

Submitter Name	Organization Name	Please provide your general feedback on the modeling results for CleanPowerSF's 2022 Integrated Resource Plan (available for review at CleanPowerSF.org/resourceplan). What stood out for you?	Based on your review of the modeling results available at CleanPowerSF.org/resourceplan, do you have a recommended CleanPowerSF resource portfolio that you would like to see the SFPUUC adopt? Why or why not?	Given that CleanPowerSF will update its Integrated Resource Plan every two years, what do you think the program should take into account in its ongoing and future energy resource planning work?	Do you have thoughts or recommendations for improving our Integrated Resource Plan process going forward?	Anything else you would like to share?
Victor Hurtado	N/A	What stood out was your stance on promoting a policy agenda.	The SFPUUC should adopt the principle of SERVICE. Provide dependable and reliable services to the public. Why? Because sending out a public service announcement requesting the public to conserve energy use does nothing for basic energy consumption.	Get out of the entertainment business and stop congratulating yourselves for your "great" work.	Put the energy experts, like PG&E, back in control. They've been doing much longer and with greater efficiency than a bunch of bureaucrats concerned with procedural correctness at the expense of people's needs.	Bring back hydroelectric and nuclear energy.
Andy Robin	N/A	Good analysis. I hope it fits with full CA plan.	Base Case or 90% time coincident both reasonable.	See how reality matches with 2-years-ago forecast.	Just ensuring it meshes with overall CA plans.	Thanks!
Douglas F	N/A	The concept of clean power is fantastic, but the issue is that this should be reducing our bills and not increasing them. Clean power costs less than fossil fuels but yet, our bills are up over 30% since the selection. If PG&E can't do better, then it's time to take over our own destiny in SF.		We need alternatives that are appropriate for various situations - a single person living in a 3 bedroom house does NOT use the same amount of power as 3 people in that same home, but the cost is equal. It makes no sense		
Tom Labelle Seymour	N/A	What stood out for me is that my small one bedroom apartment's bill in Twin Peaks would be 40 to 50% LESS without your organization. And yes I've heard how we are all supposed to benefit. But I can't wrap my head around that until I figure out why your side almost doubles my bill. To make matters worse I keep getting mailers sent to me saying that I'm using 33% more electricity than any typical single-family home in my neighborhood! How is that possible? Then I find out from PG&E that I have more than one account assigned to my address and they will not tell me who or what this other account is. This is a Kafka-esque nightmare.	I want to see why my bill is \$40 to 50% higher with Clean Energy involved. Why is my small one bedroom apartment in Twin Peaks labeled a single-family home that uses 33% more energy than anyone else in the neighborhood. Thank you.	People's monthly budgets and the economy.	I already gave enough of my personal thoughts thank you. Anymore will not do any good.	No
Joe Morse	N/A	While mix of renewables is admirable, it should not be your primary focus. We need reliable electricity at better rates than PG&E.	Find the ones that lead to lower rates for ratepayers.	Price per kilowatt hour to ratepayers. That's the ONLY consideration.	Shift focus from the virtue signaling of clean power to better electricity rates. And rate transparency.	
Anonymous	N/A	Why isn't nuclear included? It is clean, reliable, and cost effective.	Add nuclear power.	Reliable delivery in the face of high temperatures. Power outages are not acceptable.		
John Munn	San Timoteo Energy Associates	The lack of mention of the roles of efficiency or behind the meter PV/storage in easing burden on SF PUC/CleanPowerSF	Not enough information provided.	Behind-the-meter PV/storage assumptions used in calculations	Encouraging residential and small commercial building participation for efficiency and PV/storage. Meets SF PUC stated goals of investing in local production and jobs.	Just these questions: All portfolios, including the staff recommended 90% Time Coincident Portfolio, included adding 85.6 MW of local (defined as the 9 Bay Area counties) solar and 150 MW of local battery storage (slides 48 and 59). - What assumptions were made for behind-the-meter solar growth as a load modifier through 2035? - Wouldn't encouraging local residents and businesses to increase efficiency and install PV/storage in SF reduce the burden on CleanPowerSF? How is SFPUUC encouraging this? Wouldn't helping behind-the-meter installations and efficiency help with the CPSF goal of investing in local renewable projects and local jobs, especially if contractors/installers were paired with SF Workforce Development? - How will SFPUUC encourage electrification? Current rebate program is a start but what more will be done? - SFPUUC anticipates 30% increase in load by 2040 due to electrification. What infrastructure upgrades are foreseen?
