The Friday Burrito

Yes, There is a Renewables Claus

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"Very few people are original. There's very little original anything out there. Because to be original means you have to stand alone."

Susan Powter

"Any committee is only as good as the most knowledgeable, determined and vigorous person on it. There must be somebody who provides the flame."

Lady Bird Johnson

Every December since 1998 when I began writing the Friday Burrito, I wondered how time passed so quickly. I was writing the January issue and it seemed in the time it takes to snap your fingers the last issue in December. Despite the melancholy, I plodded on because if I didn't write, then I couldn't breathe … in the spiritual sense you understand. Yes, it's an addiction without apology. The lesson for y'all is do what you are passionate about and good things will follow.

From melancholy to sad, I mourn the loss of two women whose passing has meant more to me than I can say. The first was Patricia S. Hoffman, who passed on November 22nd and was the wife of my pal Bob Hoffman. The second was Rebecca Smith, retired journalist for the WSJ, among other accomplishments, who died last Friday. I wish to dedicate today's Burrito in their memory. More on both in the Odds & Ends section below.

The Energy Appetite of AI

Our world changes quickly. A good example of that is the constant references to artificial intelligence infiltrating every aspect of our lives. The WSJ columnist, Christopher Mims, wrote another great feature last Friday entitled, "AI Is Ravenous for Energy. Can It Be Satisfied?" His entry meshed well with Tim Belden's Op Ed in last week's Burrito about the surge in U.S. electricity demand, and Randy Hardy's column this week, below. Mims explains, "*Since 2010, power consumption for data centers has remained nearly flat, as a proportion of global electricity production, at about 1% of that figure, according to the International Energy Agency. But the rapid adoption of AI could represent a sea change in how much electricity is required to run the internet—specifically, the data centers that comprise the cloud, and make possible all the digital services we rely on.*" I doubt any among us would question his statement. Look, although I am no computer whiz, the frequency with which I now use

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Odds & Ends (_!_)

Western States Ticker

CAISO YTD Renewables Curtailment:

As of 11/28/23: 2,624,888 MWh
As of 11/28/22 2,431,513 MWh

% of solar and wind output curtailed:

YTD as of Nov. 2023 4.31%
YTD as of Nov. 2022 3.97%

low-level AI applications such as the free ChatGPT has been astounding for a Luddite such as I. The app is a dream especially for translating between English and Spanish as I must do often to communicate with the members of the trade association I began in Mexico in 2017.

Back to Mims and his article in the WSJ. Additional power generation required over the next two to three years to meet the demand for AI applications is mind-numbing. Estimates between 10% energy growth and 100% have been tossed out for consideration. And that is globally, not just in the U.S. The load-profile of an AI server is relatively flat and continuous across all days. Therefore, adding a ton of intermittent renewables and storage assets will not do the trick. Nuclear power and natural gas plants will be needed to satisfy this growth.

However, the future energy demand to support the growth in AI is difficult to assess. For example, Mims states: "*There is also substantial debate about whether or not AI is inherently power-hungry. On the one hand, AI systems must do their calculations afresh every time a user interacts with them … [but] Google started incorporating generative AI summaries into those results … because a copy of those results could be stored, or 'cached.'" Thus, research is suggesting that AI models could be made much more efficient than they are now.*"

I don't believe the so-called EV revolution and its related battery charging needs will boost U.S. power demand anywhere near where AI applications may go. And why would AI data centers have to be located in every country around the world? Couldn't energy-rich grids located in Timbuctoo cash in on this trend and out-compete domestic providers of AI? Not my field of expertise but we will all need to climb the learning curve as things unfold. Maybe I should pose these questions to my ChatGPT aide-de-camp?

Microsoft and Nuclear Power

Picking up from the discussion above, Microsoft announced an experiment to aid the licensing of new nuclear power stations that someday (soon) could support its fleet of AI data centers. According to an exclusive report by Jennifer Hiller in the WSJ, "*Nuclear power is carbon-free and, unlike renewables, provides round-the-clock electricity. But it faces significant hurdles to getting built, including the daunting and expensive U.S. nuclear regulatory process for project developers … In a twist, Microsoft is experimenting with generative artificial intelligence to see if AI could help streamline the approval process.*" There's a circular story here. Use nuclear to unleash more AI and also apply the generative technology to make the licensing of nuclear plants more efficient. The idea of AI making any energy regulator more efficient seems farfetched, AI or not. However, according to Hiller, "*For the past six months, a team of Microsoft employees has been training a large language model with U.S. nuclear regulatory and licensing documents, hoping to expedite the paperwork*

What we believe…

Competition yields lower electricity rates. 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 cover all the costs.

