember, before the internet, that people thought the cause of stupidity was the lack of access to information? Yeah. It wasn't that.

The chill and wet weather up to last weekend suddenly turned like clockwork and it became arid and warm. Yep, it's time to start sprinkling the lawn twice a week to keep the weeds green. Our front area is a 50/50 mix of different grasses and assorted weeds, but as long as the leafy pigment provides curb appeal then I'm good.

This week I'm at my house in Tahoe after a long hiatus away. The blue-sky vista against the snow-capped mountains is stunning. The evening sunsets are soft illumination upon the shimmering lake water. This is the time of year to enjoy clear clean views before summer's wildfire smoke blemishes the scenery.

The streets of South Lake Tahoe are abuzz with activity and visitors. Since I was last here two of the major local casinos have changed hands or been rebranded. Bally's (formerly Caesars Tahoe, and MontBleu) is owned by the Parks family that also owns the Edgewood resort. What once was the Hard Rock Casino has been rebranded as the Gold Nugget. Also recently completed is the indoor <u>Tahoe Blue Events Center</u> to replace the open-air summer venue. Okay, that's your touristy piece for this week. Come visit, spend money, and help keep my property taxes down. (If only my home-owners insurance was subsidized through casino revenues ...)

May was the Month of High Curtailments and Low Gas Generation

May was one hell of a month for renewables curtailments. That's for sure. On the other hand, it was expected ... no surprise. Separately, the monthly natural gas generation and net imports compared to one-year and twoyears ago showed a significant decline. The figure on the next page below shows each. This May, gas generation was 42% below 2023 and 57% below 2022. Net imports, interestingly, dropped precipitously at about the same level compared to either of the two previous years. My take was that Vol. XXVII #16 June 7, 2024

Table of Contents

May was the Month of High Curtailments and Low Gas Generation

The New and Improved CAISO Website

Monetizing BESS Assets

CAISO's EDAM is Full Speed Ahead

Things In the World

What Does it Take to Foster a Shared Vision and Mutual Cooperation?

Overselling A.I. and the Derived Demand for Electricity

Grand Phunk Salsa a la Energy GPS

The Toothpaste is Out of the Tube

Shout Outs and Recipes

Mushoo Pork and Pancakes with Chef Laura Manz

Odds & Ends (_!_)

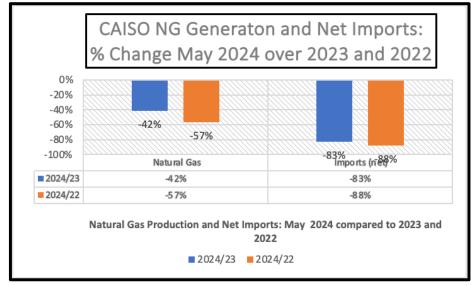
Western States Ticker

CAISO YTD Renewables Curtailment: As of 5/31/24: 2.595,132 MWh As of 5/31/23 1,946,070 MWh

% of solar and wind output curtailed: YTD as of May 2024 8.38% YTD as of May 2023 7.53%

© 2024 Foothill Services Nevada Inc. All Rights Reserved. Warning: Burrito reading may be hazardous to your health, causing rational thinking and other related diseases. The Burrito contains the personal views of Gary Ackerman and does not reflect the views of any other person or organization. The material is intended for adults, including the humor. If you are offended by the humor, then read the Meatless Burrito. A history of the Western Power Trading Forum (WPTF), including a section on the evolution of the Friday Burrito, can be found by clicking here.

exports out of California and into the Pacific Northwest blossomed in 2024, especially for deliveries from Southern California to Mid-C. Why? Because the Washington State Cap-and-Invest emission allowance costs boosted the commodity prices for wholesale electricity traded at Mid-C. Exporting ample excess renewable energy from California without a



carbon adder plus negative energy prices and selling it up North was a deal made in heaven. The transaction costs were easily covered, and the price spread captured a profit ... even across a 16-hour on-peak window.

