Analysis of the Wildfire Victim Recovery Bonds Proposal

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About the Author

Brad Williams joined Capitol Matrix Consulting (CMC) in 2011, after serving in various positions in California state government for 33 years. Mr. Williams worked for over a decade as the chief economist for the Legislative Analyst's Office, where he was considered one of the state's top experts on the tax system, the California economy, and government revenues. He was recognized by the Wall Street Journal as the most accurate forecaster of the California economy in the 1990s and has authored numerous studies related to taxation and the economic impacts of policy proposals. Immediately prior to joining CMC, Mr. Williams served as a consultant to the Assembly Appropriations Committee, where he advised leadership on proposed legislation relating to taxation, local government, labor, and banking.

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In this brief, we analyze the use of wildfire victim recovery bonds (WVRBs) as a principal tool that may be utilized by Pacific Gas and Electric Company (PG&E) to emerge from bankruptcy and used exclusively to pay for 2017 or 2018 wildfire victims claims. Additionally, this tool would be available for any other investor-owned utility to use to pay victims. The proposal would rely on the issuance of long-term securitization bonds, the proceeds of which would be used to pay victim claims for the 2017 and 2018 wildfires and, potentially, make initial contributions to a newly created Wildfire Fund. While the repayment of the bonds would be secured by a charge on ratepayer bills, the full cost of the debt service for these bonds would be borne by PG&E's shareholders, through an offsetting credit to customers funded by annual company profits. Our analysis includes comparisons of costs and benefits of the WVRB proposal to alternative proposals that would rely on a major issuance of new PG&E stock, which would sharply dilute ownership of existing shareholders.

Our key findings are that:

- WVRBs provide an extraordinary opportunity for PG&E to quickly raise funds, at an extremely low cost, to pay victim claims and return the company to profitable taxpayer status. The WVRBs can be issued at a low cost because they are secured by a dedicated revenue stream and, at least in part, will be tax-exempt.
- Given the regulatory environment in which utilities operate, PG&E earnings are more than sufficient to support the cost of the annual shareholder credit.
  - In the event profits were to fall short in a particular year, the loss would be covered by PG&E shareholders. This would not affect customer utility rates.
- Debt-service costs on the WVRBs would reduce PG&E's future cash flows (the principal source of financing for capital expenditures in the industry) and hence, would increase the amount of future capital spending that would need to be financed through the issuance of additional debt and equity. The additional equity issued would raise the number of PG&E common stock shares outstanding over time, but at a gradual pace relative to the alternative plans.
- Because it would result in a gradual increase in shares outstanding over many years, the PG&E plan has the distinct advantage of retaining PG&E ownership among traditional utility investors seeking stable earnings, long-term growth and dividend payments. This is in contrast to alternative plans involving massive sales through rights offering, which would effectively transfer company ownership almost exclusively to hedge funds and other investors seeking short-term profits, potentially to the detriment of the long-term viability of PG&E and its customers.

- The issuance of WVRBs would return PG&E to taxpayer status more quickly than alternative proposals involving issuance of new equity shares. This will result in an earlier restoration of revenues for schools and other General Fund programs.

Background

PG&E provides electricity and natural gas to about 16 million customers in northern and central California. The company has 24,000 employees, of which about 14,500 are covered by collective bargaining agreements.

Regulatory environment. As a regulated utility, PG&E's allowable rates charged for electric and natural gas utility services are established through a regulatory process that permits the company to recover its costs of providing services, as well as a return on capital invested in approved projects. The guaranteed return on approved investments shields PG&E (and other regulated utilities) from significant market risks. As a result, the company generates stable and predictable profits in the great majority of years.

The revenue that PG&E is authorized to collect is determined through general rate cases conducted by the California Public Utilities Commission (CPUC) every three or four years. The CPUC is also responsible for conducting cost-of-capital proceedings to authorize the PG&E's capital structure and rates of return for its electric generation, electric and natural gas distribution, and natural gas transmission and storage rate base. PG&E's currently authorized capital structure consists of 52% common equity, 47% long-term debt, and 1% preferred stock. Its authorized return on equity is 10.25%.

