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A Rational Approach to Balance Affordability with Customer Safety and Reliability

Main Topics For Today's Discussion

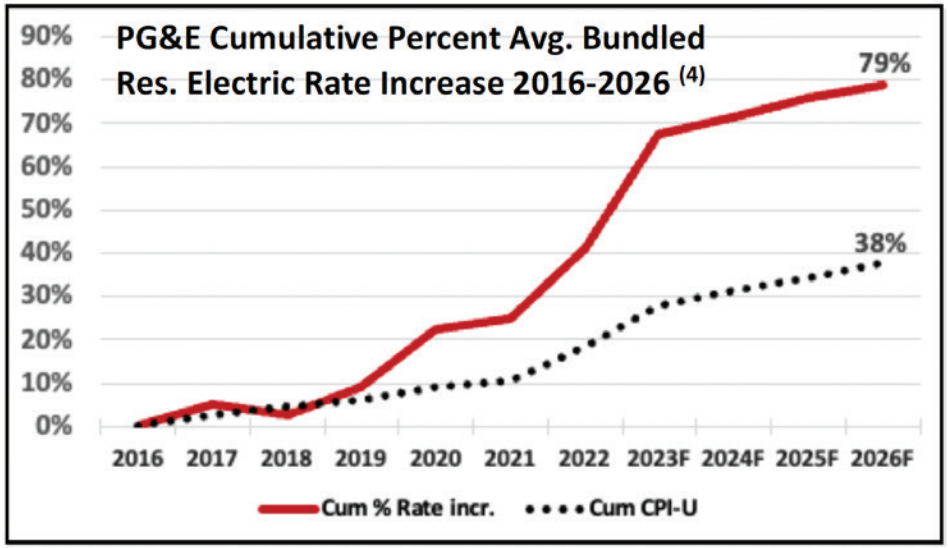
1. PG&E's proposal worsens already serious energy affordability concerns and threatens greenhouse gas reduction goals.
2. The Commission has the tools to protect safety and reliability AND prevent a further erosion of affordability.
3. Wildfire Risk Mitigation:
   - PG&E's risk modeling fails to recognize the major risk reduction from preventing compliance failures.
   - Combining improved compliance and covered conductor deployment yields the same or *more risk-reduction* as PG&E's question-riddled undergrounding plan.

Affordability is the Over-Arching Issue of PG&E's 2023 GRC

- **PG&E's cost of electric service is growing less affordable in real economic terms for all but higher income households.** (TURN OB, Sec 1.3.1.3)
- **Low-income customers in inland climate zones could pay 20% of disposable income for energy; minimum wage workers will need to work 2 more hours per month to pay for the same level of usage** (TURN OB. Sec. 1.3.1.3.)
- **Low-income programs are insufficient to protect impacted households** (TURN OB, Sec. 1.3.1.4)

PG&E's 2023 GRC Proposal vs. Illustrative CPI Projections (1)

Year	February 2022 GRC RRQ Proposal ($000) (1)	% Inc.	Update RRQ Proposal ($000) (2)	% Inc.	Illustrative CPI forecast (3)	February Proposal vs. Illustrative CPI
2022	$ 12,214,000		$ 12,214,000			
2023	$ 15,339,000	25.6%	$ 16,175,000	32%	8.00%	17.6%
2024F	$ 16,357,000	6.6%	$ 17,233,000	7%	2.50%	4.1%
2025F	$ 17,112,000	4.6%	$ 18,083,000	5%	2.40%	2.2%
2026F	$ 17,673,000	3.3%	$ 18,764,000	4%	2.40%	0.9%
Total 4-Year RRQ increase	$ 17,625,000	44.7%	$21,399,000	53.6%	16.8%	27.9%



(1) TURN OB, p. 1.
(2) TURN OB, p. 2.
(3) TURN OB p. 8 and p.27

(4) Based on TURN OB, p. 9, Table 1, and p. 27, and Exhibit TURN-613A, Response to DR 265-9, Table 3.

