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Wildfire Victim Recovery Bonds

Seeing the Truth Behind the Rhetoric

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Executive Summary

The Pacific Gas and Electric Company (PG&E), and the hedge funds that effectively took control of the company over the last year, are pressing forward with a controversial plan to emerge from bankruptcy. At the center of this proposal are the so-called Wildfire Victim Recovery Bonds (WVRBs): up to $20 billion in off-balance-sheet, tax-exempt debt that will be used to pay for a significant portion of the damages caused by PG&E's equipment in the 2017 and 2018 wildfires. This complicated proposal has numerous moving parts, including the requirement that a state law be passed to allow the creation of such a debt vehicle. PG&E has defended its proposal, claiming that it is the most effective way to pull the utility out of bankruptcy and compensate wildfire victims, while not burdening other stakeholders with these obligations.

The Center for Economic Forecasting and Development's analysis suggests something entirely different. We see the WVRB proposal as an effort by the new controlling equity holders to push a substantial share of these wildfire liabilities onto PG&E's creditors, ratepayers, and state taxpayers, in direct opposition to the stated wishes of the state and the California Public Utilities Commission (CPUC). This is a bailout plan designed not to stabilize the utility and protect the state's economy, but rather to maximize return on investment for the hedge fund shareholders. Even the name of the funding instrument is misleading, since the vast majority of funds raised will not go to wildfire victims, but instead will reimburse insurance companies and other hedge funds who are the primary claimants at this point in the bankruptcy process.

If this legislation is passed in its current form, it will allow PG&E to push $10 to $20 billion in wildfire liabilities onto ratepayers, taxpayers and PG&E creditors, while substantially increasing the risk of another bankruptcy in the next few years. The aim of this report is to debunk the rhetoric being used to support this proposal and show what is actually happening. The state and the CPUC should reject this proposal.

WVRBs are not the fastest way to pull the company out of bankruptcy

One of PG&E's central arguments is that WVRBs in their proposed form—tax-exempt, off-balance-sheet debt—are the "fastest" and "most efficient" way to raise the large amount of money needed to compensate victims of the wildfires. The proposal is not the fastest. In fact, the need for new legislation to authorize the complex structure of the bonds is actually slowing down the process.

There are already offers to inject billions of dollars of equity into the company to cover the wildfire liabilities, albeit at a share price the hedge funds that took control of PG&E by buying stock at record low prices do not like. Alternatively, these equity holders could borrow money through their own firms and use it to inject equity into PG&E—but they would prefer to use the credit of PG&E and the state to cover the debt.

The slow process is also a problem for the company, as it needs a speedy exit from bankruptcy in order to participate in the new state fund designed to protect investor owned utilities (IOUs) in the event of future wildfire losses. Why would PG&E pursue such a complicated proposal when there is clearly a simpler, quicker path forward? Because this proposal transfers both costs and risk to other stakeholders, despite PG&E's claims to the contrary.

Under the PG&E proposal, ratepayers will subsidize a portion of PG&E's losses

PG&E has stated on numerous occasions that company shareholders will pay for the WVRBs. PG&E claims that its proposed plan will divert 1.75% points of the company's CPUC-authorized return on equity (i.e., the profits available to utility shareholders) to pay off the bonds. This claim is misleading. The WVRB payments would not be paid out of corporate profits, but by a charge assessed on ratepayers instead.[1] Ratepayers would, in theory, then be recompensed through some form of a lower effective return on equity.

However, the draft bill to implement WVRBs would impose a non-bypassable, irrevocable charge on PG&E ratepayers to guarantee the WVRBs and pay off WVRB holders.[2] The ratepayers would be responsible for paying this charge until the WVRBs are paid off decades in the future, and they would remain responsible for this charge even if they switched to purchasing electricity from a direct access provider or a community choice aggregator. In

[1] Again, if PG&E wanted a mechanism that impacted only equity holders then it would just raise new equity – which it has told the bankruptcy court it intends to do.
[2] AB 235 § 926(m).

fact, PG&E's current ratepayers would remain responsible for the charges even if their part of PG&E's system was purchased or annexed by a local publicly owned utility.[3]

PG&E has publicly promised that these WVRB charges will not result in an increase in rates. Instead, PG&E claims it will make up the difference from its corporate profits. It further states that it will reduce the net income available to shareholders, meaning that its shareholders would not claim some of the profits to which they would otherwise be entitled,[4] and the revenue would instead be used for PG&E's operations. But the proposal does not suggest any mechanism for achieving this. It does not ensure that PG&E's shareholders will actually have to forego profits equivalent to the charges assessed to the ratepayers, or give up anything material at all. Even if the CPUC initially reduced the return on equity available to shareholders, it could eventually raise it back up again.

Moreover, were PG&E to enter bankruptcy again during the 20- or 30-year term of the WVRBs, the ratepayers would still be assessed charges to pay off those bonds.[5] Yet it is unclear whether the shareholders would be held to their side of the bargain in the event of a third PG&E bankruptcy. It is quite possible that ratepayers would continue paying the WVRB charges while their rates were increased to rescue PG&E from bankruptcy once again.

Equally misleading is PG&E's claim that ratepayers would not see an increase in their bills because of the WVRBs. Although the proposed bill promises to be rate neutral, PG&E has filed a request with the California Public Utilities Commission (CPUC) for an increase in its return on equity from the current 10.25% to 12.0%.[6] If the CPUC grants this increase, it will increase electricity rates by an additional $2.6 billion over the next five years, and $6.1 billion over the next decade. A recent analysis by CalMatters showed that, based on PG&E's proposals to increase its base rates and return on equity, the average residential customer could pay nearly $300 more a year in the next three years, with the average monthly bill increasing from $165.94 to $190.36.[7]

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[3] *Id.* § 933.
[4] *Id*. §930(a).
[5] *Id.* §§ 928, 933
[6] https://pgera.azurewebsites.net/Regulation/ValidateDocAccess?docID=573573 PG&E's equity holders have independently requested an even higher return on equity of 15.2%.
http://docs.cpuc.ca.gov/PublishedDocs/SupDoc/A1904015/2181/310022795.pdf
[7] https://calmatters.org/economy/2019/08/pges-rate-increases-what-you-need-to-know/

Under the PG&E proposal, taxpayers and the state will subsidize a portion of PG&E's losses

PG&E has repeatedly claimed that the tax-exempt nature of the WVRBs will maximize the funds available to compensate wildfire victims. In reality, PG&E's wildfire liabilities are completely independent of the mechanism being used to pay those losses. PG&E and the hedge funds that control it simply prefer the tax-exempt interest rate as it reduces the cost of carrying the debt and thus increases their return on investment.