I believe that solar-asset schedulers have been bidding less aggressively in the day-ahead market. For example, if the expected midday LMP is in the -\$10/MWh to -\$20/MWh range, then an aggressive bid might be -\$25/MWh or lower. A less aggressive bid might be -\$8/MWh or higher. As the clearing prices dip, the less aggressive bids don't clear, thereby freeing up solar energy for export. What I have been unable to determine is if the solar and wind resources are under RA capacity contracts, then they must offer bids to the CAISO for both day-ahead and real-time markets. Someone might explain to me how this works.

Extending my tenuous logic one step further, the "less aggressive" bids that don't clear are classified as renewables curtailments. Take note that this year, unlike any time previous the volume of curtailments has been much larger. In fact, the year-to-date curtailments for 2024 as of June 2

	Through May (MWh)	Total	% through May
2020	1,047,915	1,587,497	66.01%
2021	1,062,270	1,504,803	70.59%
2022	1,860,730	2,449,248	75.97%
2023	1,946,070	2,659,526	73.17%
2024	2,595,132	TBD	

exceeded total curtailments for 2023! At the end of May, curtailments were over 600,000 MWh higher than the prior year. I was curious to what degree renewables curtailments accumulated within the first five months of each year starting in 2020.

The table above shows the absolute and relative totals. Is it possible

What we believe...

Competition yields lower electricity costs. Stable and transparent rules and regulations promote private investment.

Private investors, rather than utilities, will spend money on new power plants and transmission facilities if they can earn a return that is balanced with the risks.

Private sector investment results in lower average prices without risking consumers' money.

However, when IOUs do the investing, the risks to them are minimal or non-existent because ratepayers effectively cover the utilities' costs.

Overcapacity lowers electricity spot market prices; yet retail rates can still increase in this case due to full costof-service regulation.

Markets work best when there are many buyers and sellers.

At-risk money will be put to investment where markets exist that are well regulated and yield credible prices.

And what we should do ...

Believe in ourselves.

Actively support the creation of independent, multi-state regional transmission organizations that coordinate policies with respective state utility commissions.

Support rules for resource adequacy that apply uniformly to all load-serving entities.

Enforce competitive solicitations by utilities for purchasing either thermal or renewable power.

that 600,000 MWh of solar energy from assets underwritten by California electricity ratepayers went to Washington State? Inquiring minds want to know.

Taking a conservative ratio of three-quarters to account for the 2024 end-of-May year-to-date totals, the 2024 renewables curtailments might be around 3,244 GWh ... thus maintaining the almost 600,000 MWh difference that we see today. Duh! I guess that linear calc should have been obvious.

Undoubtedly, renewables curtailments will abate through the summer as the load increases in response to higher average temperatures. That leaves the Q4 volume as a wildcard. Personally, I would expect the last quarter of this year to show an increased level of curtailments compared to 2023, but we'll see how that plays out.

Continued on the next page

Support choice among retail electricity customers.

Lobby for core/non-core split of retail customers.

Advocate against policies that limit, through bid mitigation, merchant returns on investment that are comparable to utility returns.

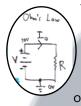


Catch Some Z's

California's Summer is Knocking!!

Click here to learn more about Ziad Alaywan

As we move into the summer, the spring has experienced abundant resources, record curtailments and negative pricing.



The <u>CAISO 2024 Summer Loads and Resources Assessment</u> shows sufficient resources to meet forecasted demand plus an 18.5 percent reserve margin for all summer months . Specifically, the CAISO estimates *"3,500 MW of surplus over forecasted demand plus an 18.5 percent reserve margin during peak net load hours 18 through 22 in September."* Expected peak demand for this July is 46.3 GW. Looks like the summer will be just fine. But we know never to say that because transmission constraints, wildfires, generator outages and regional heat waves can throw a wrench into the best forecasts. No crystal balls in this business!

Apart from that, what is stirring concern (and controversy) is the Interconnection Process Enhancement (IPE) reform. This is a particularly difficult issue to resolve due to the large number of requests. The CAISO Board of Governors will have on June 12 a special meeting to vote on the final proposal.

