

A large, stylized graphic of a lightbulb is positioned on the left side of the slide. The bulb is light green, and the base is composed of several horizontal green bars. A blue checkmark is superimposed on the left side of the bulb.

# 2021 – 2023 PG&E Allocation of GHG Free

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Executive Committee

November 9, 2020

# Agenda

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- Background
  - Overall Financial Projection
  - History
- GHG-Free Targets and Status
- Cost Impact

# Background

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- Overall Financial Projection

# Background

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- PG&E owns or contracts for GHG free energy including large hydro and nuclear resources
- In 2018, 13% of PG&E's supply was from large hydro and 34% from nuclear
- PG&E is able to count these resources to meet or exceed their GHG-free targets
- CCA customers pay for these resources through the PCIA
- CCAs are not currently able to claim and count the benefit of these resources for their customers on Power Content Labels or in connection with other GHG reporting
- Over the longer term, this will be addressed through the PCIA proceeding – expected in 2021

# Background

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- In 2019, PG&E filed an Advice Letter proposing to allocate large hydro and nuclear to all load serving entities (LSEs) in PG&E's territory based on a load ratio share
- This applied for 2020 only
- Each LSE had the option to accept each resource allocation separately
  - i.e. can accept allocation of large hydro but not nuclear, or can accept nuclear but not large hydro, or can accept both
- Volume of resource allocation is established based on actual generation
  - Rejecting a resource allocation does not impact the volumes you receive for the resource you accept

# Background

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- The Advice Letter was ultimately approved by the CPUC
- Based on PCE board direction, in June 2020, Peninsula Clean Energy signed an agreement with PG&E to accept hydro allocations only for June 15, 2020 through December 31, 2020
- Expect allocations of 90,000 – 105,000 MWh based on historical generation from the facilities allocated
- Actual allocations will depend on actual generation

# 2021 – 2023 Allocations

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- In August 2020, PG&E filed an Advice Letter to extend this allocation process through 2021 and potentially for 2022 – 2023 at PG&E’s discretion
  - For 2022 and 2023, PG&E would need to submit, by Dec 31 of the preceding year, a Tier 1 advice letter, which is the lowest tier and advice letters are considered “effective pending disposition”
  - Longer term allocation has not yet been provided through the PCIA proceeding

# 2021 – 2023 Product Targets

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	2021	2022	2023
Renewable	60%	70%	80%
GHG-Free	40%	30%	20%



# Expected Allocation Volumes

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	MWh / Year
Large Hydroelectric	240,677
Nuclear	867,437

## Assumptions

- Full allocations for January – December; actual availability depends on CPUC Advice Letter approval timeline
- Historic generation data for each of PG&E's facilities is available from the EIA
- Hydro
  - Large Hydro Forecast: Assuming similar generation to 2014, and PCE's load share per the 2020 allocation. 2014 was a dry year, so this is a conservative estimate.
- Nuclear
  - Assuming generation similar to the average of 2015-2018, and PCE's load share load share per the 2020 allocation

# Evaluated Three Scenarios

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## Option 1:

### Accept Hydro but Not Nuclear

- Accept PG&E Hydro allocations only
- Procure additional hydro to meet GHG-free targets

## Option 2:

### Accept Hydro and Nuclear; Prioritize Hydro on PCL

- Accept both hydro and nuclear allocations
- Use current hydro contracts + PG&E hydro allocations to meet GHG target first
- Only use nuclear as necessary to fill in open position
- Minimizes Nuclear percentage on Product Content Label

## Option 3:

### Accept Hydro and Nuclear; Sell Excess Hydro

- Accept both hydro and nuclear allocations
- Use nuclear first to fill in GHG target
- Sell excess hydro from current contracts and PG&E allocations

# Cost Scenarios – Notes and Assumptions

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- Allocations are received for January 1 – December 31
- We can sell excess hydro in the Option 3 Scenario
  - Actual revenue will be based on market price (Range represents market prices between \$2/MWh - \$4.25/MWh)
  - Likely scenario for resale of excess Hydro is at \$2/MWh
- Mid-Case load scenario; does not incorporate Los Banos load, but this is relatively small
- No ability / value to sell excess nuclear