Eric Konzelmann	N/A	The 90% plan sounded most reasonable to me while reading through the slides, and I was surprised to find at the end that the staff recommended it, too!	Yep! 90%! It's not too cost-prohibitive (95% is a steep jump), and yet gets us closer than required to our goals.	Customer net metering.	Show some representative CASO daily graphs of net demand so readers can get a sense of scale (in MW or MWh) for your proposals.	Nope, thanks for the info!
Mathew Bittleston	N/A	It's incredibly difficult to follow for a lay person. The pdf is full of jargon, and some of it is not defined: "95% Time Coincidence" "real time"	I didn't see anything about energy use reduction. Does everything have to assume that every year we will use more and more resources?	- Increased energy efficiency in SF - Find ways to utilize customer solar and battery storage to make the local grid resilient - Look at post-earthquake on Calaveras fault scenario where supply to SF is cut off	The presentation felt like it was targeted at people "in the know". The density of jargon made it difficult to comprehend for me.	Thank you for trying to lead towards a more environmentally friendly electricity supply.
Gabriel Goffman	DSA SF	The modeling results show that we can aim for at least 90% coincidence if not 95% coincidence level. I think IRP could also look at other resources such as demand response, using EV batteries as sources of energy to bring down cost and working with other CCA to sign cheaper power agreements. It is not clear if the study has included the benefits of IRA to build solar and storage in qualified low-income residential buildings and low income communities. These incentive may bend cost curve.	95% coincidence with plan to subsidize low income communities, build solar and storage in low income communities and engage in demand response.	It should look at changes of costs and ways to help consumers de-carbonize to electrify and work with city to do community wide electrification, which in turn can provide more consumers for clean power. CleanPower SF should have a green growth mindset, where more demand is good, because there are so many opportunities to grow renewable energy, and distributed generation.		
Anonymous	N/A	What is the global temperature reduction from this policy? Extensive report does not say.	Don't do it. It adds cost with dubious and unquantifiable benefit. PG&E costs 3x what I pay in Florida, 12.9 cents per kWh.	Stop this virtue signalling madness. Focus on low cost power from lowest cost sources.		This whole exercise is a sneeze for utterly useless expensive environmental consultants. What is the global temperature reduction from this expensive conversion to 100% renewables? Make the expensive environmental consultants give a red degrees lower earth temperature.
						The science is not settled. Blaming man-made Carbon Dioxide, CO2 molecules, for The Global Warming Crisis is junk science. - We can agree that the Earth has warmed by about +1.0C degree during the Industrial era. We can also agree that CO2 has increased +0.013% from 0.028% of the atmosphere to 0.041% during the Industrial era. However, correlation does not prove causality. - CO2 is a tiny trace gas. Emission this: If you are in a room with a 9 ft ceiling and all the gases were stacked, the pre-industrial CO2 layer would be as thin as a credit card. The raised letters on the credit card are as tall as all the extra CO2 added during the industrial age. It is this tiny thin layer of an invisible gas that has got potty mouth Greta Thunberg, Nobel Prize winner Al Gore, befuddled Mr. Biden, and all the other Global Warming alarmists parties in a bunch. An invisible layer of gas as thin as the raised letters on a credit card. - How an infinitesimal +0.013% increase in CO2 can cause a +1.0C degree increase in the remaining 99.987% of the atmosphere defies any explanation. - The Global Warming - CO2 gas math is quite simple. And physically impossible. The Earth's atmosphere has warmed +1.0C degrees during the industrial era. The added CO2 during the industrial era is one part in 7,700 of the atmosphere. To heat the atmosphere +1.0C degrees, the added CO2 molecules must contribute +1.0C / 7,700 or +7,700C degrees of heat. The surface of the Sun, 93 million miles away, is 5,700C degrees. It defies common sense, and physics, that the Sun's surface heat, at 5,700C degrees, can travel 93 million miles through space and then heat Earth's CO2 molecules hotter than the Sun at 7,700C degrees. - To make the CO2 heat pencil out, Global Warming Alarmists claim there is a CO2 greenhouse heat feedback effect which amplifies the Sun's warming, a gimmick with the fancy name of "radiative Forcing". The extra heat is impossible. CO2 can't add more heat than it absorbs. CO2 is an inert gas. There is no exothermic chemical reaction. - The planet Venus has been hailed by climate scientists as an example of CO2 caused Global Warming. Yes, Venus is very hot, 460C degrees. But conditions on Venus are extreme. The dense atmosphere is 96.5% CO2. Surface air pressure is 1,300 Pounds per square inch, equal to 93 Earth atmospheres. That amounts to 220,000 times as much CO2 as the Earth. Plus, at 67 million miles from the Sun, Venus receives twice the sunlight energy per square meter as the Earth. The extreme CO2 density, high pressure, and strong sunlight conditions combine to make the Venus CO2 warming effect 4.1 million times greater than the Earth's CO2. - Man-made CO2 molecules are not the control knob for the Earth's temperature. - Don't be hornswoggled by Global Warming Alarmists. It's junk science!