Tax-exempt quasi-government debt means reduced tax payments to the state both because of the lower interest rate and the fact that the bond buyers would not have to pay taxes on their investments. This means, in effect, that taxpayers would subsidize the company's losses. After all, if the bonds were sold in a traditional (taxable) form, the company would have to backfill approximately $3 to $4 billion in additional revenues either through additional borrowing or a direct equity contribution, depending on the credit rating on the debt that would be issued directly by PG&E or the hedge funds who control the company. This is the present value of the tax payments the government would not receive, which would be effectively transferred from the state to PG&E and its current shareholders.

WVRBs will negatively impact PG&E's balance sheet

The current PG&E proposal relies on a complex set of financial and legal maneuvers to avoid listing the WVRBs on their books as debt, even though it is functionally just that—more debt. Yet using accounting gimmicks to avoid listing the bonds as debt will have little impact on the debt markets' perception of PG&E's credit risk if they should issue these bonds, given the history of such maneuvers and the role they played in major financial disasters, including Enron and Lehman Brothers.

It is clear that diverting revenue collected from ratepayers away from the company to pay down the debt will have a negative impact on various aspects of PG&E's creditworthiness, particularly if the company does not receive the applied-for increase in the return on equity from the CPUC. Under such a circumstance PG&E's credit rating would likely be lowered, possibly below Baa1 (BBB), which is approaching junk bond status. Such credit rating downgrades increase the cost, and may impact the availability of, short-term and long-term borrowings, including commercial paper, credit facilities, note financing, and other borrowing costs. This increased cost of debt would have to paid for by ratepayers. It would also diminish the investment value of PG&E debt for current creditors.

The proposed plan does not protect CalPERS and CalSTRS

PG&E is probably correct in its claims that if its proposed plan were to be rejected, the current stock price would fall and its investors, including CalPERS and CalSTRS, would see a decline in the value of their holdings. Yet a portion of the value of today's stock price is largely driven by the fact that the current PG&E proposal transfers billions of dollars in liabilities to ratepayers and taxpayers. This is unjustifiable, regardless of who the investors in the firm are. Additionally, the collective PG&E equity holdings of CalPERS and CalSTERS is approximately 0.003% of their total assets under management.[8] Those most concerned about the share price are the hedge funds currently pushing this proposed plan.

The PG&E proposal does not further California's long-term energy needs

The current PG&E proposal is premised on maximizing shareholder value by pushing losses and increased risk to other stakeholders, including debtholders, ratepayers, and taxpayers. This clearly does not align with the needs or best interests of the state. Additionally, the state's aggressive and ongoing plan to address climate change could be affected as PG&E could try to amend or cancel some of its $34.5 billion in contracts to purchase wind and solar power in order to reduce expenses. Such contracts would be all the more risky if there is a reduction in PG&E's creditworthiness. Additionally, financing for future renewable energy projects may suffer if lenders believe they need to offer less favorable terms to the project sponsor on financing in order to hedge against future risk of default.

There is a broader issue. The hedge funds that bought control of PG&E have short-term incentives based on high risk and high return. Their goal is to maximize the value of the share price now to maximize the return on their distressed investment. They do not have the long-run health of the California economy or the safety of its residents and businesses in mind as they make the many important decisions needed over the next year to rebuild the utility. The structure of the proposed plan PG&E is touting in Sacramento—one that pushes losses onto taxpayers, ratepayers and other creditors, that hurts the financial health of PG&E and increases the odds of another bankruptcy, that reduces the company's credit rating and increases the cost of borrowing—shows this skewed set of incentives. Legislators and regulators should insist on a new injection of equity into the company to realign the incentives of the company with the long-run needs of the state.

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[8] https://www.calpers.ca.gov/page/investments; https://www.calstrs.com/calstrs-glance; based on holdings information from Bloomberg as of 8/23/2019.

Overview: Fires and Finances

The wildfires that raged through California over the last two years had tragic consequences for victims and demonstrated how climate change has intensified the types of environmental risks that state residents and businesses face. The fires have also had a profound financial impact on the investor owned utilities (IOUs) that supply the majority of the state's residents and businesses with power because of the legal regime of inverse condemnation in the state.[9] The fires have left the IOUs, the CPUC, and the state with three major and immediate challenges: how to pay for the losses from the fires; how to harden the system to reduce the probability of future incidents; and if wildfires do occur, how to prevent similar future events from threatening the financial viability of these power companies. These are critical issues affecting both the economic health of California and its commitment to reduce emissions from the state's power grid.

For PG&E specifically, the cost of handling these issues continues to mount.[10] The company is liable for losses that range from $18 billion[11] to as high as $30 billion or more depending on the results of various litigation currently moving through the courts, including the reemergence of potential damage claims from the Tubbs fire.[12] There is also another $5 billion that PG&E will have to pay into the new Wildfire Fund, established by the state to protect ratepayers against future wildfires.[13] The cost of investing in the system to reduce the probability of future fires is still in flux, as regulators and utilities try to assess the best way of dealing with growing risks. PG&E claims to be spending well over $2 billion this year on fire reduction efforts.[14] To put these liabilities in perspective, the maximum market capitalization of PG&E occurred in 2017 when it reached a peak of slightly over $36 billion. When the company filed for bankruptcy protection, PG&E estimated its total debts to be $51.7 billion and its assets to be $71.4 billion.[15] It is clear that the scale of the costs involved has pushed PG&E to the brink of financial insolvency.