Overcapacity lowers electricity spot market prices; yet retail rates can increase in this case due to full cost-of-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.

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

Support rules for resource adequacy that applies uniformly among all load-serving entities.

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

required for such approvals, which can take years and cost hundreds of millions of dollars."

Nuclear capacity in the U.S. and abroad has declined. Not by an enormous amount, but declined, nonetheless. "*Generation dropped 4% last year and nuclear's share of the global electricity market is at the lowest point in four decades, around 9.2%.*" The interest in tying nuclear power to AI data centers, among other applications including crypto mining, will open greater possibilities for small modular reactors (SMR), my fave game-changing technology. Per Hiller, "*The costly permitting and construction process remains a primary hurdle for SMRs in Western countries. In the U.S., so far just one SMR developer, NuScale Power, has had its design approved by the NRC. The process cost NuScale around $500 million and its 12,000-page application had around two million pages of support materials.*" Reading that, I wondered what happened to the Carbon Free Power Project of the SMR development initially advanced by the Utah Associated Municipal Power System (UAMPS). Unfortunately, the project folded its wings last month. More's the pity.

Bye-Bye Barra

In the Great COP Out Burrito on December 1, I wrote, "The biggest loser in the EV race-to-the-bottom has been General Motors. Its CEO, Mary Barra, struck me as a starry-eyed optimist when she made predictions two years ago about GM's reach for EV-only product lines." I don't

Continue on next page

Support choice among retail electricity customers.

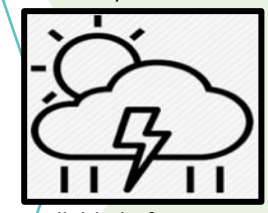
Lobby for core/non-core split of retail customers.

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

A Hardy Regional Outlook

Dramatic Northwest Load Growth

This column provides some specific examples of the rapidly increasing load growth discussed in last week's Burrito. In May 2023, the Pacific Northwest (PNW) annual utility forecast projected 4.8 percent yearly load increases for the next five years and 2.4 percent annually for the next decade. This forecast also estimated only one percent per year for the previous decade.



Since May, several events have occurred that tend to validate that higher regional forecast. For example, while BPA's 2023 transmission cluster study has not yet been published, analysis supporting its probable results revealed three significant policy conclusions: (1) little or no conditional firm transmission will likely be available in future years; (2) most transmission projects post 2023 will require new rights of way (ROWs); and (3) no more upgrades of 230 kV lines to 500 kV (in existing ROW) will likely be possible. In essence, BPA and the PNW utilities, by installing series capacitors, reconductoring and adopting similar lower-cost measures to increase total transmission capacity on key paths, have exhausted the relatively easy measures to increase capacity. In addition, BPA will probably need a new 500 kV line from The Dalles area (north Oregon) to central Oregon, both to serve new data centers and to enable renewable resource acquisitions to serve those facilities.

Moreover, much of BPA and PNW IOU transmission additions are aimed, not just at enabling wheeling of eastside renewable resources to westside loads, but also are designed to serve dramatic growth in data enters and similar high-tech loads. Recent BPA and PGE estimates of datacenter needs alone project increases of 3-5 GW by 2030. While these projections by themselves are daunting, they do not yet include any significant electrification-driven load growth or even greater data center increases fueled by future artificial intelligence demand.

expect my predictions to be correct more than 50% of the time, but this one echoed loudly when I read a feature article about Barra entitled, "Mary Barra Spent a Decade Transforming GM. It Hasn't Been Enough."

News editors don't run stories like that about standing CEOs unless there is some hint that a change of command may be near. The GM Board believed in 2013 that the stodgy firm needed to be shaken up with visionary leadership. I don't think that is the wrong thing to do. However, her approach was a wholesale disaster because she put damn near all the company's eggs in one basket. She canceled plans for a new gas-guzzling Cadillac model and put forward a two-pronged strategy for GM … EVs and driverless vehicles. Apparently, Barra never heard of the cautions put forth by philosopher Leibniz and biologist Charles Darwin, "*Natura non facit saltus*," or nature makes no jumps. Per the WSJ article, "*Lately, Barra has said that not as many consumers have been willing to make the switch to electric as the company had expected, clouding the future payoff for her EV bet.*"

If the EV lackluster sales weren't enough, then GM's flagship driverless vehicle, Cruise, added to Barra's misery because it suffered a recent setback. "*Cruise in October pulled about 400 robot taxis off the streets of San Francisco and a handful of other cities after one of its driverless vehicles collided with a pedestrian who had been struck by another car and dragged her 20 feet. Cruise announced Thursday it laid off about one quarter of its workforce.*" Look, you can't blame someone for trying to improve corporate performance, but some notion of risk-reward should be in the picture for a large company like GM. Shame on its Board. Pity on its stockholders.