Anonymous	N/A	It was a little tough to read alone, but when reviewing it as a group I understood it better. I am glad that the PUC held listening sessions, even though I couldn't make it to them! I know that that likely helped people collect their thoughts. The IRP did a great job breaking down the various options, though I got caught on some of the cost estimates. For example, the IRP showed in some slides the estimated "projected revenue requirement" in the initial slides, then at the end made a comparative graph of portfolio costs. It's good to show the difference, but I'd love to see those comparisons side by side, perhaps in paired graphs. I also got caught up on the terminology, which I know is complex. If "time coincidence" could be defined at the bottom, that would help.	I generally agree with the SFPUUC that they should adopt the 90% Time Coincident Portfolio for now - that being said, it would be great to see how inflation/costs/subsidies develop over the next two years, and revisit the 95% Time Coincident Portfolio for the next IRP. I understand balancing the PUC's budget against that of the need to get as renewable as possible as quickly as possible. I would also love to see increased local buildout, knowing that that is tough through the many conversations I have had with the PUC in the past. I wonder whether the energy and money cost of transmission and storage from afar could be factored into this going forward - or is it assumed to be not a big loss? I heard that loss can be estimated at about 8% - but I don't know what distance that kicks in at.	The cost of losing energy during transmission from far away places; the cost of ethical sourcing of materials for energy projects (lithium mining comes to mind), how things would change for this process if the SFPUUC were to acquire PG&E's assets.	The process kind of snuck up on me this year, unfortunately (despite many many email reminders), and one of my main avenues for learning (a presentation at the CAC's Power Subcommittee) didn't happen due to quorum issues (I was the only one that could attend, and didn't want to waste everyone's time ... but I wonder in retrospect if I should have attended as a committee of one. I think a major issue this year (and likely for 2024) is that this review process fell ahead of election season. I know and others in my subcommittee are often involved in electoral work, which may have made it harder for us to organize around this. I don't know if the schedule for review can be moved around or prolonged very much, but if that's possible it might help! Thank you so much for your work on this though. I know I will be better prepared next time around.	Just a big thanks to the staff for working on this. Also, I was curious about the "100% renewable & GHG free by 2025" goal - is that by the beginning of 2025 (January), the end (December), or the beginning/end of Clean Power SF's fiscal year? Also, are there any labor costs or benefits factored into this, or is it all assumed that we are following City and CCA alliance labor standards? Oh - and - if there is a way to clearly break down the difference between "RPS Anticipated" versus "Renewable," that would be awesome. Thank you all so much for your work on this.