PG&E's Request Poses Multiple Threats to Affordability

1. **Double-digit GRC requests on top of rate increases in multiple other proceedings**
2. **Hidden long-term rate impacts of huge increases in capital spending, which the CPUC has found to be a key rate increase driver** (TURN OB, Sec. 1.3.2.1)
   - Driven by undergrounding, PG&E's Reply Brief proposal would increase 2023-2026 spending by 111% over 2022 adopted levels. (TURN OB, p. 19, Table 5, updated for PG&E Reply Brief)
   - While rate case period impacts of PG&E's undergrounding plan on RRQ and rates are minimal, the huge additional UG costs will cause "pancaking" increases to rate base that will defeat future efforts to control rate hikes
3. **Balancing and Memo Account Structure Favors PG&E at Ratepayer Expense** (TURN OB, Sec. 12.3)
   - Allow substantial over-spending recovery w/o demonstration of reasonableness
   - Lack of transparency as true rate impacts are only known after spending has occurred
   - Discourages cost discipline; mis-directs utility efforts toward creative accounting, not cost-cutting
4. **Attrition request divorced from CPI and long-term spending trends** (TURN OB, Sec. 11)
   - Attrition must not insulate utilities from normal business pressures
   - PG&E proposal defeats key goal of providing an incentive to control costs

PG&E's Request Threatens Key Policy Goals

- Increased unaffordability of electric rates undermines climate strategy of switching from fossil fuels to electricity
- Increased unaffordability of gas rates exacerbates problem of stranded gas costs borne by a shrinking customer base, including customers unable to electrify
- The bill impacts in the rate case period and beyond, particularly for low income and inland communities, undermine the Commission's ESJ goals

TURN's Affordability Policy Recommendations

- **Weed Out Unnecessary Spending.** Approve ONLY costs both necessary for safety and reliability and affordable for PG&E customers. Pay close scrutiny to large capital programs.
- **Leverage Cost-Effectiveness Analysis.** Use Risk-Spend Efficiency (RSE) data to balance safety and affordability by targeting work where it is most needed and cost-effective.
- **Cap Spending Based on COLA.** To prevent a further erosion of affordability, adopt a COLA-based cap on increases to PG&E's authorized spending and require an alternative COLA-constrained GRC showing in next GRC.
- **2017/2020 Deferred Work Settlement should continue** and include RSE justification for reprioritized work.

Need for a COLA-Based GRC Spending Framework

1. **Energy must be affordable to be useful.**
2. The Commission has acknowledged the linkage between cost of living growth and bill affordability: "*We [review SCE's GRC request] with a goal of limiting the annual increase in SCE's revenue requirements to, not double the growth in customer income, but* ***rather a true alignment with no more than that growth rate. It is only by endeavoring to meet that goal, that we can begin to strive for greater affordability.***" (D.19-05-020, p. 20, emphasis added)
3. Non-ratepayer funding sources should be pursued before allowing cost increases above COLA (e.g. Infrastructure Investments and Jobs Act)

Cost-Effectiveness Analysis is an Important New Tool to Balance Affordability and Safety

CPUC-Developed Risk Spend Efficiency (RSE) Tool Can Prioritize IOU Work and Limit Inefficient Spending

- Developed in a 5-year CPUC process to prioritize risk mitigation spending, capped by the D.18-12-014 Settlement. (TURN OB, Sec. 2.3.2.1)
- 2023 GRC is the first with RSE Analysis available per the D.18-12-014 Settlement.
- "***RSE calculations are critical*** for determining whether utilities are effectively allocating resources to initiatives that provide the greatest risk reduction benefits per dollar spent, thus ensuring responsible use of ratepayer funds." (D.21-08-036, p. 38, emphasis added)
- RSEs show relative cost effectiveness. They can also be expressed as Benefit-Cost (B/C) ratios that show cost-effectiveness on a stand-alone basis. (TURN OB, Sec. 2.3.3; TURN RB ,Sec. 2.3.1)

RSEs are now available. Commission should use them to help weed out inefficient spending!