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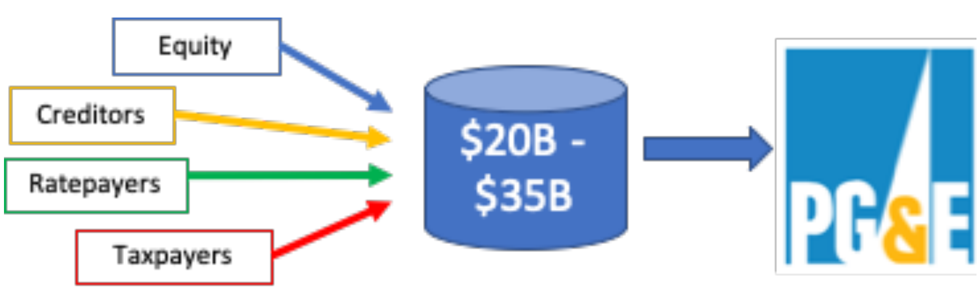
[9] https://www.bloomberg.com/news/articles/2019-01-15/the-california-rule-that-doomed-pg-e-inverse-condemnation
[10] The IOU is called Pacific Gas and Electric Company, which is owned by PG&E Corporation. `
[11] As disclosed in the company's recent 10-Q.
[12] "PG&E's Bankruptcy Filing Triggers Complex Reorganization Case" *Wall Street Journal* By Katherine Blunt and Russell Gold Jan. 29, 2019 8:45 am ET; "PG&E's role in the 2017 Tubbs Fire to go to jury trial" *San Francisco Chronicle* J.D. Morris Aug. 16, 2019
[13] AB-1054 sets PG&E's portion of the $7.5B contribution and PG&E's portion of the $300M annual contribution for a total of ~$5B https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201920200_AB1054
[14] https://www.nytimes.com/2019/02/13/business/energy-environment/pge-wildfire-bankruptcy-control.html
[15] "PG&E's Bankruptcy Filing Triggers Complex Reorganization Case" *Wall Street Journal* By Katherine Blunt and Russell Gold Jan. 29, 2019 8:45 am ET

The company's stock prices reflect the turmoil. In mid-2017 a share of PG&E was just under $70. When the extent of the losses from the 2017 and 2018 fires was more fully understood, the company's share price dropped to $6 at its lowest point, and is currently in the $10 range. At these low prices, a number of hedge funds that specialize in dealing with distressed companies began to acquire shares of equity, eventually gaining a controlling interest in the company. These investment funds, the current controlling equity holders, made a very specific risk/reward calculation. They bought into the company at an extremely low cost, but the tradeoff is that they must find a way to raise the $20 billion to more than $30 billion needed to cover its wildfire-related liabilities. These equity holders brought in a number of new board directors, who in turn recruited a new CEO to run the company, and officially filed for Chapter 11 bankruptcy protection in January. Now they need to find the funding necessary to cover their liabilities and financially stabilize the company. They are looking for a plan that will both maximize the return on their investment while satisfying creditors, the state, the ratepayers, the CPUC, and the bankruptcy court.

The funds needed for PG&E to pay off its liabilities and emerge from bankruptcy can come from only four potential sources: equity holders, creditors, ratepayers, and taxpayers. For taxpayers, such funding would come in the form of a bailout of the utility by the state, with public money being used to fund the recapitalization. For ratepayers, the costs would be paid over time through higher utility prices. Creditors (either debt holders or those with long-term contracts with the company) could be on the hook if the payout is partly funded by reducing PG&E's existing obligation to pay these commitments. Lastly, equity holders could inject new funding into the company from their own funds or other private sources—funding that will be compensated ultimately out of future PG&E profits.

<u>Structure of PG&E Proposed Recapitalization Plan</u>



How PG&E will pay its obligations will ultimately depend on the structure of the reorganization plan that is accepted by the bankruptcy court and the CPUC. But regulators and state officials have been clear that the final option, private funding from the markets, is the only politically acceptable choice. This is where the primary conflict arises for the hedge funds who control PG&E. From their perspective, this final option has the largest negative impact on the returns on their investments.

Why should PG&E's equity investors be on the hook for these costs? As an IOU, financial risks from the company's operations—including risks stemming from these massive fires—are the responsibility of the owners. The company's return on equity—10.25% net of taxes by the latest CPUC cost of capital proceeding—is meant to compensate owners for these risks. To put this in context, the gross return on a (risk-free) 10-year treasury bond has been running in the 2% to 3% range over these same years. But earning this risk premium comes at the expense of having to absorb potential losses in the case of unexpected events, such as the catastrophic fires of 2017 and 2018. Were the returns worth the risk? Given that PG&E's market value was $36 billion in 2017, the market surely felt so beforehand.

The equity funds that invested heavily in PG&E after its stock price collapsed are highly attuned to the notion of risk and reward. They acquired PG&E stock when it was clear the corporation would have to file for bankruptcy while it figured out how to recapitalize and reorganize. Those investors who owned stock when the fires hit already suffered their losses from the precipitous decline of PG&E's stock price. These companies bought into PG&E at a low price with the clear understanding that the burden of these liabilities would be on their shoulders.

The risk these investors now face depends on the type of plan that is ultimately accepted by the bankruptcy court and the CPUC, and how that plan will impact their investment in PG&E. The incentives of the current owners are clear, and their returns from investing in and gaining control of the distressed utility will be determined by three major factors:

1. The degree to which they can reduce PG&E's liabilities related to wildfire victim claims.
2. How they deal with future risks faced by the company due to changing environmental conditions.
3. How much they can transfer existing liabilities (both directly through cost sharing or indirectly by the transference of risk) to other stakeholders—namely creditors, ratepayers, and taxpayers.