The CAISO proposal includes the introduction of scoring criteria into the new interconnection process. Project scores would be based on indicators related to commercial interest (30%), project viability (35%), and system need (35%). In evaluating commercial interest, the ISO would incorporate preliminary scoring on specific projects from load-serving entities (LSEs). In short, each LSE would be awarded capacity, proportionate to that LSE's load share obligation to specific projects. Projects can receive between 0 and 100 points in the LSE allocation process. The CAISO proposes limitations on the amount of capacity LSEs can award to their LSE-sponsored projects in order to maintain historical ratios of utility-owned generation and independently developed projects in the queue.

I appreciate the work the ISO staff has done to balance the various interests. However, I am bothered by the commercial interest (30%) criteria. If two equally situated projects scored equally in the second and third criteria, but an LSE selects one project, the second project will be denied interconnection. This seems highly capricious. Some LSEs may seek to extract concessions in advance from developers in return for early points allocated for the commercial interest criteria. The other LSE allocation criteria appear to be transparent and fair. The point is that the ISO should exercise its full independence and be the only entity that determines the projects that will be interconnected. The decision should be based on project viability and system needs without getting into the commercial issues.

The New and Improved CAISO Website

If you haven't yet done so, then check out the <u>revamped pages of the CAISO website</u>. It has a fresh look and a welcoming feel. Pages of the old website remain available until the end of the month. When I prepared my data for the topic above on curtailments and such, the new layouts intrigued me, but I needed to see the monthly totals in the old layout. The "help-find" search function saved me.

Another feature of the new system that I like is the data-refinement options posted on the left-hand side of the webpage. It helps to narrow down the item(s) one is seeking.

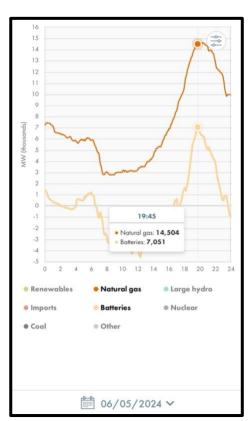
Databases and user interfaces are tricky things. What I find most discouraging is that often I don't know exactly in *CAISO-speak* what I am searching for, or the keywords elude me. So, I hunt and peck with the hopes that I'll find the mother lode before I expire. Someday, and I think it will be soon, an A.I. bot will assist me in refining my searches and quickly take me to the right place. Can't wait.

Monetizing BESS Assets

A few years ago, when battery energy storage systems (BESS) first appeared, there were claims about the

multiple revenue streams these assets would fetch. Of course, those claims were ridiculous because separate functions such as intraday arbitrage and ancillary services had to be co-optimized by the grid operator, not the asset owner. Initially, BESS assets gravitated to the ancillary services function because it was the least risk. Then, as the fleet grew, price-arbitrage increased in volume as the ancillary services markets filled up. However, despite the 9,163 MW of installed grid-scale battery capacity (both stand-alone and hybrid) currently on the CAISO grid, one does not see that level of discharge for any 5-minute segment. In fact, it rarely tops 7,000 MW, however, it did just that Wednesday evening last (see figure to the right). One reason is the BESS asset-owners want to manage maintenance costs and don't like the state-of-charge exceeding 80% or falling below 20%. It's rational behavior and bids are tailored to seek that balance.

Nonetheless, I couldn't see how BESS assets were making much money until the prices for Resource Adequacy (RA) capacity escalated. Aha!, thought I, that's how these projects are prospering. But I was wrong in thinking it was the end of the story. Here's what else happened starting in 2022. The Inflation Reduction Act (IRA) carved out investment tax credits (ITC) for several types of energy projects, which can then be transferred to third parties. Prior to the Act, projects needed a tax-



equity partner to take on the ITC credits. The IRA expanded the eligibility and scope of ITC, promoting a wider range of renewable energy and clean energy technologies. Projects such as solar PV, wind energy, and BESS are just a few of a long list of options that qualify under the IRA for this treatment.

Certain projects may need to source a percentage of its components from domestic manufacturers. However, the transfer process is simple: The project must be certified by the IRS to ensure it meets all eligibility criteria, and a formal agreement must be executed between the project owner and the third party receiving the ITC.