How RSE Increases Ratepayer Value—Gas Program Example

RSE Exposes Low Cost-Effectiveness of Certain Gas Programs

- Per SPD's RAMP report, "very low" RSEs and high ratepayer costs demand CPUC scrutinize cost-effectiveness of gas programs. (TURN OB, Sec. 3.2.1)
- Low RSE results for mature gas programs show riskiest parts of the system have already been addressed.
- TURN recommends significantly scaling back, or, in some cases, rejection of PG&E's inefficient spending on these discretionary programs. (TURN OB, various programs in Secs. 3.3, 3.4, 3.5, and 3.10)

Example of Savings Opportunity: RSE results for PG&E's largest gas pipe replacement proposals (TURN OB, Sec. 3.2.2)

Program	4-Year Cost ($M)	RSE/Rank*	B/C Ratio**
Plastic Pipe Replacement	2,502	0.0072/ Bottom 13%	0.0014
Steel Pipe Replacement	752	0.0073/ Bottom 13%	0.0022
ILI Upgrade Replacement	889	0.0796/ Bottom 31%	0.0173

* Rank based on comparison to RSEs for all 247 gas and electric programs scored by PG&E

** For example, B/C Ratio for Plastic Pipe program means that PG&E's proposal would provide 0.14 cents of risk reduction benefits for every dollar spent.

PG&E Offers NO GOOD REASON to Reject RSE-Based Program Funding Decisions

PG&E Admits RSE Analysis Gives Best Assessment of Risk Reduction Benefits (TURN OB, Sec. 2.3.2.3)

- RSEs are not just a "single summary statistic" but based on PG&E's own comprehensive risk analysis by its subject matter experts (TURN OB, Sec. 2.3.2.3).
- RSEs are more useful and transparent than PG&E's qualitative discussions in comparing program cost-effectiveness (TURN OB, Sec. 2.3.2.2)
- RSEs reflect robust approach PG&E agreed to in D.18-12-014 Settlement (TURN OB, Sec. 2.3.2.6)

RSE results need not be the ONLY funding decision determinants but cannot be discounted or ignored given the imperative for BOTH Affordability and Safety *(TURN RB, Sec. 2.3.3).*

TURN's Wildfire Proposal Yields Comparable Risk Reduction at Over $4 Billion Less Cost

Summary of TURN's Proposal

1. **PG&E can reduce most of its wildfire risk by a back-to-basics strategy of improving vegetation management and inspection/repair compliance activities**
   - PG&E's risk analysis makes the key mistake of failing to recognize that PG&E's catastrophic wildfires have resulted from compliance failures. (TURN OB/RB, Sec. 4.2.1)
   - CPUC should recognize the significant risk reduction from PG&E's promise to improve compliance.
2. **System hardening should focus on Covered Conductor, which is more cost-effective, quicker to deploy, and more flexible than undergrounding**
3. **Undergrounding should be focused on the riskiest circuits**
4. **When the risk reduction from improved compliance is counted, TURN's proposal**