Jeremy Pollock	San Francisco Local Agency Formation Commission (SF LAFCO)	The "EV and Building Decarbonization Targets Met" alternative portfolio highlights the dramatic increase in electricity capacity that will be required to meet the City's electrification goals. The "95% Time Coincident" conforming portfolio highlights the challenges of meeting CleanPowerSF's peak demand in the winter when solar power production is at its lowest. The combination of the huge increase in power capacity needed to meet that peak and the resulting huge increase in dependence on selling excess power during the rest of the year makes it clear that CPSF will need creative approaches to addressing winter peak demand—especially as building decarbonization leads to increased electricity usage for winter heating. We are interested in learning about possibilities for addressing winter peak demand such as procuring more geothermal or wind power, developing effective demand management programs, improving efficiency of energy efficiency for CPSF residential customers, or possibly partnering in procurement with LSEs that have complementary load profiles that do not have peak demand in the winter. We are interested in learning how the CPSF portfolio could be optimized to improve time coincidence during peak demand while also taking into account how excess power could be sold most profitably during non-peak times.	Of the three conforming portfolios, we agree with staff's recommendation of adopting the 90% Time Coincident portfolio to be submitted to the CPUC. We note that the 90% portfolio falls far short of adding the additional capacity needed to meet San Francisco's electric vehicle and building decarbonization goals (922 MW of new capacity compared to the 1,682 MW of new capacity in the "EV and Decarb Goals" alternative portfolio). The 95% Time Coincident portfolio is compelling because it would add a comparable amount of new capacity as the "EV and Decarb" portfolio, but we agree with CPSF staff's concerns about the 95% portfolio being too reliant on market sales of excess electricity and over-committing to long-term contracts. We would be interested to see the results for 92% and 93% Time Coincident portfolios as potential compromises that would better model the City's anticipated future increase in electricity demand from electrification while moderating the flaws of the 95% Time Coincident portfolio. However, because of the significant staff, consultant, and computational time needed to calculate new portfolios, we understand that this is likely not possible to do in time to meet the 11/1/2022 IRP submission deadline.	Looking beyond meeting the CPUC's strict requirements for the IRP, we urge the SFPUUC to commit to implementing the "EV and Building Decarbonization Targets Met" alternative portfolio. Of the two alternative portfolios, we see the "EV and decarb" portfolio as the best proxy for the much more ambitious electricity system we will need to meet the ambitious goals of our City, state, country, and planet. We request that CPSF provide more analysis and solicit community input on weighing the costs, benefits and feasibility of sourcing electricity in-City vs. within the nine-county Bay Area. One of the main priorities we hear from commissioners and the public is a strong desire for increasing in-City power sources to support local resilience from earthquakes, public safety power shutoffs, and wildfires. The significant cost of the "Local Resource" alternative portfolio is a sobering reminder of the significantly higher costs of regional power projects. It's unclear how much support there is for paying this premium for regional power sources that offer little or no improvement in local resilience. While we recognize that potential in-City renewable projects are much smaller in scale and much more expensive, we believe there are strong policy rationales and public interest for funding this energy resilience and independence. There may be stronger support for investing the funds necessary to source 10% of power in-City compared to investing a similar amount of funds to source a much larger percentage within the Bay Area. We also recognize that CPSF ratepayer funds alone will not come close to meeting the ambitious goals of the Alternative Portfolios, and we urge the SFPUUC to consider all possible funding options when planning for our energy future, such as revenue bonds, general obligation bonds, the general fund, new local revenue measures, and state and federal funding. We are excited for further analysis of the in-City investment possibilities created by the federal Inflation Reduction Act, particularly the provision granting an extra 20% tax credit for small solar projects that benefit low-income households and the provision granting an extra 10% tax credit for brownfield sites.	Now that LAFCOs have participated in two cycles of commenting on CPSF's IRPs, it is clear that the CPUC's IRP process would benefit from significant reform. Our comments on improving the process are largely directed to the CPUC, CASO, and state legislators: 1. We appreciate the suggestions CPSF included in the "Lessons Learned" section of the 2020 IRP that urged the CPUC to provide more certainty in its guidance to LSEs and to complete their IRPs. We encourage CPSF to revisit these suggestions and include a similar "Lessons Learned" Section in the 2022 IRP. 2. We are concerned about how accurately the CPUC requirements for conforming IRP portfolios reflect CPSF's real-world planning, considering that CPSF cannot submit a preferred portfolio that fully capture factors like San Francisco's behind-the-meter solar power or the increase in projected demand from the City's electrification goals. 3. We are concerned about the accuracy of IRPs for state transmission planning processes given the multi-year delay between CPSF submitting the IRP in 2022, the CPUC adopting a Preferred System Plan (PSP) portfolio in 2023, and finally CASO adopting a 2024-2025 Transmission Planning Process (TPP) that will be used to approve transmission projects in 2025. Given the rapid rate evaluations of the electricity market, we urge the CPUC and CASO to streamline these processes so that decisions are made on more timely data. 4. LAFCO hopes to work with CPSF, the Board of Supervisors, and our state representatives to support legislative and regulatory improvements to the IRP and these other processes. 