The transfer ability significantly changed the pro forma for assets such as BESS. These are capital-intensive designs, so allowing 30% or more¹ of the capital cost to be sold as a tax credit holds great value to prospective tax-bearing entities. No wonder BESS asset-owners have been so risk-averse in the arbitrage arena. Who needs to take risk when an upfront tax-credit sale can proffer 20x or more than the annual net earnings from operating the machine? Sell the tax credits, collect the RA revenues, and just don't lose money in the energy markets.

CAISO's EDAM is Full Speed Ahead

At the West-Wide Governance Pathways Initiative (Pathways) meeting last Friday, two things became concrete . First, NV Energy announced its intent to join the Extended Day-Ahead Market (EDAM), thus exceeding the prespecified critical mass threshold. Second, the Pathways Launch Committee endorsed the Step 1 Proposal to authorize the Western Imbalance Energy Market (WIEM) Governing Body to oversee EDAM policies. Both items were covered in <u>Utility Dive</u> and <u>RTO Insider</u>, but I didn't see any other notices.

I was pleased to read that <u>Ethan Howland</u> wrote the <u>Utility Dive pieces</u> in <u>two separate articles</u>. When Ethan was a stringer for Platts he and I would converse frequently. Alas, stringers for Platts became a thing of the past and we hadn't talked in years. So, the events of last week were a great excuse for me to call him and catch up.

In brief, here's how Ethan linked and inked the two things. David Rubin, the federal energy policy director from NV Energy, told the Pathways people during their teleconference meeting last Friday that NV Energy plans to join EDAM. Per the article, "*Those utilities [that intend to join EDAM] have enough load to trigger a process that would make the Western EIM Board the primary governance authority over the day-ahead and imbalance markets instead of having joint authority with CAISO's board.*" That was a perfect segue into the second item about which Ethan wrote: "*The proposal from the West-Wide Governance Pathways Initiative's launch committee gives the EIM's governing board primary authority over the markets; in the current structure, it holds joint authority with the California Independent System Operator's board.*"

Here is what the Pathway committee's endorsement means. The CAISO Governing Board will no longer be able to reject or veto policy initiatives of the WEIM Governing Body. The two governance entities can discuss and negotiate if there are differences of opinion. Lacking agreement, the two can submit to arbitration for resolution. If that doesn't happen, then the two parties will have Federal Power Act Section 205 filing rights (one filing for each party) and place the outcome squarely in FERC's lap.

The Step 1 proposal makes a lot of sense. In reality, the two bodies will be loath to upset the applecart unless absolutely necessary. And if they go either to arbitration or FERC, then the outcome would be months in the making, or possibly a year or more. Not a preferred option.

WPTF Executive Director Scott Miller participated in the Pathway's Launch Committee and here were his comments : "Once, the CAISO EIM was on track to evolve into one big RTO covering most of the West. The composition of the CAISO Board – appointed by the California Governor – kept that from happening and three attempts to get legislation passed to have an independent Board were unable to get the necessary votes. Subsequently, CAISO began discussion of a 'day-ahead' market that would increase the benefits of the EIM while preserving the balancing areas of any out of state utilities.

¹ Projects that meet domestic content requirements can receive an additional 10% ITC, making the total 40%. Projects located in energy communities, which are areas with significant unemployment, can qualify for an additional 10% ITC, bringing the total up to 50%. If all the bonuses available are combined, then a project can potentially receive an ITC of up to 70%.

"Enter Pathways, an effort begun last Fall by regulators in California, Washington, Oregon, Arizona and a few other states to see if some kind of 'path' toward governance might allow for a big regional market that would include California. A lot of work went into fundraising to get the legal and technical help to initiate this work.

"Since the beginning of this year, the attitude on the viability of EDAM as an independent entity seems to have changed for some utilities outside California. In one instance, that of NV Energy, it has seemed to make a difference. Additionally, a Brattle Study that was done for some utilities demonstrated benefits for joining either Day-Ahead market offering (EDAM or SPP Markets+) but for many the benefits for joining EDAM were greater.

"Let me finish by saying that if this trend continues, it will not be because of any deficiency on the part of the SPP effort on Markets+. WPTF submitted comments at FERC on the Markets+ tariff and found little fault with the proposal. However, a market with a broader scope that includes the biggest part of the West (California) would appear to offer greater economic and reliability benefits. We'll see how this develops in the coming months. EDAM is supposed to "go live" in first quarter of 2026. Markets+ will "go live" first quarter of 2027."