Remember, there are no such things as CEO departures due to personal reasons like devoting more time to family. That hype is press-release boilerplate for a CEO stepdown. Behold, the ground is rumbling in Detroit.

The Inevitable Climate Creep

NYT climate and science writer David Wallace-Wells penned a seminal piece last Saturday that smacked of hard-core realism. In a sentence, the Paris Accord target of reducing greenhouse gas emissions such that global temperatures stay below 1.5^0C is no longer in sight, so get used to it. His opinion had the title, "What No One at COP28 Wanted to Say Out Loud: Prepare for 1.5 Degrees." Bully. We are finally getting to the point of self-realization. He bemoans this forecast, of course. But he couches his dismay with elan: "*For all of our temperature goals, the timelines are growing shorter and shorter, bringing the world closer and closer to futures that looked so fearsome to so many not very long ago.*"

The fear factor was fueled by a gaggle of things including so-called science and media hype. There has never been a lack of climate hysteria. Thus, Wallace-Wells was spot on when he wrote: "*Most analysts predict a global peak in fossil fuel emissions at some point over the next decade, followed not by a decline but a long plateau … The expected result: end-of-century warming between 2 and 3 degrees Celsius. Not very long ago, this was a future that terrified us. Now, we are not just coming to accept that future but, in some corners, applauding it as progress … Over the last several years, as decarbonization has made worst case scenarios seem much less likely, a wave of climate alarmism has given way somewhat to a new mix of accommodation and optimism.*" Maybe the bubble has popped, and it is time for some calm thinking about GHG reductions in a cost-effective manner, assuming imaginary targets that even if enacted would result in negligible effect. I believe that emissions can be reduced, but it will take decades and a large-scale commitment of individuals to change their respective lifestyles rather than supporting mandates.

Maybe this is how progress is made. One mistake at a time.