# Allocations for Calendar Year 2021

		Calendar Year 2021		
		Option 1	Option 2	Option 3
		Accept Hydro Only	Accept Hydro and Nuclear, Prioritize Hydro on PCL	Accept Both, Prioritize Nuclear on PCL & Resell Excess Hydro
<b>Range of Financial Impact</b>				
<b>Low</b>	\$2/MWh			
Cost to fill Open Position - Low		1,171,046	-	-
Resale of Excess Hydro - Low				(481,354)
Net Cost - Low		\$ 1,171,046	\$ -	\$ (481,354)
Difference			\$ 1,171,046	\$ 1,652,400
<b>High</b>	\$4.25/MWh			
Cost to fill Open Position - High		2,488,472	-	-
Resale of Excess Hydro - High				(1,198,135)
Net Cost - High		\$ 2,488,472	\$ -	\$ (1,198,135)
Difference			\$ 2,488,472	\$ 3,686,608
<b>Buy Hydro at High, Sell Excess Hydro at Low</b>				
Cost to fill Open Position - High		2,488,472	-	-
Resale of Excess Hydro - Low				(563,828)
Net Cost		\$ 2,488,472	\$ -	\$ (563,828)
Difference			\$ 2,488,472	\$ 3,052,301

# Allocations for Calendar Year 2022

		Calendar Year 2022		
		Option 1	Option 2	Option 3
		Accept Hydro Only	Accept Hydro and Nuclear, Prioritize Hydro on PCL	Accept Both, Prioritize Nuclear on PCL & Resell Excess Hydro
<b>Range of Financial Impact</b>				
<b>Low</b>	\$2/MWh			
Cost to fill Open Position - Low		505,818	-	-
Resale of Excess Hydro - Low				(481,354)
Net Cost - Low		\$ 505,818	\$ -	\$ (481,354)
Difference			\$ 505,818	\$ 987,172
<b>High</b>	\$4.25/MWh			
Cost to fill Open Position - High		1,074,862	-	-
Resale of Excess Hydro - High				(2,611,745)
Net Cost - High		\$ 1,074,862	\$ -	\$ (2,611,745)
Difference			\$ 1,074,862	\$ 3,686,608
<b>Buy Hydro at High, Sell Excess Hydro at Low</b>				
Cost to fill Open Position - High		1,074,862	-	-
Resale of Excess Hydro - Low				(1,229,057)
Net Cost		\$ 1,074,862	\$ -	\$ (1,229,057)
Difference			\$ 1,074,862	\$ 2,303,919