Much of the recent fluctuation in PG&E's stock price reflects market sentiment over these three factors. For example, the creation of the state's Wildfire Insurance Fund under AB1054 caused PG&E's stock price to rise, as it reduced risk to the company's profits and overall financial viability. Additionally, PG&E's share price has fallen significantly in response to public reports on its potential liability for the Tubbs fire since, if the company is ultimately determined to be liable, it will have to pay billions of dollars in additional claims.[16]

Lastly, there is the possibility of transferring liabilities to other stakeholders. This is where potential conflict between CPUC and the state on one hand, and the company on the other, is most acute. Pushing these liabilities onto others in the system—despite the fact that the CPUC and the state have made it clear they do not want that to happen—ultimately increases the return on their investment. And while PG&E has put on a good show in claiming they wish to honor such demands, the structure of the proposal they are putting forward suggests otherwise.

The company has yet to file a formal plan of reorganization with the bankruptcy court or the CPUC, but they have been floating various proposals informally. They have launched an active public information campaign regarding some of the more complex aspects of their proposed plan in a number of policy briefs issued on PG&E's behalf. One from August 3, 2019, titled 'Wildfire Victim Recovery Bonds', lays out most of the critical arguments being made in support of the WVRB proposal.[17] In that brief there are a number of claims that back the use of bonds—presumably to support the legislation needed to adopt such a proposal. Another undated document titled 'Protecting Wildfire Victims: Next Steps' makes a series of similar claims.[18] And in his testimony to state legislative bodies on 21 August 2019, PG&E CEO William Johnson made a number of direct requests. These included, in apparent order of preference:

1. The issuance of off-balance-sheet tax-exempt bonds (so-called WVRBs) of $20 billion or more.
2. The issuance of convertible preferred shares.
3. The issuance of other debt, in part, to be financed through cost cutting.
4. Direct injection of equity cash funding from existing equity holders.

What is immediately clear from PG&E's proposed plan is that equity holders are looking for a way to cover their losses while retaining control over the firm and avoiding (as much as possible) a direct injection of equity

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[16] On August 16, 2019, the bankruptcy court lifted a freeze on $18 billion in legal claims tied to the Tubbs fire, which caused PG&E's stock price to drop about 25% on August 19, 2019. https://www.latimes.com/business/story/2019-08-19/pge-stock-plunges-as-tubbs-fire-claims-come-back-to-haunt-it
[17] "Wildfire Victim Recovery Bonds" 2 page scanned document, no listed author August 3, 2019
[18] "Protecting Wildfire Victims: Next Steps" 2 page scanned document, no listed author, undated

funding.[19] Selling bonds or taking out loans through PG&E to raise the money is one way to avoid the use of equity funds. The use of convertible preferred shares is similar; these financial instruments give equity holders a guaranteed return (like debt), but do not grant voting rights. The maintenance of control would only be for the period until the shares converted to common stock. Well aware of the criticism of its proposed plan, PG&E has also been looking for equity commitments from specific (presumably allied) investors. But it is clear that this is only a backstop measure in the event that they cannot use the WVRBs and convertible preferred stock to a sufficient level. PG&E has made numerous statements justifying and defending their proposed plan through various informational releases and the testimony of their CEO. These include some of the following: [20]

1. "Wildfire Victim Recovery Bonds are a critical financing method that will enable PG&E to pay wildfire victims quickly…" "Tax-exempt bonds can be offered at a lower interest rate, which means that PG&E can raise more money … to pay wildfire victims."
2. "To eliminate any impact on customers from this financing, PG&E would credit a portion of its earnings to pay the bonds…" "PG&E shareholders pay back the WVRBs…" "There will be no net impact or additional charge to customers' bills."
3. "WVRBs are tax-free. They are the most efficient way to maximize funds available to pay wildfire victims." "The state has no obligation to pay WVRBs. They are funded through a fixed charge that will be 100% offset by shareholders." "It cannot be a bailout because ratepayers are not bailing out the company. The government is not bailing out the company."
4. WVRBs "[p]rotect CalPERS, CalSTRS investments…"
5. "Further analysis and discussions … are needed to determine definitively that the transactions will not impact PG&E's credit rating…" "The financing amount will be excluded from the calculation of PG&E's compliance with its regulated capital structure."
6. "Advance clean energy goals..." "Help the Legislature's and Governor Newsom's goal to maintain safe, reliable, clean, and affordable energy."

[20] The following statements have been directly extracted from 'Protecting Wildfire Victims: Next Steps' a two-page scanned document, no listed author, undated; 'Wildfire Victim Recovery Bonds' a two-page scanned document, no listed author, dated August 3, 2019; and comments by Assemblyman Chad Mayes who released language on the PG&E-backed bill that would authorize the state to use its authority to sell $20 billion in bonds.

At best, these assertions miss the reality of the situation PG&E is in and what its proposal will do. At worst, they are fabrications seemingly designed to obscure the true reasons for the structure of the proposed plan—namely to push a substantial portion of the liabilities onto other stakeholders in the company.

1. **WVRBs are not the fastest way to raise the money needed to cover PG&E fire-related liabilities**

One of PG&E's central arguments is that WVRBs in their proposed form (tax-exempt, off-balance-sheet debt) are the "fastest" and "most efficient" way to raise the large amount of money needed to compensate victims of the wildfires. While this sounds noble on its face, it is incorrect.

Even the name of these instruments, Wildfire Victim Recovery Bonds, is misleading. The large majority of the money that will be raised to cover losses will not be paid directly to victims of the wildfires, but rather to the insurance companies that have already paid out funds to claimants and are simply looking to be reimbursed under the state system of inverse condemnation. Some of these insurance companies have even gone so far as to remove themselves from the legal process by selling their claims on PG&E to yet another investment hedge fund.[21] Other claimants are government agencies who incurred extensive costs dealing with the fires and their aftermath.

There is no way to speed up the compensation process. The amount needed to compensate the various victims of the fires will be determined in the bankruptcy. A trust will be created and funded at emergence, and claimants will be able to settle or pursue their claims against the trust. The insurance companies, hedge funds, and public agencies can and will wait for final rulings to receive their payments. And while there are still wildfire victims who need to be compensated, they represent a smaller share of all claims, and can be paid without raising funds through WVRBs.