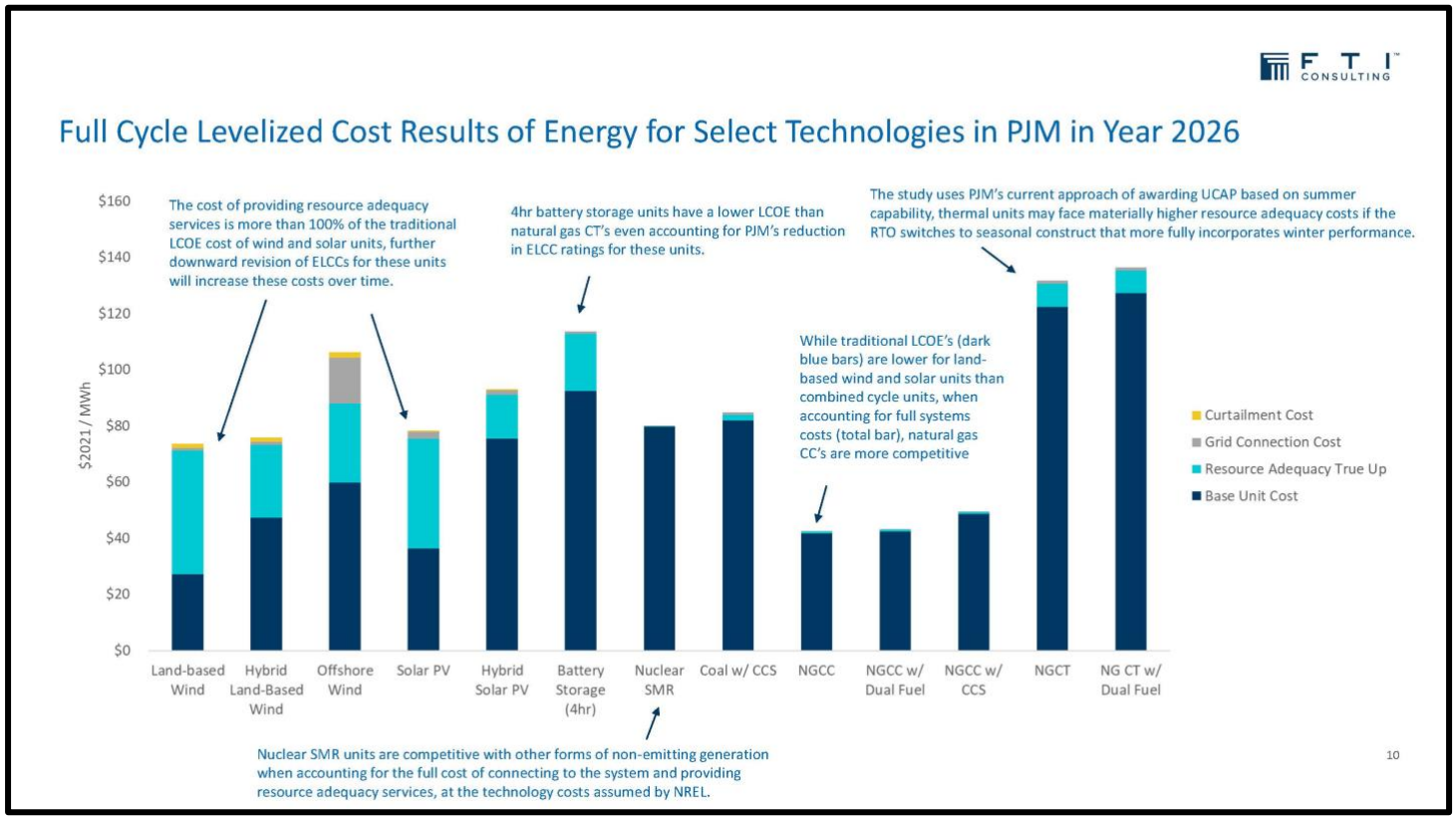
Things In the Energy World

Lazard v. FTI on Levelized Cost of Energy

There are instances when comparing two studies that have similar goals are not truly an apples-to-apples exercise, if you know what I mean. On the other hand, once the differences are understood and appreciated there are opportunities to learn things. What those things may be is always a surprise. With that charitable spirit in mind, I attended a webinar about a study on the levelized cost of energy (LCOE) in PJM, sponsored by the Electric Power Supply Association (EPSA) and the consulting firm FTI. I have great respect for both EPSA and FTI, so I knew in advance that whatever was presented would be credible.

The gold standard for LCOE for about the last 16 years has been done by Lazard Brothers. In many past Burritos, I have summarized the Lazard findings that are applicable to the U.S., rather than an exclusive RTO such as PJM. That's one example where my apple turns into an orange. But we carry on for the purpose of uncovering relevant findings of interest. What I have appreciated about the Lazard studies (the most recent was released last April, LCOE 16; LCOE 15 was released in October of 2021) are the footnotes that clearly state the limits of their analyses. Their stuff is intellectually honest in that regard.

The EPSA/FTI effort was undertaken to bridge the gap regarding the missing costs that the folks at Lazard have freely admitted are not included. To be specific, EPSA/FTI estimated for the PJM footprint, in addition to annualized capital costs, the costs of 1) grid connection; 2) curtailment; and 3) resource adequacy (RA). The third element of cost is what I think of as the incremental expense to provide a level of capacity for a resource