Things In the World

What Does it Take to Foster a Shared Vision and Mutual Cooperation?

Yesterday marked the 80th anniversary of the D-Day invasion. I don't need to cover the specifics of that battle or WWII. It is well known. Any war is tragic. The staggering number of military losses and civilian deaths seems unimaginable for the likes of me who has never witnessed the carnage. I never expect to in my remaining lifetime. A <u>commemorative article in the WSJ</u> highlighted the damage the invasion imposed upon the citizens of France. For example, "*On Wednesday, the French president commemorated the more than 50,000 civilians who died from American and British bombing during the war.*"

However, in the aftermath of that war in which many of our parents fought, there was a widespread political commonality about which I read and can't stop pondering. <u>It was entitled</u>, "Congress Got More Done When the <u>Greatest Generation Ran It</u>," and it was an essay penned by Gerald Seib. Brilliantly done, he points out that politicians in Congress on either side of the aisle respected each other, partnered when such was needed, and shared a common purpose because they had grown up during the war years. Take note: "*Three Senators—Phil Hart, Bob Dole and Daniel Inouye—are gone now, as are the hundreds of other World War II veterans who once filled the halls of Congress and long formed a majority of its members ... It has been 10 years since the last two World War II veterans departed from Congress ... That represents more than a historical footnote; it is a reminder of how much those veterans and their shared bonds are missed today."²*

I felt a profound ache when I read it. Out of immense tragedy emerged something that has not been replicated during peacetime. How is this possible? Why does it happen? What does it say about us? As I reflected a few weeks ago on the seemingly endless care we provided for our dying dog—who for seven months depended on us to move her, clean her, and care for her—I realized that tending to someone who relies on you, whether human or pet, is a virtuous and deeply rewarding act. Yet, who would willingly sign up for such an assignment?

² At its peak, the number of veterans in the 100-member Senate reached 81 in 1975, according to data compiled by the Brookings Institution. The veterans' presence was felt just as strongly in the House. Brookings Institution data show that the number of veterans in the 435-member House rose from 268 in 1953 until it hit a peak of 327 in 1969.

No one. You do it because you must. The same is true for wartime. Who would volunteer to start another global conflict just so future generations can benefit from political cooperation? It's crazy to even consider.

More on Seib's reflections: "*At a time when Congress finds it hard to perform even its most basic tasks, when comity is declining and consensus seemingly impossible to find, and when lawmakers define themselves less by what unites them than by what divides them, the experience of the World War II veterans shows that a different reality is possible.*" The common experience shared by those veterans transcended their differences. I also read separately that many incumbent Senators and Representatives are leaving Congress this election cycle out of frustration. I get it. Who wants to make a living arguing with a wall? Seib wrote: "*That didn't eliminate ideological disagreements by any means, but it made it easier for members to cross party lines and provided an atmosphere in which it was easier, at the end of the day, to trust one another.*" That's the world I want to live in, but I'm not willing to make the same or similar sacrifice to get there.

Seib's essay is a terrific piece. I encourage you to read it.

Overselling A.I. and the Derived Demand for Electricity

My fave technology journalist, Chris Mims, submitted an unusual piece for him last weekend because he is often upbeat and optimistic. I would call it <u>a warning about A.I. hype</u> that the blossom already is off the rose. He posited, "*The rate of improvement for AIs is slowing, and there appear to be fewer applications than originally imagined for even the most capable of them. It is wildly expensive to build and run AI. New, competing AI models are popping up constantly, but it takes a long time for them to have a meaningful impact on how most people actually work ... These factors raise questions about whether AI could become commoditized, about its potential to produce revenue and especially profits, and whether a new economy is actually being born." Good points, and very sobering. The widespread excitement affecting everything that A.I. touches, including electricity demand, might overstate reasonable expectations. Maybe it's time to temper our outlook.*

In his wrap-up, Mims proffers: "Changing people's mindsets and habits will be among the biggest barriers to swift adoption of AI. That is a remarkably consistent pattern across the rollout of all new technologies ... The problem is that the current level of investment—in startups and by big companies—seems to be predicated on the idea that AI is going to get so much better, so fast, and be adopted so quickly that its impact on our lives and the economy is hard to comprehend.