The primary urgency in the process of raising funds is not due to the interests of wildfire victims, but rather for PG&E equity holders themselves. The state has legally required PG&E to put a plan into place for emerging from bankruptcy in order to contribute funds to, and participate in, the new state Wildfire Insurance Fund.[22] If PG&E

[21] The remaining insurance companies, and the hedge funds that have purchased some of the claims, have issued their own plan to receive compensation—most of which they would prefer to receive as equity in the company. This secondary plan for PG&E to raise funds is through convertible preferred shares—a nod to the demands of these insurance companies. https://www.seattletimes.com/business/insurers-offer-competing-plan-to-rescue-pge-from-bankruptcy/

[22] AB-1054, passed by the state in July of this year, specifically bars PG&E from participating in the fund until it emerges from bankruptcy and resolves its claims from the 2017 and 2018 fires. https://www.greentechmedia.com/articles/read/california-assembly-passes-21b-wildfire-fund-for-utilities#gs.wfcmrx

fails to do this on time, its potential future liabilities will go up substantially, and its equity value will take a commensurate hit, something equity holders clearly want to avoid.

If settling victims' claims is so urgent, why is PG&E pursuing a tax-exempt, off-balance-sheet debt offering? There are any number of complicated legal and practical issues to be worked out, not the least of which is approval from the state's legislative bodies. This is creating significant uncertainties and delays for little benefit to the wildfire victims and other claimants.[23]

Clearly, the fastest way to raise the needed money is through a direct infusion of new equity into PG&E. Such money is available. Earlier this year the Ad Hoc Committee of Senior Unsecured Noteholders (Ad Hoc Committee) offered to commit up to $20 billion of equity capital to cover losses in their alternative plan.[24] And, as mentioned earlier in this report, PG&E itself, feeling the heat over its proposed plan, has begun to look for backstop commitments of equity in the event that its proposal is not accepted. As of now, it has commitments of over $13 billion.[25] In other words, the company does seem to have access to direct funding if needed. And remember that if the equity holders wanted to use debt to finance this injection of new funds into PG&E, those hedge funds could issue their own bonds or borrow money. Yes, such an issuance would be tied to their own credit rather than PG&E's, but it is a significantly simpler means to raise the funds, one that would not require any state law or any complicated legal maneuvers.

Why would PG&E pursue such a complicated proposal when there is clearly a simpler, quicker path forward? Primarily because the company is worried about return on investment for the current shareholders, and not about quick compensation for victims. As noted, the Ad Hoc Committee tried to put a competing proposed plan in front of the bankruptcy court, one in which they were willing to offer substantial funding to inject equity into the company, but at an expected price of $6 per share. The market price for a share of PG&E at the time of their proposal was between $14 and $15 per share. The gap between the current share price and the share price offered by the Ad Hoc Committee reflects in large part the difference in potential returns to equity holders driven by the transference of costs and risk under the WVRB plan, despite PG&E's claims to the contrary.

2. Ratepayers will subsidize PG&E's losses

[23] This delay in the creation of a bankruptcy exit plan has caused both the group representing the insurance companies and an ad hoc committee of noteholders to ask the court to consider their alternative plans, albeit that has not been allowed as of yet. https://www.wsj.com/articles/pg-e-stays-in-charge-of-mega-billion-dollar-bankruptcy-exit-plan-11565992276
[24] https://www.bloomberg.com/news/articles/2019-05-30/pg-e-creditors-said-to-boost-restructuring-plan-to-45-billion
[25] https://www.bloomberg.com/news/articles/2019-08-13/pg-e-says-it-will-file-reorganization-plan-in-less-than-a-month

PG&E has repeatedly stated that only the equity holders will pay off the WVRBs. It claims that its proposed plan would divert 1.75% points of PG&E's return on equity (out of the current 10.25% allowed by the CPUC) to pay off the bonds. This sounds good on the surface, but an examination of the actual process quickly reveals that this claim is simply false.

The basic issue here is that the CPUC return on equity is an *expected* not a guaranteed rate of return. Actual returns for equity holders can and do vary from this set rate depending on the vagaries of fortune, as recent losses by the firm have shown. This is the risk that equity holders are expected to absorb and that, in turn, drives the high return on equity set by the CPUC.[26] In contrast, the WVRBs are being offered as a form of debt with a fixed rate of return, not a variable one. To say the least, it is an uncomfortable fit to offer a fixed return out of a variable one—both legally and financially.

As such, the WVRBs would not be paid out of corporate profits. The draft bill to implement WVRBs would impose a non-bypassable, irrevocable charge on its ratepayers to guarantee the WVRBs.[27] The ratepayers would be responsible for paying this charge until the WVRBs are paid off decades in the future, and they would remain responsible for the charges even if they changed electricity providers to direct access or a community choice aggregator. In fact, the ratepayers would remain responsible for the charges even if their part of PG&E's system were purchased or annexed by a local publicly-owned utility.[28]

PG&E has publicly promised that these WVRB charges will not result in an increase in rates. Instead, PG&E claims it will make up the difference from its corporate profits. It states that it will reduce the net income available to shareholders, meaning its shareholders would not claim some of the profits to which they would otherwise be entitled,[29] and the revenue would instead be used for PG&E's operations. But the proposal does not suggest any mechanism for achieving this goal. It does not ensure that PG&E's shareholders will have to give up profits equivalent to the charges assessed to the ratepayers, or, in fact, give up anything material at all. Even if the CPUC initially reduced the return on equity available to shareholders, it could eventually raise it back up again.

Moreover, if PG&E entered bankruptcy again during the 20- or 30-year term of the WVRBs, the ratepayers would still be assessed charges to pay off those bonds.[30] Yet it is unclear whether the shareholders would be held to their

[26] https://www.cpuc.ca.gov/General.aspx?id=12094
[27] AB 235 § 926(m).
[28] *Id.* § 933.
[29] *Id.* §930(a).
[30] *Id.* §§ 928, 933

side of the bargain if there were to be a third PG&E bankruptcy. It is quite possible that the ratepayers would continue paying the WVRB charges at the same time that their rates were increased to rescue PG&E from bankruptcy once again.