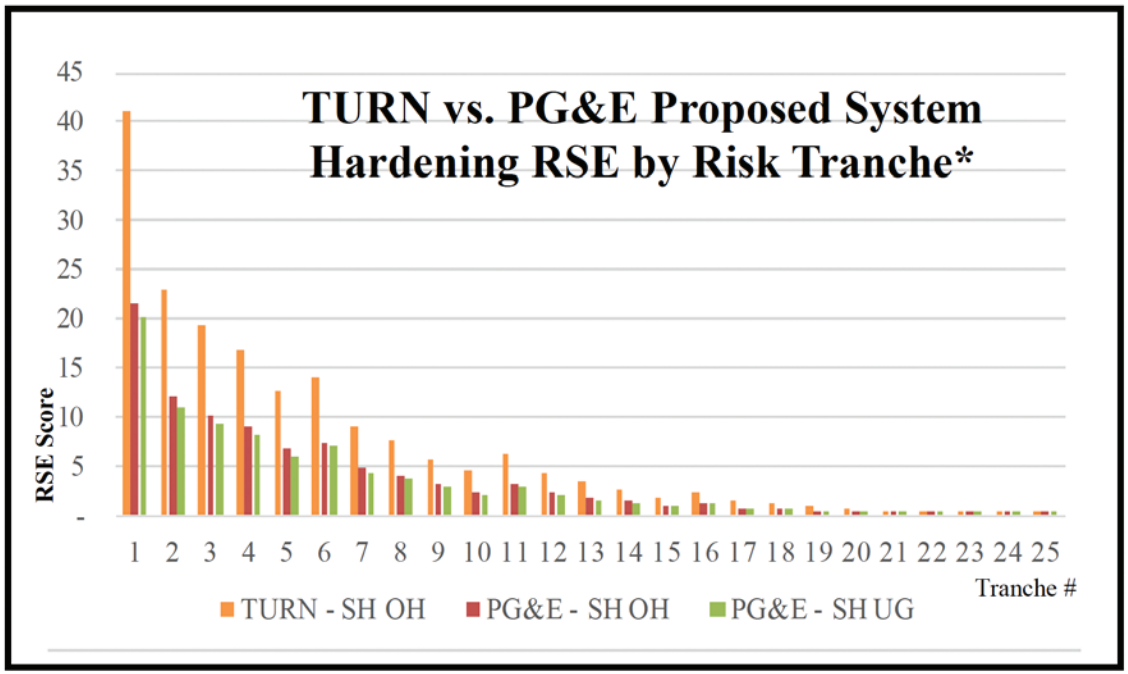
Details of TURN's Wildfire Proposal

1. **Covered Conductor (CC) Should be Primary System Hardening Strategy** (TURN OB, Secs. 4.3.2/4.3.7)
   - CC is more cost-effective than undergrounding (see next slide)
   - CC can be deployed more quickly without triggering CEQA/permitting/property acquisition challenges
   - CC can be teamed with other existing and emerging technologies for more cost-effective risk reduction
2. **TURN proposes more CC than PG&E's original proposal** – 1,800 miles compared to PG&E's 1,480 miles
3. **TURN proposes more undergrounding than in PG&E's original proposal**
   - 200 miles (50 miles/year) compared to PG&E's 182 miles in June 2021 request
4. **TURN's proposal avoids $4.2 billion** in unnecessary capital spending

Covered Conductor More Affordable		
PG&E-2/22 Proposal (1)	**PG&E – Reply Brief Position(1)**	**TURN**
$10.4 B (2)	$6.3 B (3)	$2.1 B

Notes: (1) Does not include September 2022 Update Escalation; (2) Source PG&E OB, p. 380; (3) Source PG&E OB, p. 332.

Covered Conductor is More Cost-Effective than Undergrounding



* Each tranche represents a portion (ranging from 200-2,000 circuit miles) of PG&E's ~ 25,000-mile, HFTD distribution system, generally from highest risk to lowest risk.
Source: TURN OB Figure 6, p. 387.

- RSE for CC program – when PG&E's unnecessary asset replacement is removed – is over 2X higher than UG. **11.0 for CC vs. 5.3 for UG** (TURN OB, Sec. 4.3.2.1)
- RSEs for CC program are higher than UG **in every tranche** (graph at left) (TURN OB, Sec. 4.3.2.1)
- These numbers understate CC's RSE advantage. **Results to date show 1.0 UG mile replaces only 0.64 mile of CC** b/c of construction feasibility issues, while PG&E assumed 0.80 miles. Effect is to further reduce UG's RSE. (TURN-11, pp. 32-34; TURN Sur- Reply, p. 9)