Current distribution of stock ownership. Hedge fund ownership of PG&E stock rose when share prices declined following the 2015 fires. These funds currently make up about one-half of equity ownership in PG&E. The balance is comprised of traditional, long term, utility investors focused on stable returns and dividend payments. These include employees, retirees, pension funds, and mutual funds.

Wildfires. CalFire determined that certain wildfires occurring in 2015 (the Butte fire), 2017 (the Northern California wildfires, excluding the Tubbs fire) and 2018 (the Camp fire) were caused by electrical transmission lines and related equipment owned by PG&E. Under the "inverse condemnation" provisions of current state law, utilities face liability damages if their equipment is found to have caused the fire, even if the company is not negligent.

In September 2018, Governor Brown signed SB 901. The final version did not make changes to California's strict liability standard, but it did include several other provisions related to risk mitigation and reasonableness standards for utility cost recovery from customers. The measure also allowed utilities to impose a surcharge on its customers and to "securitize" future revenues from the surcharge for the purpose of paying claims related to the 2017 Northern California wildfires.

In July 2019, Governor Newsom signed AB 1054, which created additional safety oversight for utility infrastructure. It also created the Wildfire Fund to address future wildfire liabilities, and specified formulas for allocating contributions by electrical corporations to the fund. The measure contains a $2 billion state loan to capitalize the Wildfire Fund, and a total loan authorization of up to $10.5 billion. These transfers would be short-term loans repaid from proceeds of ratepayer charges or bonds within a fiscal year.

Proposals to Exit Bankruptcy

Three capital-raising proposals have been put forward to move PG&E out of bankruptcy.

- One, proposed by the PG&E's principal bondholders (bondholder proposal), would involve the investment of up to $20 billion in the company in return for issuance of new stock in the company. According to recent estimates, existing shareholders would see their ownership diluted to about 5-15 percent of the company's value. About $16 billion to $18 billion would be used to pay claims, and $5 billion would be paid into the new Wildfire Fund.
- A second, proposed by insurers and the Baupost Hedge Fund (subrogation group proposal) includes issuance of $14.2 billion preferred stock convertible into common stock at prices 15% below the applicable market value.
- The third, proposed by PG&E (PG&E plan) would commit $15 billion in new equity capital to PG&E to help pay claims. Instead of relying solely on newly issued stock, the PG&E plan builds on the SB 901 securitization provisions. The key difference is that *shareholders* rather than ratepayers would bear the full burden of the debt-service costs associated with the securitization bonds.

All of these plans are fluid and will be influenced by further actions taken by the state.

Details of PG&E Plan

The key provisions of the PG&E plan are shown in Figure 1.

Figure 1
Key Features of WVRB Securitization Proposal

- CPUC issues a financing order authorizing securitization of future PG&E customer charges for victims claims.
- Proceeds raised by PG&E through the sale of long-term bonds are used to pay victims claims and support the Wildfire Fund.
- PG&E profits are used to fully offset customer charges via a customer credit funded from company profits. Thus, there is no increase in customer rates.

Under the PG&E plan, the proceeds of long-term bonds issued by PG&E would be used to pay 2017 and 2018 wildfire victims and, potentially, to make an initial contribution to the Wildfire Fund. The bonds would be repaid from PG&E's future earnings. Specifically, CPUC would issue a financing order creating a property right to future revenues from rate payers. The property right would be sold to the government agency that issues the bond, which would be then responsible for paying victim claims and all future debt service expenses. The statute would include a pledge by the state not to impair the value of the securitized property.

The WVRBs would be used in conjunction with other equity contributions from current shareholders through a "rights offering" (that is, an offer to purchase additional shares of stock at a predetermined discounted value). The various contributions would be coordinated in a way to maximize the bond rating. The goal would be a AAA rating.