"Mounting evidence suggests that won't be the case."

With those words in mind, I read the <u>following bluster in the WSJ with a huge grain of salt entitled</u>, "The Aging <u>U.S. Power Grid Is About to Get a Jolt</u>." Follow the Kool-Aid drinkers to the fountain of stupidity. Take one of this and another of that, put the two together, and suddenly you have an idea that exudes rapture about the inadequacy of the electricity grid across the country. Here is the passage that really bothered me: "*The plans come ahead of an expected surge in electricity demand, driven by a wave of power-hungry electric vehicles and new data centers for artificial-intelligence technology. That is a departure from the past two decades, when stagnant demand gave power companies little incentive to modernize their systems.*"

This from an enthusiastic journalist attempting to please his or her editor and offer sophomoric conclusions. It just bothers me, you know?



Grand Phunk Salsa a la Energy GPS

The Op Ed below is from the team at EnergyGPS with Tim Belden as the lead author. They delve into the ins and outs of regional energy commodities in their <u>West Power and Natural Gas Product</u>. To learn more about Energy GPS' offerings please email them at <u>sales@energygps.com</u>.

The Toothpaste is Out of the Tube

I found Ziad Alaywan's column, "The Elephant in the Room," <u>from the May 10th Burrito</u> interesting and thought provoking. In it, Ziad highlighted the prevalence of deeply negative LMPs during solar hours. The points I took from the article are that policy choices have contributed to some odd market outcomes and that it is questionable whether standard RTO market design is compatible with California policies, which are resulting in significant solar oversupply. The three bullets below recap the key premises of his article:

- Generators are paid their power purchase agreement price unless the generator is merchant or receives index pricing.
- The ratepayer pays the ever-increasing retail energy rate no matter how low the LMPs go.
- All generation and transmission additions are state-mandated or reliability-based and observed LMPs play little if any role in signaling these decisions.

Let's start with the first bullet – generator economics. As I've written before, CAISO policy suppresses prices during times of scarcity compared with the surrounding WECC region and other RTO markets. Generators in California are kept on a very strict, marginal energy cost diet. This policy has consequences.

Now to ratepayers. California has the fifth highest retail rates in the country. I don't buy the simple 'the high cost of renewables is causing high rates' argument. Texas has a comparable level of renewable penetration and has the 12th lowest rates in the country. There's more going on here than spending on renewables. Further,

retail rate design in California bludgeons the price signal received by load. There is no discernable price-sensitive demand in the state. In contrast, when the price in ERCOT ticks above \$250 per MWh, which it routinely does, you can watch the load graph fall as the price paid by some large consumers in ERCOT is directly tied to the short-term prices.

I might turn the third bullet on its head. I'm not aware of a California state policy that bans new merchant generators. Instead, there are no generators who like the prospect of operating on a merchant basis because the revenue is insufficient to finance the project. Why? Because

Texas is filled with merchant generators. PJM has plenty as well. The lack of merchant generation in CAISO can be directly tied to its decisions that suppress prices.

they are responding to the price signal sent by the CAISO. As a result, utilities have to step in with a long-term contract to make the project financeable. Texas is filled with merchant generators. PJM has plenty as well. The lack of merchant generation in CAISO can be directly tied to its decisions that suppress prices.

Ziad's column raises two other points I will quibble with:

• The price-signal benefits over the last decade in California have proven to be a fallacy. No transmission project has been approved based on market economics mitigating congestion costs.

• As to providing transparency on the marginal cost of wholesale energy, I am not sure it is applicable anymore, since during solar hours, all renewable generation without fuel costs has artificially suppressed the marginal cost as reflected in the negative LMPs.

I think the price signal in the CAISO has been very clear – don't build here unless you can secure a long-term contract. While that's not ideal, in my view, the price signal is achieving the exact result you would expect. By removing all the juice from the price, the CPUC and the CCAs have complete control over what is built. While that's not a market solution, I suspect it is consistent with their intentions.