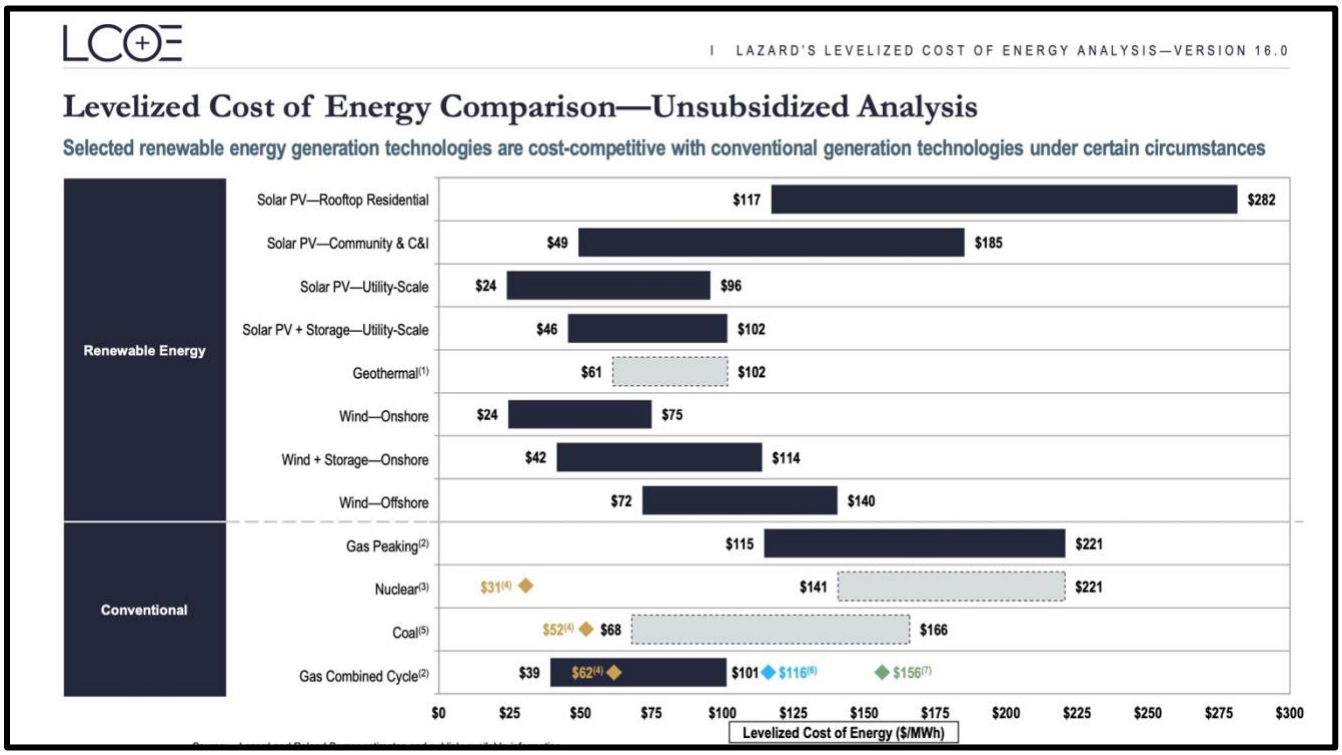


across a 24-hour span … like the Effective Load Carrying Capability (ELCC). The slide presentation used in the webinar explained the RA component as follows: "*FTI used projected ELCC's and class EFORd* [effective forced

outage rate] *ratings to reflect units' contribution towards meeting RA requirements in 2026. All units must purchase a capacity 'true up' to achieve 100% ELCC or* [unforced capacity adjustment] *UCAP relative to* [installed capacity adjustment] *ICAP. This true up is priced at the cost of 4 hour energy storage.*" Kudos to EPSA/FTI for undertaking this task. The three elements of additional costs are necessary to make legitimate LCOE comparisons between intermittent and firm capacity resources.

The EPSA/FTI results in the chart on the page above confirm one's suspicions that for too long people have made technology comparisons between, say, solar and natural gas as if the only thing that mattered was the capital cost and tax incentives. Not so. As the comments on the chart state for wind and solar, "*The cost of RA services is more than 100% of the traditional LCOE …*"

Below and turned on its side (thus making more challenging any visual comparison by 90 degrees) is the Lazard LCOE chart representing the traditional approach. Thus, if the missing-costs factors identified and



estimated by EPSA/FTI can be applied loosely to Lazard, then the full cost of onshore wind for example could easily triple, and utility-scale PV might double … using my eyeball estimation technique with its well-known optimal properties.

So, there is something to be learned even if an exact comparison between two different approaches can't be executed. EPSA/FTI moved the needle in the correct direction. I doubt in future studies that Lazard will be able to replicate the missing costs for intermittent technologies. But time will tell.

ENERGYGPS

Grand Phunk Salsa a la EnergyGPS

The Op Ed below is from the team at EnergyGPS with Tim Belden as the lead writer. EnergyGPS covers the intersection of renewables and wholesale markets in its *Renewable Monthly Report*, which is part of the EnergyGPS eCommerce Platinum Plus package. For more information, email sales@energygps.com.

Tis the Season for Any Reason

In the spirit of the holiday season, I've been reflecting on which customers and stakeholders in the industry we should be thankful for this year. Of course, we are grateful that our customers hire us and subscribe to our content. But another group of people comes to my mind. I should be sending a large Harry and David's fruit basket to the people who have provided a nice boost to Energy GPS' business over the last few years: California unions, environmental groups in Washington and Oregon, carbon regulators in Washington, and electricity regulators throughout the West who have been slow to push for centralized markets. Perhaps a special gift basket should go to California politicians who have resisted changes in CAISO governance. Collectively, these good people have created scarcity, seams, and volatility, which has roiled the Western US power markets for the last several years and may continue to do so into the future. The environmental and electricity markets are more complex than they need to be, have policy-driven price spikes for commodities that are not actually consumed by anyone (carbon and REC), and have a set of byzantine rules. All of this adds up to opportunities to analyze markets and provide consulting services. Yes, this madness is good for Energy GPS' bottom line, but it drives me bananas. It doesn't have to be this way.