PG&E would then provide an offsetting credit to rate payers, funded by its profits, to ensure that there is no increase in customer rates. The financing amount would be excluded from the calculation of PG&E's compliance with its regulated capital structure requirement. As a result, the bond would not interfere with future debt-financing of capital investments.

Analysis of PG&E Plan

This analysis of the PG&E plan focuses on six issues:

1. The impact on victims of the wildfires.
2. The relative cost of the plan.
3. The financial viability of the plan to PG&E.
4. The implications for existing PG&E shareholders.
5. The impact on customers.
6. The impact on state government revenue and Proposition 98.

Impact on Victims

A major advantage of the WVRB proposal is that it would allow for a quick resolution to PG&E's bankruptcy, enabling victims to be paid promptly. A key reason for the quick resolution is that PG&E would be able to avoid prolonged litigation likely to occur over the dilution of existing shareholders' stock. The emergence from bankruptcy would also enable PG&E to participate in the Wildfire Fund established by AB 1054.

Relative Cost of the PG&E Plan

A key advantage of the WVRB securitization plan is that it would enable PG&E to raise funds for victim payments at tax-exempt interest rates that are at historically low levels. As of mid-August 2019, AAA rated 30-year tax exempt municipal bonds were trading at interest rates of 1.87 percent. Even allowing some upward adjustment for the size of the WVRB bond issuance – and possibly a less than AAA rating – the WVRB securitization bond would likely carry an interest rate of 3 percent or lower given the size and reliability of PG&E's rate base. This is much less than the typical weighted cost-of-capital for insurers and asset management industries (which comprise a major share of the creditors behind the equity proposals). And equity investors would be seeking returns well above their cost of capital when setting an offer price for new PG&E shares.

As discussed more fully in the financial viability section below, added WVRB-related debt service costs would will reduce PG&E's future cash flow available to internally fund new investments by about $0.5 billion per year. Hence, we would expect future debt and equity financing of the company's future capital investments to rise by a like amount. Over time, the added expenses associated this financing would offset a portion – but only a portion – of the up-front savings relative to alternative plans. (The additional financing costs would be occurring in the future and thus would be reduced on a present-value basis).

Financial Viability of the Plan

The issuance of WVRBs is financially viable given the large "coverage" in terms of annual profitability of PG&E, which we expect will rise over time due to the positive long-term growth outlook for the company. Aside from its low-cost attributes, the plan has the advantage of spreading out the dilution of existing shares over many years. This would reduce risk and enhance PG&E's future access to capital markets, which is vitally needed to support future investments in safety, reliability, and emissions reduction.

PG&E Financial History and Outlook

PG&E's long-term prospects remain positive, making it highly likely that the company will be able to easily accommodate the securitized debt.

Recent history. Figure 2 shows that over the three years prior to 2018, the company had average revenues of $17 billion, costs for operations and energy purchases totaling $12 billion, depreciation of $3 billion, and net interest and miscellaneous payments of about $0.5 billion. This resulted in net income before tax of $1.5 billion, and net income after tax of $1.3 billion. The income and operating-related expense picture in 2018 was similar to previous years. However, the utility recognized nearly $12 billion in charges related to wildfire claims, leaving it with a net loss after tax of $6.8 billion during the year.