On the transmission side, I'd point out that the large curtailments in 2024 hit SP15 much harder than NP15. Yet the CAISO's 2023/2024 draft transmission plan indicates that upgrades to Path 15 and Path 26 are (mostly) not justified on an economic basis. While I'm sure that Ziad is right that transmission plans haven't been justified on economics, it may be that their economics are broken via price suppression. Or perhaps the long-term economic models haven't peeked across the way to see what is happening in the short-term markets.

Finally, how about those deeply negative prices in CAISO? I admit, they are strange. Try explaining a negative \$75 price to a friend not in this business. But they do reflect the underlying economics of the combined energy and REC value. If the marginal cost to produce energy is \$0 and the cost to replace a REC is \$75, then whoever controls that generator should offer down to the negative value of the REC. Batteries are responding to this price signal by shifting participation from the ancillary service markets to the energy markets so they can charge these deeply negative prices. People are scrambling to find new ways to import more renewable energy to secure PCC1 RECs. These price signals are resulting in, at least, some response. If you didn't have negative prices, then how would you decide who will be curtailed and who won't.

The end of the article poses whether California should revisit its market design given these anomalies. Perhaps we could jettison the market, get in our time machine and go back 35 years, and acknowledge that the market isn't sending price signals that direct what will be built in the future – the CPUC and CCAs do that. But who would decide which resource gets dispatched when? How would prices be set? Who would pay these prices? Who gets curtailed and how? It's hard to put the toothpaste back in the tube.

Ziad's main point is a good one – how do you reconcile command and control policies with market outcomes? Recent CAISO results – lack of high prices during scarcity and extreme low prices during oversupply – makes one wonder whether the plan is working. You have to hope that as the CAISO expands via EDAM and perhaps, someday, a multi-state RTO, they sort through these challenges in a thoughtful way so that California policy and regulators don't dictate pricing outcomes for everyone in the WECC.

Shout Outs and Recipes

Mushoo Pork and Pancakes with Chef Laura Manz

"I have been dusting off old recipes and found a few forgotten favorites. One of them dates back to my college days when one of my only two cooking appliances was an electric wok. One of my cooking pals had a family favorite mu-hsu-jou or mushoo pork. I modified the recipe slightly to use cabbage, substituting for ½ cup of lily buds. Many suggest simply using flour tortillas, but to me the texture and chew of these simple pancakes makes this dish right. Substitute chicken for pork or substitute 1 cup rehydrated lily buds for 1 cup of the cabbage." For the pancakes: Place 2 cups AP flour in the bowl of a stand mixer. Using chopstick stir in a single direction $\frac{1}{2}$ cup boiling water, followed by $\frac{1}{2}$ cup cold water. When ingredients are incorporated, knead with the dough hook for 10 minutes. Cover with a damp towel and rest for 30 minutes. Prepare a floured work surface and divide the dough into 12 pieces. Roll each piece into a pancake shape. Brush the top of one pancake and the bottom of another pancake with sesame oil. Put the oiled sides together and cook in a frying pan over medium heat that has also been brushed with sesame oil. Flip as the pancakes become opaque. When cooked through, separate onto a platter that has been lined with paper towels. Continue until all the pancakes are cooked.

For the mushoo pork: Heat 1 Tbsp. of neutral oil in a large non-stick skillet over medium heat. Add 2 beaten eggs and cook about four minutes. Flip cook on the



other side until cooked through. Set aside. When eggs have cooled, slide into thin strips.

Add another Tbsp. of oil to the pan and cook 1 lb. pork tenderloin that has been cut into thin matchstick pieces. Remove from the pan and set aside. Season with $\frac{1}{2}$ tsp. of white pepper and $\frac{1}{2}$ tsp. of black pepper.

In a small bowl whisk together 2 tsp. of grated ginger, 1 clove garlic, 2 Tbsp. of soy sauce, 2 Tbsp. of dry sherry, 2 Tbsp. of <u>hoisin sauce</u>, 1 tsp. of toasted sesame oil, 1 tsp. of honey, 2 tsp. of cornstarch and 1 Tbsp. of water.