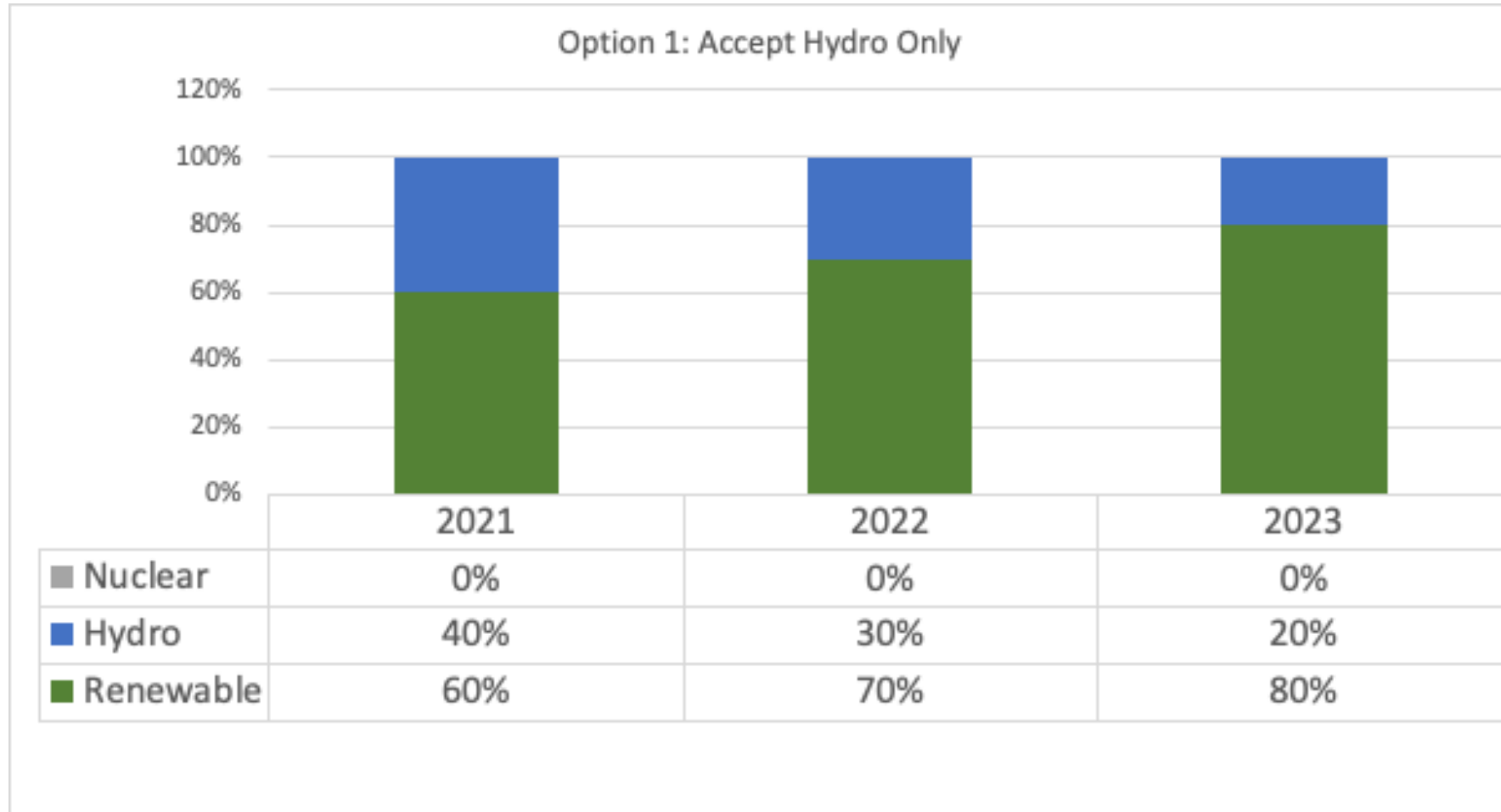
# Allocations for Calendar Year 2023

		Calendar Year 2023		
		Option 1	Option 2	Option 3
		Accept Hydro Only	Accept Hydro and Nuclear, Prioritize Hydro on PCL	Accept Both, Prioritize Nuclear on PCL & Resell Excess Hydro
<b>Range of Financial Impact</b>				
<b>Low</b>	\$2/MWh			
Cost to fill Open Position - Low		179,124	-	-
Resale of Excess Hydro - Low				(481,354)
Net Cost - Low		\$ 179,124	\$ -	\$ (481,354)
Difference			<b>\$ 179,124</b>	<b>\$ 660,478</b>
<b>High</b>	\$4.25/MWh			
Cost to fill Open Position - High		380,638	-	-
Resale of Excess Hydro - High				(2,297,877)
Net Cost - High		\$ 380,638	\$ -	\$ (2,297,877)
Difference			<b>\$ 380,638</b>	<b>\$ 2,678,515</b>
<b>Buy Hydro at High, Sell Excess Hydro at Low</b>				
Cost to fill Open Position - High		380,638	-	-
Resale of Excess Hydro - Low				(1,081,354)
Net Cost		\$ 380,638	\$ -	\$ (1,081,354)
Difference			<b>\$ 380,638</b>	<b>\$ 1,461,992</b>