To the extent that it can be said that PG&E is offering to use a portion of its expected returns to pay off the debt (a questionable proposition considering the proposed structure of the WVRBs), its proposal is still misleading. As noted above, PG&E has already applied to have its return on equity increased. Its first request came in April, for an increased ROE of 16%; a later request trimmed that astronomical request back to 12%.[31] Such an increase would exactly offset the 1.75% of return on equity that PG&E has promised to forgo to pay off the WVRBs. At the same time as PG&E requested an ROE of 12%, the equity holders made their own submission, asking the CPUC to authorize a 15.2% ROE for PG&E.

Such an increase in the return on equity would necessarily mean higher prices for PG&E's ratepayers. Moreover, the increase seems calibrated to leave PG&E equity holders at roughly the same place as they are now after diverting a portion of these returns to paying down the WVRBs, as the difference between 10.25% and 12.0% is exactly 1.75%. Therefore, taken at face value, the PG&E proposal and its current submissions to the CPUC, appear to require that ratepayers to pay a substantial portion of the wildfire losses, despite PG&E's claims to the contrary. By our calculations, such an increase would cost ratepayers an additional $2.6 billion over the next five years, and $6.1 billion over the next decade.

Moreover, PG&E is not only asking to increase its return on equity but is also asking for a general rate increase of approximately $2 billion to make fire-safety improvements to its power system. Recent analysis by CalMatters showed that the average residential customer could pay nearly $300 more a year in the next three years through this and the higher rate of return. By their analysis, these requests would raise the average monthly bill of $165.94 to $190.36.[32] This is nothing short of an $8 billion to $10 billion ratepayer bailout of the utility.

The response of PG&E and its equity holders to such criticism would be to suggest that the increase in expected returns is driven by other circumstances not related to past wildfire losses.[33] According to Dr. Richard Hern, an

[31] https://www.sacbee.com/news/politics-government/capitol-alert/article229556149.html; https://www.cpuc.ca.gov/General.aspx?id=10432

[32] https://calmatters.org/economy/2019/08/pges-rate-increases-what-you-need-to-know/

[33] Another potential justification for such increases is an increase in overall expected market returns, something that makes little sense in today's capital markets. Rates on a 10-year treasury have averaged slightly over 2% since 2012. They briefly rose above 3% at the end of 2018 before declining sharply to under 2% again in recent weeks.

expert hired to file testimony on behalf of equity investors on August 1, 2019,[34] there is a large increase in the risk of owning equity in PG&E. What is driving this increase? According to Dr. Hern, "[t]he principal source of this risk is related to the application of inverse condemnation to regulated electric utilities in California, which exposes PG&E and other California IOUs to significant asymmetric downside risks not present for IOUs in other jurisdictions."[35] But the fund created by the state to ensure the utilities are covered in the event of future losses should actually serve to *reduce* this risk—suggesting the exact opposite, that no increase in the rate of return should be needed if PG&E successfully navigates its way out of bankruptcy in time to participate in the fund.

Still, the metrics used by Dr. Hern, such as derivative prices, do suggest a recent increase in risk to equity holders. However, we believe that this increase in risk is not driven by California's long-run environmental or economic issues but rather by PG&E's own short-run managerial decisions as it tries to work its way out of bankruptcy. There is the complex proposal that needs legislative approval PG&E continues to push for the emergence from bankruptcy. If the company fails to emerge from bankruptcy in time to join the Wildfire Insurance Fund, it will be back where it started in terms of wildfire risk. And part of the risk measured by Dr. Hern is created by the potential failure (if it is rejected by regulators and the bankruptcy court) of their proposed plan, thus implying that they will be unable to transfer billions in losses to ratepayers and taxpayers.

3. In part, WVRBs will be paid for by the state and taxpayers

PG&E suggests that the tax-exempt nature of the WVRBs will allow the company to maximize the funds available to pay for losses. This claim, like many others, makes little sense. To begin with, PG&E's wildfire liabilities are completely independent of the mechanism being used to pay those losses. PG&E's liabilities are a fixed amount—albeit one that has yet to be fully determined—and that amount will not vary regardless of how PG&E chooses to pay it.

Claimants of losses due to the wildfires do not benefit at all by the structure of PG&E's efforts to raise the necessary funding. The equity holders must find a way to come up with funds to pay these losses. If they cannot borrow as much as they like, this only means that PG&E will have to raise funds through different mechanisms, including, potentially, a direct infusion of new equity. And it is worth noting that even if they didn't use equity, PG&E has plenty of conduits to sell debt on its own—indeed the company is already carrying over $20 billion in

[34] Prepared direct testimony of Richard Hern, PhD on behalf of the institutional equity investors of Pacific Gas and Electric Company, August 1, 2019 Docket: A.19-04-014, et al (Consolidated)
Identification: IEI-001
[35] Ibid. page 5 lines 14-17.

leverage. Of course such a change in the debt-to-equity ratio would have to be approved by regulators and could have potential financial consequences depending on the structure of other loans the utility carries on its books.

Alternatively, the equity investors could simply go to the debt markets themselves and borrow money to inject additional equity into PG&E. But borrowing money to invest in equity is inherently risky, and they would have to pay an accordingly high interest rate on that debt. Ultimately, PG&E's proposed plan is a complicated set financial and legal maneuvers largely designed to reduce their cost of capital by using taxpayer funding and public credit. This is, yet again, nothing less than a bailout of the company.