Add 1 cup sliced mushrooms (shitakes with stems removed preferred) and 4 cups shredded Chinese cabbage to the pan and sauté until mushrooms are cooked through. Add the pork and eggs to the pan and stir in six sliced scallions. Add the sauce to the pan and cook for about 2 minutes until the sauce thickens.

Serve with the pancakes, garnished with a drizzle of hoisin sauce and a sprinkle of minced scallions.

Thanks, Laura. Another great addition to your recipe repertoire. Although neither are called for in your instructions, there are two ingredients in Chinese cooking that I must avoid like the plague: plum sauce and baby Bok choy. To explain why would violate the TMI guidelines for the Burrito (or should I change the name to the Friday Moo Shu, or Mushoo, Mu Shi?) loosely applied as they are. Consider Using This Space for Digital Advertising of your Company or Association <u>Contact gba</u> for more information.

Odds & Ends (_!_)

I was saddened to hear belatedly the <u>passing of Jim Detmers</u>, a dear man who managed the CAISO Dispatch Center for many years. I didn't know until this week that he passed last December. His health was not good during the last decade of his life due to a genetic disease that impeded his balance. But his mind was sharp, and his demeanor always pleasant. It was individuals like Detmers, Jim McIntosh, and Ed Riley (a.k.a. Mr. Clean), now all three gone, who mentored me in the workings of the control center in Folsom and embraced my publication. I miss them all. Below are your stories if you are reading the red-meat edition. We'll do it again next week. Y'all have a great weekend.

Gba



What Kids Say

These have to be original and genuine - no adult is this creative!

MELANIE (age 5) asked her Granny how old she was. Granny replied she was so old she didn't remember any more. Melanie said, "If you don't remember you must look in the back of your panties. Mine say five to six."

STEVEN (age 3) hugged and kissed his Mom goodnight. "I love you so much, that when you die, I'm going to bury you outside my bedroom window."

BRITTANY (age 4) had an earache and wanted a painkiller. She tried in vain to take the lid off the bottle. Seeing her frustration, her Mom explained it was a childproof cap and she'd have to open it for her. Eyes wide with wonder, the little girl asked: "How does it know it's me?"

SUSAN (age 4) was drinking juice when she got the hiccups. "Please don't give me this juice again," she said, "It makes my teeth cough."

DREW (age 4) stepped onto the bathroom scale and asked: "How much do I cost?"

MARC (age 4) was engrossed in a young couple that were hugging and kissing in a restaurant. Without taking his eyes off them, he asked his dad: "Why is he whispering in her mouth?"

CLINTON (age 5) was in his bedroom looking worried. When his Mom asked what was troubling him, he replied, "I don't know what'll happen with this bed when I get married. How will my wife fit in?"

JAMES (age 4) was listening to a Bible story. His dad read: "The man named Lot was warned to take his wife and flee out of the city but his wife looked back and was turned to salt." Concerned, James asked: "What happened to the flea?"

TAMMY (age 4) was with her mother when they met an elderly, rather wrinkled woman her Mom knew. Tammy looked at her for a while and then asked, "Why doesn't your skin fit your face?"

The Sermon I think this Mom will never forget... this particular Sunday sermon..."Dear Lord," the minister began, with arms extended toward heaven and a rapturous look on his upturned face. "Without you, we are but dust." He would have continued but at that moment my very obedient daughter (who was listening!) leaned over to me and asked quite audibly in her shrill little girl voice, "Mom, what is butt dust?"

A Golfing Story

Two women were playing golf when one teed off and watched in horror as her ball headed directly toward a foursome of men playing the next hole. The ball hit one of the men and he immediately clasped his hands together at his groin, fell to the ground and proceeded to roll around in agony.

The woman rushed down to the man, and immediately began to apologize "Please allow me to help. I'm a physical therapist and I know I could relieve your pain if you'd allow me," she told him. "Oh, no, I'll be fine in a

few minutes," the man replied. He was in obvious agony, lying in the fetal position, still clasping his hands together at his groin.

At her persistence, however, he finally allowed her to help. She gently took his hands away and laid them to the side, loosened his pants and put her hands inside. She administered tender and artful massage for several long moments and asked, "How does that feel?"

He replied, "It feels greatbut my thumb still hurts like hell."