# Allocations for 3-Year Period – 2021-2023

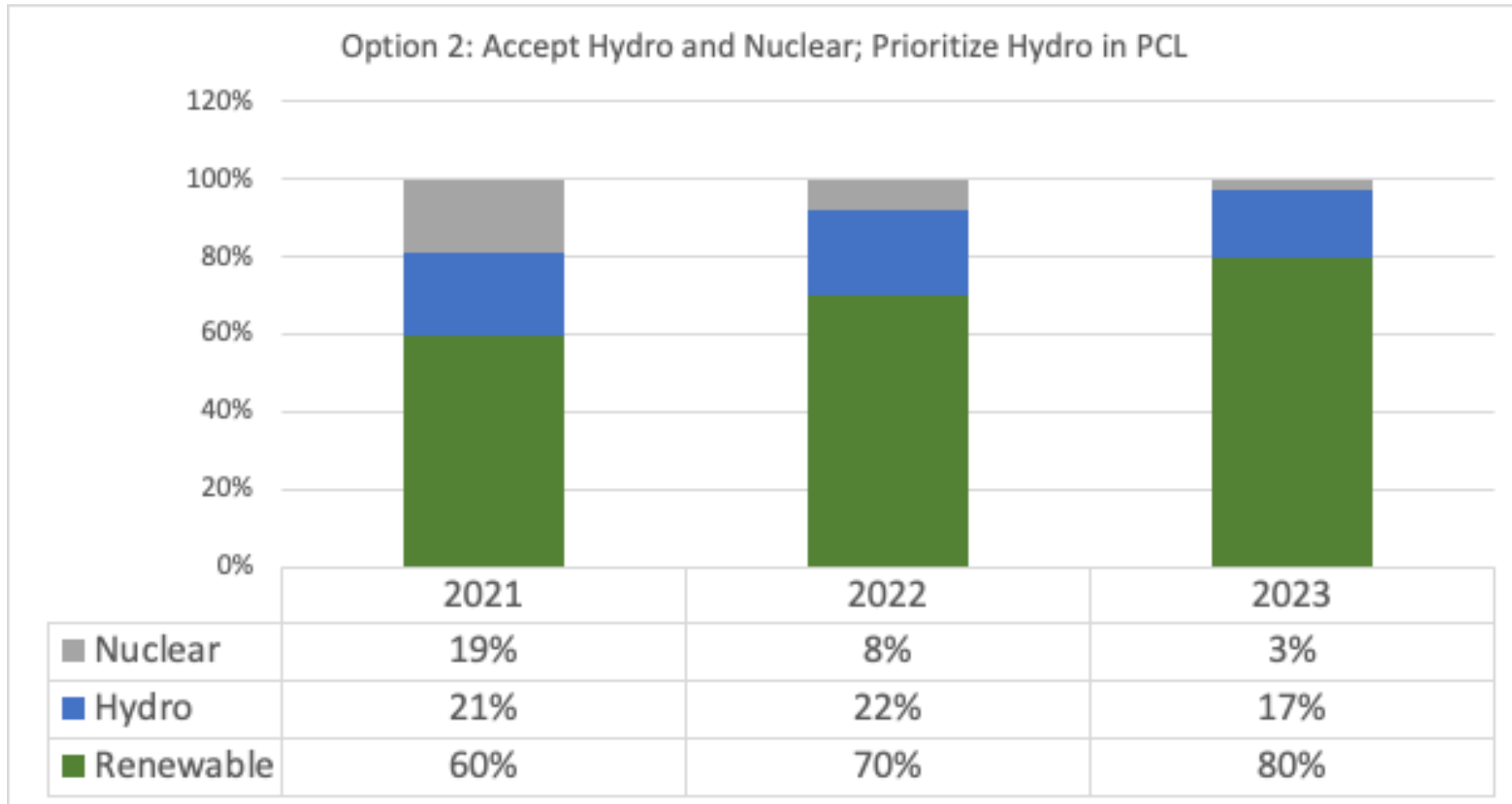
		3-Year Summary		
		Option 1	Option 2	Option 3
		Accept Hydro Only	Accept Hydro and Nuclear, Prioritize Hydro on PCL	Accept Both, Prioritize Nuclear on PCL & Resell Excess Hydro
<b>Range of Financial Impact</b>				
<b>Low</b>	\$2/MWh			
Cost to fill Open Position - Low		1,855,987	-	-
Resale of Excess Hydro - Low		0	0	(1,444,062)
Net Cost - Low		\$ 1,855,987	\$ -	\$ (1,444,062)
Difference			<b>\$ 1,855,987</b>	<b>\$ 3,300,049</b>
<b>High</b>	\$4.25/MWh			
Cost to fill Open Position - High		3,943,973	-	-
Resale of Excess Hydro - High		0	-	(6,107,758)
Net Cost - High		\$ 3,943,973	\$ -	\$ (6,107,758)
Difference			<b>\$ 3,943,973</b>	<b>\$ 10,051,731</b>
<b>Buy Hydro at High, Sell Excess Hydro at Low</b>				
Cost to fill Open Position - High		3,943,973	-	-
Resale of Excess Hydro - Low		0	0	(2,874,239)
Net Cost		\$ 3,943,973	\$ -	\$ (2,874,239)
Difference			<b>\$ 3,943,973</b>	<b>\$ 6,818,212</b>