Environmental markets in the West are going bonkers. California PCC1 2024 Vintage RECs[1] are trading around $80 per MWh. Vintages 2025 and 2026 are bid around the $60 per MWh level. California PCC2 2024 Vintage RECs[2] are currently bid north of $60 with the offer out until after the holidays. Washington carbon traded up to $70 per ton earlier this year as it became clear the market was in tight supply. After numerous twists and turns by the Washington Department of Ecology, prices are down to around $50 per ton. California carbon prices are the most "normal" of any of these environmental markets with prices rising from about $30 a ton to above $35 a ton, with a steady but measured upward move. Meanwhile, the electricity market beauty pageant continues with CAISO and SPP vying for a piece of the day-ahead and real time action.

Events from the last few years could be interpreted in a few ways. I'm a fan of price signals – high carbon and REC prices should send a price signal to the market to build more renewables, which can benefit from these high prices. But new build is being driven by regulatory requirements, not by market prices. The number of new-build, carbon-free, merchant resources hitting the grid due to high prices is a small number that may equal zero. Further, the high price signal doesn't put a dent in demand. Demand is almost entirely fixed due to compliance obligations. Nobody is reducing their consumption of RECs by either reducing demand or buying something else instead. Similarly, with Washington carbon prices soaring, demand for fossil fuels marches on – most people don't even know about the price of carbon.

I suppose all of this is part of the uneven journey to a clean energy future. And perhaps this period of unbalanced supply and demand will be fleeting – an extended hangover from COVID-related supply chain disruptions. But I suspect it may be here for a while. A fundamental challenge is that demand is set through imperfect regulatory/political processes. The clean energy and carbon reduction obligations are high. In some cases, they may be unrealistically high. Our analysis of the Washington carbon market certainly suggests that. Getting to the high level of renewables may also pose challenges. Don't get me wrong, as a citizen, I'm very much in favor of de-carbonizing the economy. But it may make sense to put some thoughtful release valves in

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[1] Bucket 1 (Power Content Category (PCC) 1) – Energy and RECs (typically from CA) delivered to a California Balancing Authority (CBA) without substituting electricity from another source. Min 75%

[2] Bucket 2 (PCC2)– Energy and RECs (typically from an out-of-state renewable energy project) that cannot be delivered to a CBA without substituting energy from another source (i.e. intermittent wind energy needs to substitute in another energy source to meet demand during times when the wind facility is not generating electricity). Max 15%

place if the targets that were hashed out by politicians and lobbyists in the back rooms of our state capitals turned out to be too ambitious.

And if I'm going to be really greedy with my "ask", wouldn't it be great if the state leaders talked to one another to figure out how to harmonize policies and prevent any low-hanging seams, like maybe developing a common set of carbon rules rather than a tax in British Columbia, a cap-and-trade island in Washington, a command-and-control approach in Oregon, and a separate cap-and-trade program in Washington. Am I asking for too much?

Recipes and Shout Outs

Cream Cheese Pecan Bundt Cake with Chef Laura Manz

" The holidays bring back many memories and one of my favorites is the time our dog circumnavigated the dining room table to devour only the back side of the holiday cake, leaving no obvious traces when observed from the kitchen. Thank goodness we made the discovery in time to make a second cake, but I was sorely teased that if I were really a dog person, I would have kept the intact half. The horror of the moment has become one of our favorite recollections to laugh about. Hoping your holidays are also filled with good memories and laughter that last throughout the years.

Cream together 8 oz. cream cheese and 3 sticks of room-temperature butter. Gradually add 3 cups of sugar, beating until light and fluffy. Add 5 large eggs, one at a time, beating well after each. Add 3 cups of sifter flour and a dash of salt. Beat until light. Incorporate 1½ tsp. of vanilla. Stir in 1 cup chopped toasted pecans. Sprinkle ½ cup pecans into a generously greased Bundt pan. Pour batter into the pan and bake at 325° for at least an hour until a toothpick comes out clean. Cool for 10 minutes before removing from the pan. Cool completely on a wire rack.

Top with powdered sugar or make a glaze from 2 cups sifted powdered sugar mixed with 4 Tbsp. or fresh Meyer lemon juice using an electric mixer. Garnish with Meyer lemon zest or some festive colored sugar.