When PG&E says it is using tax-exempt debt to maximize payments to victims, what it really means is that the lower expected interest rate would maximize how much can be borrowed relative to the charges assessed on ratepayers. But this is just another way of saying that a tax-exempt interest rate would cost the equity holders less—or the ratepayers less, as they will actually be the ones paying it. The way to understand this is to consider how much the company could borrow today against, for example, a fixed amount of revenues coming from the firm that are equivalent to 2% return on the current equity rate base. The following table shows the difference in how much could be borrowed currently at different interest rates against that fixed flow of funds. At 3% (as a tax-exempt bond) the firm could raise over $18 billion. At 5% (a riskier non-tax-exempt bond) it could only borrow $13.7 billion.

Estimated Current Value of 2% of Forecasted Equity Rate Base Over 30 years

Interest Rate	3.0%	3.5%	4.0%	4.5%	5.0%
CV of 2% of future ERB	$18,193.2	$16,914.0	$15,756.5	$14,707.3	$13,754.8

At a higher interest rate, the firm would have to find funding from other sources—or borrow more money and increase the assessed charges on ratepayers. But if lower rates are good for investors or ratepayers, they must, in turn, be bad for someone else. In this case it is the taxpayer who is effectively subsidizing the company's losses. If the bonds were sold in a traditional (taxable) form, the company would have to backfill approximately $3.5 billion in additional cash to pay off their obligations (the difference between a 3.0% rate and a 4.5% rate).

This amount, $3.5 billion, is the same as the present value of what investors in the bonds would have to pay out in taxes on their returns—otherwise investors would not purchase one of the assets as it would offer a lower return.[36] Taxes that are not paid are exactly the same as the government funds being used to directly cover PG&E losses. In other words, by seeking tax-exempt status for these bonds, PG&E is asking the legislature to authorize a $3.5 billion taxpayer bailout for PG&E. This clearly contradicts the language they have used to justify their proposed plan.

4. WVRBs will negatively impact PG&E's balance sheet

The current PG&E proposal to issue tax-exempt bonds is a clear attempt to push costs onto taxpayers and ratepayers. This should be an issue in itself. But PG&E goes a step further by initiating a complex set of financial and legal maneuvers to avoid listing the WVRBs on their books as debt. Lenders are understandably wary of such off-balance-sheet debt maneuvers, given the role they played in major financial disasters including Enron, WorldCom, and Lehman Brothers. While keeping the debt off the books may allow PG&E to skirt the letter of CPUC regulations, such distinctions mean little to lenders, or to the credit rating agencies or, ultimately, to other existing creditors in the firm. This explains why the PG&E information releases—rife with glaring misrepresentations and false claims—are so surprisingly nuanced in their claim that the company did not expect the WVRBs to impact their credit rating: "Further analysis and discussions with the rating agencies are needed."[37]

Regardless of where the debt sits by accounting standards, the issue is that the funding needed to pay for the debt must still be paid out of PG&E profits. If PG&E gets the increase in the return on equity that they are currently requesting, then it will not matter. The debt will be paid by ratepayers, leaving the company largely untouched.

More importantly, whether or not the debt sits directly on PG&E's books is irrelevant for other creditors and other market participants. Two carefully watched metrics of creditworthiness are Funds From Operations (FFO) and Earnings Before Taxes Depreciation and Amortization (EBITDA) and their ratio relative to debt levels. These credit ratios will be materially impacted by the diversion of company revenues. Due to a broadly recognized need for significant capital spending on systems hardening and safety measures, PG&E's short term credit metrics are likely to be strained even without diverting funds to service WVRBs. Diverting approximately 20% of the company's regulated profit margin to service off-balance-sheet obligations implies that the company would not be rated investment grade, and that its debt would instead be rated "junk." While the specific impact that WVRBs

[36] If investors are willing to buy either asset, then the after tax returns on these bonds must be the same.

will have on FFO and EBITDA are not yet clear, and will not be quantifiable until additional details on the size and cost of the financing are revealed, what is clear is that issuing additional off-balance-sheet debt will increase the utility's risk profile. As a result, PG&E's credit rating could be lowered, possibly even below Baa1 (BBB)—junk bond status.

Such credit rating downgrades increase the cost and may impact the availability of short-term and long-term borrowing, including commercial paper, credit facilities, note financing, or other borrowing costs. These costs would ultimately have to be paid by ratepayers. It would also have a materially negative impact on current creditors. The PG&E notes they hold would rise substantially in terms of their risk profile, and if a current creditor tried to resell the PG&E obligation, it would likely do so only at a highly discounted price.

Yet again, the PG&E proposal seems largely devised to pass the costs of the losses onto other parties, despite claims to the contrary. Ultimately, such credit problems will degrade the value of the investments of current long-term creditors in the company. They also substantially increase the possibility of another bankruptcy in the future. If equity holders wanted to use debt to pass off the losses, they could simply borrow money on their own and use the proceeds to inject equity into PG&E. The complexity of the company's proposed plan is clear evidence of their true motives.

5. PG&E's proposed plan is not needed to protect CalPERS and CalSTRS

If PG&E is granted the requested increase in its return on equity, the requested increase in funding for fire improvements, and the issuance of the WVRBs, then roughly $10 billion in PG&E liabilities will be transferred to taxpayers and ratepayers over the next decade—20% to 40% of the total liability the company is currently facing. This goes some way to explaining why the current market price of PG&E equity is significantly higher than what investors would pay for shares if there were simply a straight injection of equity into the company to cover its fire-related losses. While PG&E continues to state publicly that equity holders will pay all the losses, the market clearly sees through the subterfuge. The proposed plan, as it currently stands, is nothing short of an enormous bailout that benefits equity holders. On the other hand, if PG&E's proposed plan was rejected, the stock price would fall and the current equity holders would see a decline in the value of their holdings.

Yet another misleading argument put forward by the hedge fund investors is that their proposal protects the state's pension funds who are invested in the utility, including CalPERS and CalSTRS. That begs the question: what exactly does it protect them from? The liabilities generated by the fires, while still being litigated, are in the past and are of some fixed amount. Anyone invested in the firm in 2017 and 2018, including the state's two largest pension funds, has already absorbed those losses. There is no protection to be granted from liabilities that have already been incurred. Additionally, CalPERS and CalSTERS do not have large investments in PG&E. The collective PG&E equity holdings of CalPERS and CalSTERS is approximately 0.003% of their total assets under management.[38]

There is little doubt that the PG&E proposal benefits all investors in the utility—by pushing a large portion of the losses onto ratepayers and taxpayers. As for the hedge fund investors who bought a controlling interest in PG&E, this proposal would not help them recover 'losses' from the fires. They bought the company for a fraction of its original value from other investors who decided to absorb their losses and move on. For these investors, such a bailout would represent a massive windfall return.