PG&E's Undergrounding Program is Unnecessarily Expensive and Unproven

TURN's More-Affordable, Portfolio Proposal Reduces as Much Risk as PG&E's Undergrounding for $4.2 billion* Less Cost to Ratepayers

PG&E Current Proposal Cost: $6.3 B*

- PG&E's 10K UG plan was poorly planned: announced before PG&E assessed feasibility and cost. (TURN OB, Sec. 4.3.1.1)
- Hidden costs and permitting challenges: UG often needs a different, longer path than overhead lines, which will trigger CEQA delays, uncertainty, and higher cost. (TURN OB, Sec. 4.3.6.1; PG&E RB, p. 361)
- PG&E's ever-changing UG targets are unrealistic and unprecedented, and vulnerable to completing the easiest, rather than riskiest miles. (TURN OB, Sec. 4.3.3.2)
- PG&E hedges bets on claims of declining costs by seeking automatic balancing account recovery for costs up to 25% above forecast. (TURN OB, Sec. 4.3.6.2)
- PG&E exaggerates cost savings from UG. Even with claimed long-term savings, net cost of UG for 10,000 miles is twice cost of equivalent CC. (TURN OB, Sec. 4.3.3.3)

TURN Proposal Cost: $2.1 B*

- "Back-to-Basics Strategy" addressing basic equipment repair and past compliance failures, delivers immediate risk reduction and maximum ratepayer value (TURN OB/RB, Sec. 4.2.1)
- More cost-effective, flexible, quickly-deployed CC should be primary system hardening strategy (TURN OB, Secs. 4.3.2 and 4.3.7)
- UG reserved for highest risk areas where it is most cost-effective.

*Excludes September 2022 escalation update.

TURN's Recommendations on Key Issues

TURN Recommended Adjustments	Why TURN Recommends
Wildfire Spending	
System Hardening. TURN proposes (2023-2026) more covered conductor than PG&E's revised proposal: 1,800 vs. 320 miles, at $975 million higher cost. BUT TURN proposes much less undergrounding, limited to the highest risk circuits: 200 vs. 2,100 miles, at **$5.14 billion lower cost**.	RSEs show covered conductor (CC) (without replacing safe, useful assets) is more than twice as cost-effective as undergrounding, so TURN's recommendation removes much more risk per dollar spent. CC can be deployed faster and can be more flexibly teamed with other existing and emerging wildfire protection technology.
Gas Distribution (GD) and Transmission (GT) Spending	
GD Plastic Pipe Replacement capital (MAT 14D). TURN recommends reducing forecast by **$348 million**, from $520 million to **$172 million**. (TURN OB, Sec. 3.3.1)	RSE analysis shows PG&E's plan provides very little risk reduction benefit compared to the cost. Focus should be on replacing pre-1976 pipe, which based on pipe materials/leak data evidence, as well as PG&E's DIMP model, poses a higher risk than the other pipe PG&E proposes to replace.
GD Steel Pipe Replacement capital (MAT 50B).TURN recommends reducing capital by **$90 million**, from $151 million to **$61 million**. (TURN OB, Sec. 3.3.2)	This program has extremely low RSEs and Benefit-Cost ratios. Focus should be on replacing pre-1924 pipe, which leak data/PG&E's own DIMP model shows poses a higher risk than the other pipe PG&E proposes to replace.
GT In-Line Inspection (ILI) Upgrades (Mat 98C). TURN recommends reducing PG&E's test year capital forecast by **$152 million**, from $207 million to **$55 million**. (TURN OB, Sec. 3.4.1).	PG&E has already addressed the highest risk pipe in this mature program, which results in low RSEs and Benefit-Cost ratios for the proposed work. PG&E's proposal to perform 12 projects/year should be reduced to no more than 4. In addition, TURN's recommendation corrects analytical errors that reduce unit costs 21%.