Thanks, Laura, and happy holidays. Your dog story reminds me of a similar episode with our buff Cocker Spaniel named Tess. Instead of eating a cake on the holiday table she jumped on the dining room table while the family was busy in the kitchen and took a chunk out of the Honey Baked ham. When we caught her sitting on the table, she simply looked away from us hoping that we wouldn't notice either her or the bite marks on the main entrée.

Odds & Ends (_!_)

In Memory of Patricia S. Hoffman

Pat often accompanied her husband, Bob, to WPTF General Meetings, which is where I first met her. For some reason, I have a visual image in my mind that at the reception where we were introduced, she was saddled with a boot on one foot that had been surgically treated. I recall that she had to use a wheelchair to get around that evening. Since then, and over the years, Erin and I have met socially with Pat and Bob on many occasions because they lived in the broader LA area. Her good humor and sparkle were the highlights of our outings.

Of course, over the last couple of years as her health declined our interactions with Pat were limited to text messages passed back and forth between Bob and me. Bob and Pat were together for 39 years. She is survived as well by her son Sam Hoffman, her daughter Claudine Garcia, and a brother Mark Knight.

In Memory of Rebecca Smith

The first journalist to ever ask to be put on the Burrito distribution list was Becky Smith. At the time, I knew her by reputation not having met her, but I was simply shocked when she called. I think it was a year to two after I started the publication. Dumbfounded as I was, I asked her for some advice as she was the pro, and I was (and still am) the amateur. She said, "*Keep doing what you are doing*."

Over the years, we had many visits when attending the same industry conferences, such as the National Association of Regulatory Utility Commissioners (NARUC). Once I saw her in a conference center alcove alone, and I sat with her for a good 30 minutes just talking about stuff. I considered her a friend and I hope she thought the same about me. Sometimes, and I mean maybe once or twice, she would send me an email on some highly technical piece that I wrote complimenting me on my work. That meant a lot to me. After all, she was the news writer and I the apprentice.

A lovely story about Rebecca was written by Katherine Blunt in the WSJ this week. The characterizations of Rebecca by others as reported therein have been echoed over and over without exception: Rebecca was the consummate reporter, dug into the facts of an energy story with no stone left unturned, asked good questions, wrote clear and concise copy on difficult topics, and was just about the nicest person you'd ever want to meet. Her loss will be felt for a long time.

WPTF General Meeting

The next WPTF General Meeting in Palm Springs on February 29 – March 1, 2024. The place will be the Omni Rancho Las Palmas and registration is available by clicking here. One of the keynote speakers will be Andy Ott, former CEO of PJM, and current Board member of WRAP.

The hotel is located about 15-20 minutes from the Palm Springs Airport in Rancho Mirage, California. Our resort near Palm Springs offers an ideal escape in the Coachella Valley. Rooms are $269/night, plus taxes, fees, and assessments (approx. 13.45%). There is also a $35/night resort charge.

The hotel charges an early departure fee to ensure you have your correct arrival and departure dates. If you need to cancel your hotel reservation, do so 72 hours prior to the arrival date or one night's room and tax will be charged.

Program of Events

Thursday, February 29

WPTF Golf Tournament (9:00 AM shotgun start)

- Separate registration required ($175 total fee - includes golf, cart, and luncheon. Rental shoes and clubs are an additional fee)
- Sponsored by Gregory Klatt, Partner, Douglass, Liddell & Klatt

6:00 p.m. - 7:00 p.m.: Hosted Reception

7:00 p.m. - 9:30 p.m.

- Dinner and Keynote Presentation Andy Ott, former CEO of PJM, and current Board member of Western Resource Adequacy Program (WRAP).
- Presentation of the Jackalyne Pfannenstiel Award

9:30 p.m. - 11:00 p.m.: Dessert Reception

Friday, March 1

8:00 a.m. - 9:00 a.m.: Buffet Breakfast

9:00 a.m. – Noon: Roundtable Discussions

Noon - 1:00 p.m.: Luncheon

1:00 p.m.: Program Concludes

In the section below are your stories for the week if you are a meat eater. Next Burrito on January 5, 2024. Have a wonderful and safe holiday season.

gba

Where's the BC?

My friend is a rather old-fashioned lady, always quite delicate and elegant, especially in her language. She and her husband were planning a week's vacation in Arizona; so she wrote to a travel trailer court and asked for a reservation.