6. The PG&E plan does not further California's long-term needs

Along with the other more direct claims made by PG&E to support its current proposal to cover losses, there is also the more general assertion that the proposed plan will help align the interests of the company with the interests of the state and its regulators, particularly in terms of the long-term climate goals of the state. Given the empty claims that equity holders will shoulder all the costs of the wildfire losses under the current proposal, any such claim should be met with a high degree of skepticism.

Current equity holders have suggested that they are able to find significant cost savings within the PG&E operations—savings that would go towards paying down debt taken on to cover losses from the wildfires.[39] The big question is: Where would such cost savings come from, particularly since PG&E has already acknowledged it will have to increase spending on safety measures?

One possibility that should concern the state is the potential cost savings PG&E might attempt to garner through renegotiating the company's portfolio of contracts that support California's Renewable Portfolio Standards (RPS)). In 2002, SB-1078 introduced RPS goals to California and initially required utilities to obtain 20% of electricity from renewable sources. The program was accelerated in 2015 with a new goal of 50% RPS by 2030. Acting on this mandate, PG&E entered into power purchase agreements (PPAs) with wind and solar providers

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[38] https://www.calpers.ca.gov/page/investments; https://www.calstrs.com/calstrs-glance; based on holdings information from Bloomberg as of 8/23/2019.

[39] Of course, if there are true cost-savings to be captured, they should go to ratepayers under the CPUC system, not equity holders in the form of loss payments.

throughout the western United States. As renewable energy technology has advanced since 2002, the cost per kilowatt hours for wind[40] and solar[41] have dropped precipitously, resulting in avoided market-rate costs in PG&E's older PPAs.

PG&E could attempt to amend or cancel some $34.5 billion in contracts to purchase wind and solar power, many entered at prices much higher than current market prices, in order to reduce expenses. Concerned by this prospect, created by PG&E's bankruptcy filings, "NextEra petitioned the Federal Energy Regulatory Commission (FERC) to assert jurisdiction over those contracts by ordering PG&E to seek the commission's approval if it moves to renegotiate them during the bankruptcy process. The FERC ruled last week that it would review the matter alongside the bankruptcy judge."[42]

Such renegotiation could create uncertainty for future development, as financers would worry about the potential for problems in the future posed by current PPA contracts. Any change in PG&E's creditworthiness would make such contracts all the more risky given the increased chance of another bankruptcy. Additionally, funding for future renewable energy projects may suffer if lenders believe they need to offer less favorable terms on financing in order to hedge against future risk. Historically, PPAs have allowed renewable energy developers to offer a long-term hedge against fluctuating rates in wholesale electricity prices. While all of this is outside the narrow issue of covering fire losses, it suggests that state legislators and regulators need to be thinking of the PG&E bankruptcy plan proposal on many levels outside of the immediate need for a cash injection into the company.

Much of this is speculation. Not surprisingly, the company has been quiet on such issues. But the state should be very concerned about the motivations of, and managerial decisions made by, the current controlling equity holders. These hedge funds specialize in short-term investments in distressed companies, not long-term climate goals. They buy into a company at a low equity price and try to maximize the returns on their investments while either bringing the company back out of bankruptcy or liquidating it. Such incentives do not align with the long-term need of state businesses and residents for clean, safe power.

The typical efficient market response to such a criticism is that both short- and long-run investors are aligned to maximize the 'value' of the company as represented by its market capitalization. But there are a number of

[40] See Lazard's Levelized Cost of Energy Analysis, ver. 11.0. Retrieved from: https://www.lazard.com/perspective/levelized-cost-of-energy-2017/
[41] Bolinger, M. and Seel, J. (September 20, 2018). *Berkeley Lab's "Utility-Scale Solar" documents an expanding U.S. market*. Retrieved from: https://emp.lbl.gov/news/berkeley-lab-s-utility-scale-solar-documents

problems with this argument. One issue is that the excessively high debt-to-equity ratio incentivizes companies to take disproportionate risks. If the decisions the equity holders have made turn out for the worse, all they will have lost is the cost of the shares that they bought at a historically low price. But these same mistakes could push PG&E into yet another bankruptcy, with ratepayers, creditors and taxpayers having to bail the company out once again. This risk is exacerbated by basic asymmetric information between the market and the managers of the company. The market often does not understand the risks of PG&E decisions until after something negative happens. For example, the lack of appropriate safety measures directly led to the San Bruno explosion—an event that led, in turn, to the company's felony conviction.[43]

Moreover, small positive changes in short-run profit outcomes can mean a big return for equity holders who bought in at such a low price. But when investment companies are making short-run decisions, they will not worry about such potential long-run consequences. The rapidly changing environmental situation that all IOUs are facing should give us pause. This is literally a problem with life-or-death consequences. The key to aligning the choices of the company with the needs of the state is to promote a deep equity base. This means the state should require a massive injection of new money into the company in the form of equity, regardless of the effects that might have on the PG&E share price right now.

Ultimately, given the major challenges California will face in terms of its power grid over the coming decades, the state should be promoting a long-run partnership with their largest IOU. The best way to align the incentives of PG&E with those of the state is to require that the firm carries a substantial share of equity relative to debt. This would require existing shareholders to materially dilute their holdings and reduce their return on initial investment, but it would provide a necessary cushion and encourage a longer run outlook by the management. In terms of return on investment, this would not bode well for the hedge funds that took over PG&E. But that should not be a concern for either state regulators or residents.

[43] https://en.wikipedia.org/wiki/San_Bruno_pipeline_explosion

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