(Figures, except Wildfire, are for Test Year and exclude PG&E's 9/22 Update)

TURN's Recommendations on Key Issues

TURN Recommended Adjustments	Why TURN Recommends
Gas Distribution and Transmission (cont.)	
GD Cross Bore Inspections. Reduce expense forecast by **$21 million** from $34million to **$13 million** (TURN OB, Sec. 3.3.5)	With highest risk work in San Francisco already completed, PG&E proposes to expand the program to much less risky areas, w/ extremely low costeffectiveness. (RSE in bottom 23%, B/C ratio of 0.006). TURN recommends keeping the average number of annual inspections constant and a reduced unit cost to reflect lower costs outside San Francisco.
GT Strength Testing and Replacement. Reduce non-TIMP capital forecast by **$42 million** from $140 million to **$98 million** and expense forecast by **$24 million** from $35 million to **$11 million**. (Ex. TURN-04, Table 16; PG&E OB, Tables 3-23, -24, -25; TURN OB, Sec. 3.4.7) (Note: PG&E's OB presents updated PG&E forecasts that are not reflected in Ex. TURN-04, Table 16 or TURN's OB.)	PG&E's forecast includes 65 non-high priority projects that are not required to be completed during this GRC cycle. TURN removes these projects and also provides a more reasonable method for estimating project costs and calculating disallowances for pipelines lacking proper documentation.
GD and GT Overpressure Programs (MATs 76G, 50N, JTX and FHQ). TURN recommends reducing capital and expense for this program by **$64 million** to **zero** and providing no further funding going forward. (TURN OB, Sec. 3.5.4)	These mature programs provide secondary protection on top of regulators and monitors. PG&E has already addressed riskiest assets. PG&E's RSEs thus show minimal risk reduction compared to the costs (bottom 32% of PG&E's programs, B/C ratios below 0.02).
Transmission Integrity Management Plan Balancing Account and Memorandum Account (TIMPBA and TIMPMA) – **The CPUC should maintain the status quo of a one-way TIMPBA and a TIMPMA to track costs associated with any new safety regulations.** (TURN OB, Sec. 3.14.2.1)	The CPUC has twice rejected PG&E's requests to convert the TIMPBA to a two-way account and should do so here for the same reason – to provide PG&E a meaningful incentive to control costs. The TIMPMA, as currently scoped, provides PG&E appropriate protection against costs arising from any new regulations that may be adopted.

TURN's Recommendations on Key Issues

TURN Recommended Adjustments	Why TURN Recommends
Gas Storage	
Claimed Need for Additional Storage Withdrawal Capacity. Contrary to PG&E's inflated forecasts, the CPUC should find no capacity shortfall during the rate case period. Thus, there is no need to keep the Los Medanos storage field, drill new wells at McDonald Island or Gill Ranch, or take any other measures to address a non-existent shortfall. (TURN OB, Secs. 3.6.1, 3.6.2, 3.6.4, 3.6.5, 3.6.6). The capital forecast for gas storage programs should be reduced by **$42 million** from $106 MM to **$64 million** and the expense forecast reduced by **$6 million** from $18 million to **$12 million**. (TURN OB, Sec. 3.6.7)	PG&E's forecasts are outdated and poorly supported. (E.g. PG&E's core forecast is based on a proprietary model that PG&E's witness could not explain and which produced results counter to the post-2013 trend of steadily declining gas demand). TURN's demand forecasts are grounded in more realistic and transparent data, while still conservative. For example, TURN's figures assume Diablo Canyon will be retired in 2024 and 2025, which now seems less likely per SB 846. If Diablo continues to operate, the need for gasfired electric generation would be lower than TURN forecasts.
Electric Distribution	
Overhead Distribution Maintenance (MATs KAA and 2AA). Reduce expense forecast by **$38 million** from $58 million to **$20 million** and reduce capital forecast by **$85 million** from $205 million to **$120 million** (TURN OB, Sec. 4.11.1).	PG&E has not justified the doubling (expense) and tripling (capital) of the unit costs for these programs since 2018, failing to provide evidentiary support for its changing explanations. Ratepayers should not pay for cost premiums resulting from the need for remediation of PG&E's history of unreasonable inspection practices.
Pole Replacement (MAT 07D). Reduce capital forecast costs by **$80 million** from $369 million to **$289 million** (TURN OB, Sec. 4.12).	PG&E's huge proposed increase over 2020 recorded costs reflects a premium to address a backlog of pole replacements resulting from PG&E's unreasonable inspection history. TURN's forecast removes unnecessary and unreasonable costs and provides a reasonable budget for this program.