Figure 2
PG&E Income Statement for FY 2015 through 2018
(Dollars in Billions)

	2015	2016	2017	2018
Revenue	$16.8	$17.7	$17.1	$16.8
Costs:				
Electricity and Natural Gas Purchases	$5.8	$5.4	$5.0	$4.5
O&M	$6.9	$7.3	$6.4	$7.1
Depreciation, Amortization, Decommissioning	$2.6	$2.8	$2.9	$3.1
Wildfires	$0.0	$0.1	$0.0	$11.8
Operating Income	**$1.5**	**$2.1**	**$2.8**	**-$9.7**
Net Interest and Other Expenses	$0.7	$0.6	$0.7	$0.4
Income before tax	**$0.8**	**$1.5**	**$2.1**	**-$10.1**
Income Tax	$0.1	$0.1	$0.4	-$3.3
Net income (after tax)	**$0.9**	**$1.4**	**$1.7**	**-$6.8**

Source: PG&E Corporation, PG&E Company, 2016 ad 2018 Joint Annual Report to Shareholders

Outlook In the next several years, PG&E's rate base, operational expenses, and net income are all expected to grow as a result of major investments planned by the company to help meet California's long-term energy goals. These investments include upgrades to its electrical grid, gas transmission and storage; wildfire mitigation; and expansions to accommodate future transportation electrification. In its second quarter 2019 earnings presentation, PG&E projected annual investments of about $7 billion and growth in its weighted average rate base of over 7 percent per year between 2018 and 2023. Nearly $6 billion of these investments are currently authorized and the balance are subject to future review and approval by FERC and the CPUC.

Regardless of the precise outcome of the future determinations, it is highly likely that the company's rate base, and hence its capacity to accommodate additional debt, will rise significantly over time.

Impact of WVRBs on PG&E's Finances

They will return company to profitability relatively quickly. The proceeds of the WVRBs would be applied to the outstanding claims, thereby offsetting the major charge to operating income caused by recognition of the wildfire claims. This would eliminate the large net operating loss that would otherwise exist under the other financing plans, and it will return PG&E to cash taxpayer status in a relatively short period of time.

They will moderately reduce ongoing profit levels until the debt is paid off. The revenues devoted to debt repayment will impact ongoing profit levels. Since share prices are related to the present discounted value of current and expected future earnings, the reduction in after-tax earnings will translate into lower PG&E stock prices. Assuming a $10 billion issuance, the annual pre-tax expense would be about $500 million, reducing pre- and after-tax profits reported in recent years by roughly one-third. The percentage reduction in profits would likely decline in the future however, as PG&E's rate base grows, as noted above.

They will also modestly increase the need for debt and equity financing of future investments. Utilities rely primarily on internal cash flow generated from annual operations to support their investments. However, it is also common for these same utilities to tap expected growth in their customer rate base to support a portion of capital investment spending – when those requirements exceed internal cash flows from existing operations. In the three years prior to 2018, PG&E issued an average of $1.8 billion annually in combined debt and equity to cover the gap between its investment needs and its internal cash flow (see Figure 3). The equity and debt financing was similar (on a proportional basis) to that undertaken by Southern California Edison during the same period. The debt service on $10 billion in WVRBs would raise the amount of debt and equity financing by about $0.5 billion per year, or about 28 percent relative to the levels of recent years.

Figure 3
PG&E Historical Cash Flow
(Dollars in Billions)

	Fiscal Year			
	2015	**2016**	**2017**	**2018**
Net income:	$0.9	$1.4	$1.7	-$6.8
Plus:				
Depreciation, Amortization	$2.6	$2.8	$2.9	$3.0
Changes in working capital and other operating activities	$0.3	$0.2	$1.4	$8.6
Cash from operating activities	$3.8	$4.4	$6.0	$4.8
Minus:				
Capital Expenditures	$5.2	$5.7	$5.7	$6.6
Equals: Net cash after capital expenditures	-$1.4	-$1.3	$0.3	-$1.8
Minus:				
Dividends paid	$0.9	$0.9	$1.0	$0.0
Other financing activity	$0.1	$0.1	$0.1	$0.0
Equals: Net cash after capital expenditures and dividend payments	-$2.4	-$2.3	-$0.8	-$1.8
Financing Sources				
Net Debt Issued	$1.5	$1.3	$0.7	$2.9
Common Shares issued	$0.8	$0.8	$0.4	$0.2
Total Debt + Equity Financing	**$2.3**	**$2.1**	**$1.1**	**$3.1**

The increased amount of future equity financing will cause shares outstanding to grow gradually over time. Based on historical allocation of financing between debt and equity, the new shares outstanding would increase by about $200 million per year – a small fraction of the $15+ billion issued all at once under the alternative plans. Because new shares would be gradually issued over many years - in line with growth in the utility's ratepayers base – we would expect the principal purchasers to be the traditional utility investors seeking stable earnings growth over the long term, as opposed to hedge funds seeking quick returns.