5. Because of these constraints on and issues with the CPUC's IRP process, LAFCO recommends CPSF re-evaluate its approach to community engagement on the IRP. We commend CPSF for the resources it committed to the well-designed community engagement process for the IRP. But the drop off in public participation from the first round of listening sessions to the second round suggests that the process could be improved. 6. We recommend CPSF make more explicit which portions of the process are subject to limits to meet CPUC compliance and which portions CPSF has freedom to modify. 7. CPSF could emphasize community engagement on earlier parts of the process, such as developing the broad categories of portfolios to be analyzed. In the first round of listening sessions, it was stronger questions such as how to balance the priorities of affordability/reliability/renewable content would be translated into specific IRP portfolios. 8. Unless the CPUC makes significant changes to increase the flexibility of conforming IRP portfolios and to allow more time for development of IRP portfolios, CPSF should consider either de-emphasizing input on evaluating the conforming portfolios or providing more context on what types of feedback would be relevant or helpful. 9. We suggest CPSF engage the community in a public process during the off years from the IRP cycle to inform the community on how the IRP is being implemented and allow the public to provide meaningful bigger-picture input on the earliest stages of the subsequent IRP. 10. We also request that in the future, CPSF consider publishing more detailed data on the modeling results to compliment the slide presentations. One of our commissioners called the slides "radically accessible" for someone who is new to the world of electricity policy. But people who work in related fields or who have participated in multiple IRP processes would benefit from seeing a great level of detail of the information that goes into creating the IRP. 11. Lastly, we urge CPSF to publish responses that enter all comments received or synthesized responses to categories of similar comments received.	We commend CPSF staff for their great work on both the IRP and the community engagement process.
Jackie Fielder	LAFCO	I appreciate the presentation updates timeline provided in slide 3. The key terms laid out in slide 4 and the explanation of the IRP process, assumptions, and methodology in slides 5-20. This goes a long way to help the public and even myself understand the content of this plan. I know we share the values of accessibility and civic empowerment in the IRP process. It is hard to understand how far this grounding and introduction to the presentation goes, so thank you for your work in this section. One term that I would have liked to have seen alongside examples is "RPS-eligible renewable," first mentioned on slide 16. Which renewable energy sources qualify as "eligible" by the state? I would also like to understand the operating definition of "greenhouse gas free" in this plan. I am pleased to see both 90% and 95% time coincident portfolios analyzed in this plan, in addition to building decarbonization and local resource procurement. It is my hope that in future IRPs, all portfolios assessed have a 90% local resource procurement floor and building decarbonization goals built into the models. Below is a table compiled using the information from slides 25, 31, 37, 45, 52, and 60. I wonder what the difference is between total projected revenue requirement and net present value for each of the portfolios. I also wonder how useful 2021 dollars are given inflation is more than 8% this year.	Ultimately I support the staff's recommendation of adopting the 90% Time Coincident Portfolio, primarily on the basis of needing to see how we emerge from inflation and a potential recession this next year. However, if economic conditions improve by the next IRP, I will be eager to push for the 95% Time Coincident portfolio. The difference between the total projected revenue requirement of the 95% TC portfolio and that of the 90% TC portfolio is only \$400 million, and the difference between the total projected revenue requirement of the 95% TC portfolio and that of the base case portfolio is only \$480 million. The SFPUUC capital budget for FY 2021-22 alone is \$698.0 million, which indicates to me that the 95% TC portfolio is doable, at least in 2021 dollars. The increased diversity of resources and reliability of the 95% TC portfolio, in my view, provides benefits to customers that amount to well beyond \$480 million. How can we put a price on reliability in these times of increasing climate chaos and grid mismanagement? I understand there are CPUC limits to how much any energy provider can sell, but it seems to me that becoming a large retail seller of renewable energy sooner rather than later would put San Francisco in a strong financial position for decades to come.	I hope in future IRPs, 50% local resource procurement becomes a baked-in floor for all portfolios. Any extra costs to such a policy would be outweighed by the thousands of local jobs provided, as well as increased reliability. In addition, at least some costs could certainly be offset by taking advantage of new Inflation Reduction Act funds that incentivize renewable energy generation in communities currently and historically burdened by the fossil fuel industry and the antiquated new state revolving loan fund for energy efficiency upgrades. In fact, I hope LAFCO undertakes a study on how CleanPowerSF can best take advantage of IRA funds in the near future.		
Sierra Garcia	N/A	I'm excited about the plan! I hope there will be great incentives for users to shift electricity use (such as EV charging) to peak solar production hours. I hope that policy prioritizes new solar for rooftops or over aqueducts/canals rather than on land that could otherwise be used for housing or habitat.				