TURN's Recommendations on Key Issues

TURN Recommended Adjustments	Why TURN Recommends
Electric Distribution (cont.)	
Electric Distribution Capacity. Reduce total capital forecast for two capacity programs by **$30 million** from $139 million to **$109 million** (TURN OB, Sec. 4.17).	TURN's reduction accounts for the reduced peak load from agricultural customers due to the implementation of new Time-of-Use tariffs in March 2021.
Electric Distribution New Residential Connections. Reduce capital forecast by **$54 million**, from $262 million to **$208 million**. (TURN OB, Sec. 4.18).	PG&E's forecast is based on a sharp increase to the historical growth rate in residential housing permits based on a proprietary model that PG&E did not make available to parties. TURN's forecast is based on a more reasonable growth rate for new housing construction based on the historical trend.
Community Rebuild Program. **The CPUC should deny any rate recovery at this time for the over $500 million** in recorded and forecast costs associated with rebuilding facilities and restoring service in the town of Paradise. (TURN OB, Secs. 4.23, 10.4)	These rebuilding costs are necessary because of the devastation resulting from the catastrophic Camp Fire caused by PG&E, for which PG&E has pled guilty to 85 criminal counts. PG&E has failed to demonstrate the reasonableness of its actions that caused that fire. If PG&E wishes to pursue recovery of these costs, it should do so in a future, single CEMA request covering all of the rebuilding costs. PG&E must also be barred from including any Community Rebuild capital spending from 2019-2022 in its 2023 rate base before that spending has been found reasonable.
Wildfire Mitigation and Vegetation Management Balancing Accounts. **The CPUC should modify these accounts to make them each one-way balancing accounts.** If the CPUC deems it necessary to allow PG&E an opportunity to recover above-authorized costs, the CPUC can create a companion memorandum account for each and require a demonstration of reasonableness before rate recovery of such costs. (TURN OB, Secs. 4.24.1, 12.3)	PG&E's proposal would recover $275 million more in annual veg. management costs and $165 million more in annual wildfire mitigation RRQ, without any showing of reasonableness. PG&E should not be excused from demonstrating reasonableness for a substantial and increasing share of its revenue requirement. TURN's proposal increases PG&E's cost-control incentive, promotes transparency, and is consistent with fundamental principles of utility regulation.

TURN's Recommendations on Key Issues

TURN Recommended Adjustments	Why TURN Recommends
Customer and Communication	
Gas AMI Module Replacement. **The CPUC should deny recovery at this time of the over $600 million in capital costs and additional expenses** associated with the premature failure of Gas AMI communications modules. (TURN OB, Sec. 6.10)	PG&E has failed to establish the reasonableness of its actions leading up to the premature failure of equipment it selected, installed, maintained and operated. PG&E can renew its request, with the required showing, in its 2027 GRC.
Billing System Upgrade Project. **The CPUC should deny recovery at this time of the $174 million in capital and expense** that PG&E forecasts for this project. (TURN OB, Sec. 6.11)	PG&E failed to provide the information necessary to determine whether the proposal is reasonable -- including a cost-benefit analysis, and an explanation of the requirements, features, and functionalities for the proposed new system. PG&E should be directed to file a separate application with the necessary information to determine the project's reasonableness.
Human Resources	
Short-Term Incentive Compensation – reduce PG&E's total request for its Short-Term Incentive Program (STIP), which primarily benefits salaried employees, by **$146 million** from $233 million to **$87 million** (TURN OB, Sec. 8.3).	The 25% of STIP based on PG&E's financial performance should be disallowed from recovery as: (1) it is based on a measure of performance that excludes losses resulting from management missteps, thereby providing a disincentive for improved management; and (2) the CPUC has repeatedly disallowed funding for financial metrics as benefiting shareholders, not ratepayers. The remaining STIP goals incentivize activities that benefit both shareholders and ratepayers and the cost should therefore be shared 50/50.