Impact on Existing Shareholders

While the WVRBs would be 100-percent funded from existing shareholders, the impacts would be felt over time, rather than all at once. The alternate proposals to immediately sell additional stock would sharply dilute existing shareholders that are not able to participate in the "rights offering" of new shares. This would harm employees that have invested in PG&E stock in their retirement portfolios, as well as traditional investors, such as CalSTRS and other pension funds that hold PG&E stock for its long-term stable growth prospects. Just as importantly, the rapid dilution of stock would send a negative signal to traditional investors in PG&E stock, potentially making it more difficult for the company to access equity markets in the future to finance future investments in safety, modernization, and expansion in the EV electric grid.

Impact on Customers

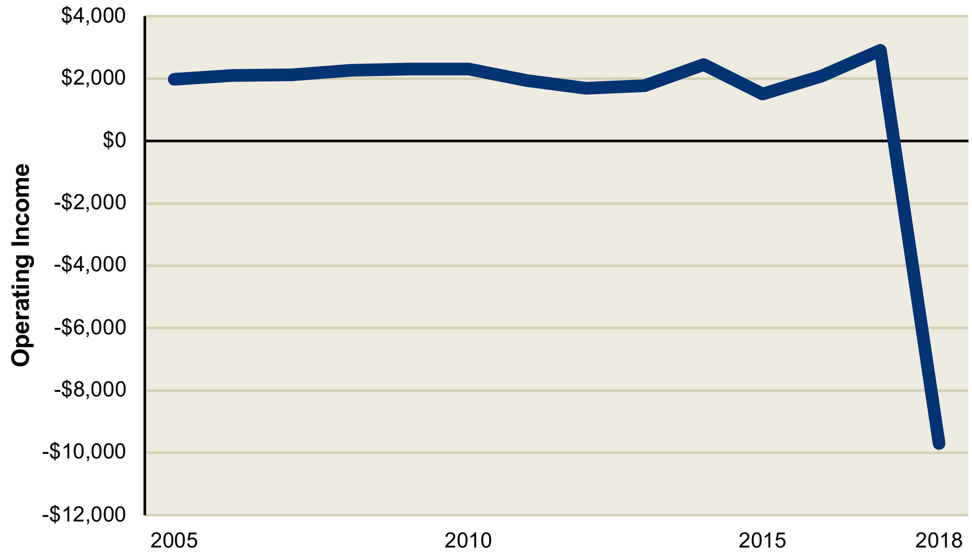
The full costs of the WVRBs would fall on existing shareholders, not customers. In order to ensure the highest possible tax-exempt bond rating, the long-term bonds would be secured by future rate payer revenues. However, the proposal also calls for an offsetting credit to ratepayers, funded by PG&E profits, to ensure that there are no net increases in customer rates.

What would happen if net income were not sufficient to cover bond payments? A key question that often arises about the WVRB proposal is whether, despite the clear intent of the proposal, debt service costs would be borne by customers if PG&E's profitability were to fall below expectations.

Given the strict regulatory environment in which PG&E operates, the likelihood of a sustained shortfall in profits is extremely low. Even risks of single-year shortfalls caused by disasters would be diminished substantially if the state is able to build significant reserves in the Wildfire Fund.