# Expected Power Content Label: Option 1

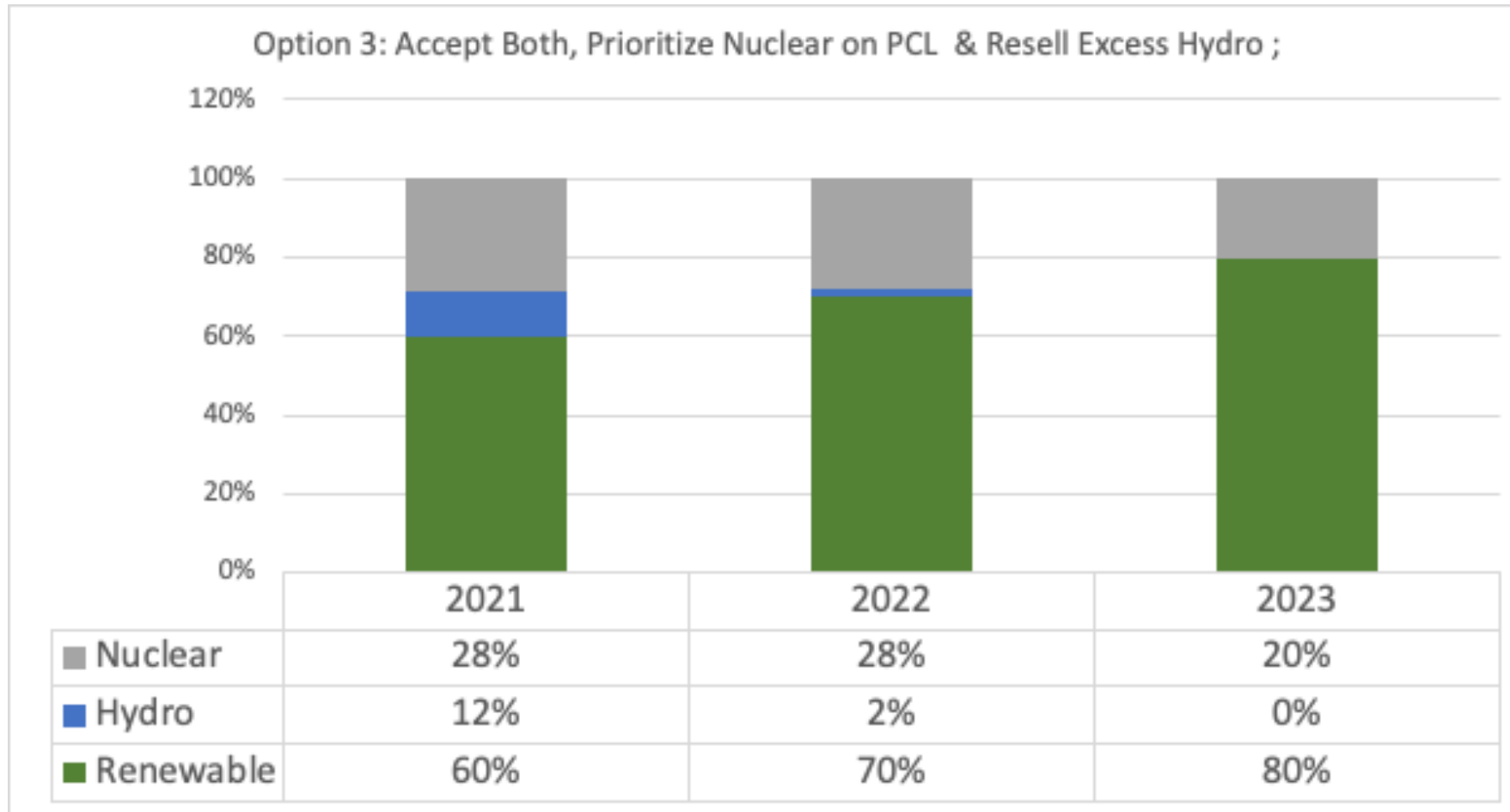




# Expected Power Content Label: Option 2



# Expected Power Content Label: Option 3



# Power Content Label: Summary

	2021	2022	2023
Option 1:			
Nuclear	0%	0%	0%
Large Hydro	40%	30%	20%
Option 2:			
Nuclear	19%	8%	3%
Large Hydro	21%	22%	17%
Option 3:			
Nuclear	28%	28%	20%
Large Hydro	12%	2%	0%
All Options:			
Renewables	60%	70%	80%

# Risks

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- For Option 3, our savings are based on the ability to sell excess hydro at the assumed price, if there is no demand, or if prices are lower, the savings will be lowered
- Actual generation volume from PG&E may differ from our projection
- Actual load may differ from our projection
- PG&E doesn't make allocations for 2022 or 2023
- Allocations are not effective until later in the year – we don't receive full allocations

# Other CCAs Approach

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- CCA's who plan to accept PG&E Nuclear Allocation
  - Silicon Valley Clean Energy (SVCE)
  - San Jose Clean Energy (SJCE)
- CCA's who plan to reject PG&E Nuclear Allocation
  - Central Coast Community Power (Monterey Bay Comm Power - MBCP)
  - Sonoma Clean Power (SCP)
  - Clean Power San Francisco (CPSF)
  - Marin Clean Energy (MCE)
  - East Bay Community Energy (EBCE) \*\*
- All CCA's indicated that they were not changing their decision from the 2020 allocations

# Citizens Advisory Committee

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- Discussed with CAC on Thursday 11/5
- Voted 7 to 3 to reject nuclear allocation and accept hydro allocation – follow same path as 2020

# Questions / Discussion

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