She wanted to make sure the campground was fully equipped, but she didn't quite know how to ask about the "toilet" facilities. She just couldn't bring herself to write the word "toilet" in her letter. After much deliberation, she finally came up with the old-fashioned term "bathroom commode".

So, she started all over again and referred to the bathroom commode merely as the B.C. "Does the campground have its own B.C?" is what she actually wrote. Well, the court manager, Herman, wasn't old-

fashioned at all and when he got the letter, he just couldn't figure out what the woman was talking about. That B.C. business really had him stumped.

After worrying about it for a while, he showed the letter to several campers, but they couldn't imagine what the lady meant either. So, he finally came to the conclusion that the lady must be asking about the location of the Baptist Church. He sat down and wrote the following reply:

Dear Madam: I regret the delay in answering your letter, but I now take pleasure of informing you that a B.C. is located 9 miles north of the campground and is capable of seating 250 people at one time. I admit it is quite a distance away if you are in the habit of going regularly, but no doubt you will be pleased to know that a great number of people take their lunches along and make a day of it. They usually arrive early and stay late.

The last time my wife and I went was six years ago and it was so crowded we had to stand up the whole time we were there. It may interest you to know that right now there is a supper planned to raise money to buy more seats. They are going to hold it in the basement of the B.C. I would like to say it pains me very much not to be able to go more regularly, but it is surely no lack of desire on my part. As we grow older, it seems to be more of an effort, particularly in cold weather.

If you decide to come down to our campground, perhaps I could go with you the first time you go, sit with you, and introduce you to all the other folks. Remember, this is a friendly community.

Interpreting History

The following excerpts are actual answers given on history tests and in Sunday School quizzes by children between 5th and 6th grade ages. They were collected over a period of three years by two teachers. Read carefully for grammar, misplaced modifiers, and of course, spelling!!!

- *Ancient Egypt was old. It was inhabited by gypsies and mummies who all wrote in hydraulics. They lived in the Sarah Dessert. The climate of the Sarah is such that all the inhabitants have to live elsewhere.*
- *Moses led the Hebrew slaves to the Red Sea where they made unleavened bread, which is bread made without any ingredients. Moses went up on Mount Cyanide to get the ten commandos. He died before he ever reached Canada but the commandos made it.*
- *Solomon had three hundred wives and seven hundred porcupines. He was a actual hysterical figure as well as being in the bible. It sounds like he was sort of busy too.*
- *In the first Olympic games, Greeks ran races, jumped, hurled biscuits, and threw the java. The games were messier then than they show on TV now.*
- *Julius Caesar extinguished himself on the battlefields of Gaul. The Ides of March murdered him because they thought he was going to be made king. Dying, he gasped out "Same to you, Brutus."*
- *It was an age of great inventions and discoveries. Gutenberg invented removable type and the Bible. Another important invention was the circulation of blood.*
- *Sir Walter Raleigh is a historical figure because he invented cigarettes and started smoking.*
- *Sir Francis Drake circumcised the world with a 100 foot clipper which was very dangerous to all of his men.*
- *The greatest writer of the Renaissance was William Shakespeare. He was born in the year 1564, supposedly on his birthday. He never made much money and is famous only because of his plays. He wrote tragedies, comedies, and hysterectomies, all in Islamic pentameter. Writing at the same time as Shakespeare was Miguel Cervantes. He wrote Donkey Hote. The next great author was John Milton. Milton wrote Paradise Lost. Since then no one ever found it.*
- *Abraham Lincoln became America's greatest Precedent. Lincoln's mother died in infancy, and he was born in a log cabin which he built with his own hands. Abraham Lincoln freed slaves by signing the Emasculation Proclamation. On the night of April 14, 1865, Lincoln went to the theater and got shot in*

his seat by one of the actors in a moving picture show. They believe the assinator (sic) was John Wilkes Booth, a supposingly (sic) insane actor. This ruined Booth's career.

- *Johann Bach wrote a great many musical compositions and had a large number of children. In between he practiced on an old spinster which he kept up in his attic. Bach died from 1750 to present. Bach was the most famous composer in the world and so was Handel. Handel was half German, half Italian, and half English. He was very large.*
- *Cyrus McCormick invented the McCormick Raper, which did the work of a hundred men.*
- *Louis Pasteur discovered a cure for rabbits but I don't know why.*
- *Madman Curie discovered radio. She was the first woman to do what she did. Other women have become scientists since her but they didn't get to find radios because they were already taken.*
- *Karl Marx was one of the Marx Brothers. The other three were in the movies. Karl made speeches and started revolutions. Someone in the family had to have a job, I guess.*