Regulated utilities are not subject to the type of market-based volatility that face businesses in non-regulated sectors. Once approved, a utility investment will generate a regulated rate-of-return over its life, regardless of market circumstances. The result is a steady flow of profits. As indicated in Figure 4, PG&E experienced positive operating earnings of approximately $2 billion during each year from 2005 through 2017. This occurred despite the severe 2008-2010 economic recession. Net income (calculated by subtracting net interest expenses from operating profits) averaged about $1.5 billion per year during this period. The debt service costs associated with the WVRBs would likely be in the range of $0.5 billion, which is about one-third of the average net income during this historical period, leaving a substantial cushion in terms of profits available to cover customer credits. This percentage would likely decline significantly over time as PG&E's rate base grows.

Figure 4
PG&E Annual Operating Income, 2005 through 2018
(Millions of Dollars)



In the rare event that profits did fall short, the gap would not be covered through a reduction in credits to ratepayers. Rather, it would be covered through PG&E's cash reserves or shareholders through the sale of additional company shares. Such actions would further reduce stock values but would not affect customer reimbursements.

Impact on State Government Revenues and Proposition 98

PG&E has historically been a source of significant revenues to state government, both in terms of corporation income taxes paid on its profits and personal income taxes paid on the portion of its dividend payments that are received by California residents or businesses. Critics of the WVRBs assert that the debt service payments on the WVRBs will diminish future profits and dividend payments, thereby reducing state revenues and (under Proposition 98 school funding formulas) K-14 education funding over time.

These assertions fail to take into account three important factors:

First, it is the 2017 and 2018 wildfires – not the WVRBs – that are responsible for the loss in PG&E income and related dividends. Payment of wildfire-related claims will result in a major net operating loss for PG&E, which under U.S. and California income tax law can be carried forward and used to offset income and associated tax liabilities in future years.

Second, under the WVRB tax-exempt financing mechanism, the property right created by a charge on future utility bills would create immediate taxable income to PG&E, thereby offsetting the taxable losses resulting from the wildfire-related claim payments. The elimination of the claims-related taxable loss would move PG&E back to taxable status in relatively short order. In contrast, the issuance of additional equity shares under the alternative plans would have no impact on PG&E's taxable income; thus, the large claims-related taxable losses would be carried forward and used to offset future income (and associated tax payments) for several years.

Third, the PG&E plan will result in a smaller dilution in PG&E share values than the alternative plans. This will translate into smaller capital losses on stock sales by existing shareholders, which, in turn, will yield more net personal income tax revenues to the state. This is a significant impact given the high marginal tax rates applied to capital gains in California.

The bottom line is that, while liabilities for wildfire-related victim claims will reduce future PG&E tax payments relative to pre-disaster trends, the securitization plan will move PG&E to profitable status more quickly than the alternative equity-based plans, and it will result in smaller capital losses on personal income tax returns. This produces more state revenues available for schools and other state programs than would be generated under the alternative plans.

Summary and Conclusion

The securitization proposal offers a low-risk and extremely low-cost option for moving PG&E quickly out of bankruptcy and for paying victim claims. Its costs will be low due to historically low interest rates and its ability to utilize tax exempt financing. The plan is funded by existing equity shareholders from future PG&E profits. While the debt service payments on the WVRBs will reduce future profits and result in a diminution of share values relative to pre-disaster levels, the reductions in share values will be significantly less than would be the case under alternative plans involving the immediate issuance of a substantial amount new common stock. The securitization plan will return the company to profitable taxpayer status relatively quickly, thereby restoring state revenues available to support schools and other programs.

The plan will modestly boost the amount of capital expenditures that need to be supported through debt and equity financing. This will lead to a gradual increase in the number of shares outstanding over time. Under the plan, however, equity ownership is likely to continue to be principally comprised of traditional long-term utility investors, as opposed to hedge funds and related investors seeking short term profits. Such short-term actions, such as divestments or risky cost-cutting measures (such as outsourcing) may raise near-term profits but would also put the longer-term viability of the company at greater risk.