TURN's Recommendations on Key Issues

TURN Recommended Adjustments	Why TURN Recommends
Results of Operations	
Depreciation. **The Commission should not adopt PG&E's proposal to increase gas distribution depreciation expense by $47 to $186 million** over the course of this GRC cycle as a measure to protect the utility from stranded investment due to California's decarbonization policy.	PG&E proposes to switch from straight-line depreciation to a Units of Production (UoP) method for gas distribution plant in order to achieve higher depreciation rates and thereby accelerate the utility's recovery of its investment in gas distribution plant. The Commission should deny this request with the expectation that potential stranded cost issues and other decarbonization policy issues will be addressed in a more fair and balanced manner in R.20-01-007, the rulemaking addressing long-term gas system planning.
Working Cash. PG&E's request should be reduced by **$792 million** to reflect realistic forecasts of revenue lag, goods expense lag, and income taxes. The CPUC should adopt a revenue lag forecast of 46.92 days based on years that were not impacted by the Covid Pandemic and the moratorium on shutoffs in California. The CPUC should adopt a goods and services expense lag of 36.67 days to reflect standard best utility industry cash management practices. The CPUC should adopt a federal income tax expense lag of 292 days and a state income tax lag of 365 days based on the fact that PG&E has not been a cash taxpayer over the last decade and does not expect to pay cash taxes until 2026. Should PG&E expect to become a cash taxpayer during its next GRC cycle, PG&E can include this in its next GRC request.	PG&E's showing should justify every dollar of ratepayer funding. Even with small RRQ impacts, the Commission should require that forecast values be reasonable and adequately supported. This view has informed all of TURN's recommendations in this proceeding.

TURN's Recommendations on Key Issues

TURN Recommended Adjustments	Why TURN Recommends
Post Test-Year Ratemaking	
Adopt TURN's two-part attrition mechanism that separately addresses expense and capital. For **O&M**, escalate during the Post Test-Year (PTY) period using CPI-U rather than PG&E's escalation factors, to provide PG&E an incentive to manage and reduce costs during the PTY period. For **capital**, TURN proposes that the Commission adjust capital costs for the PTY based on a forecast of capital additions that results from trending seven years (2015-2021) of recorded capital additions, to normalize utility spending variations over time. TURN also recommends that the Commission adopt budget-based capital attrition for three non-standard categories: wildfire system hardening, gas storage, and Diablo Canyon power plant (a more limited list than proposed by PG&E). (TURN OB, Sec. 11; TURN RB, Sec. 11)	TURN's two-part attrition mechanism meets the objectives of attrition and reasonably balances the interests of ratepayers and shareholders during the post-test year period. An attrition mechanism should provide the utility with an incentive to manage and reduce its costs during the post-test year period, rather than cover all potential cost changes. Attrition should not be used to insulate PG&E from the economic pressures which all businesses experience. Budget-based attrition should only be used for cost categories that are experiencing extraordinary changes that make a forecast based on trends inappropriate – here, wildfire system hardening, gas storage, and Diablo Canyon. PG&E's proposal for all other expense and capital categories is too complex and comes close to a "cost plus" guarantee that defeats the key goal of providing an incentive to control costs. PG&E's proposal is too generous to shareholders at a time when rate restraint is necessary to avoid deepening the affordability crisis and undermining achievement of California's climate goals.