

Clean Power Update

SVCE Board Meeting
December 8, 2021
Monica Padilla, Director of Power Resources

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Topics

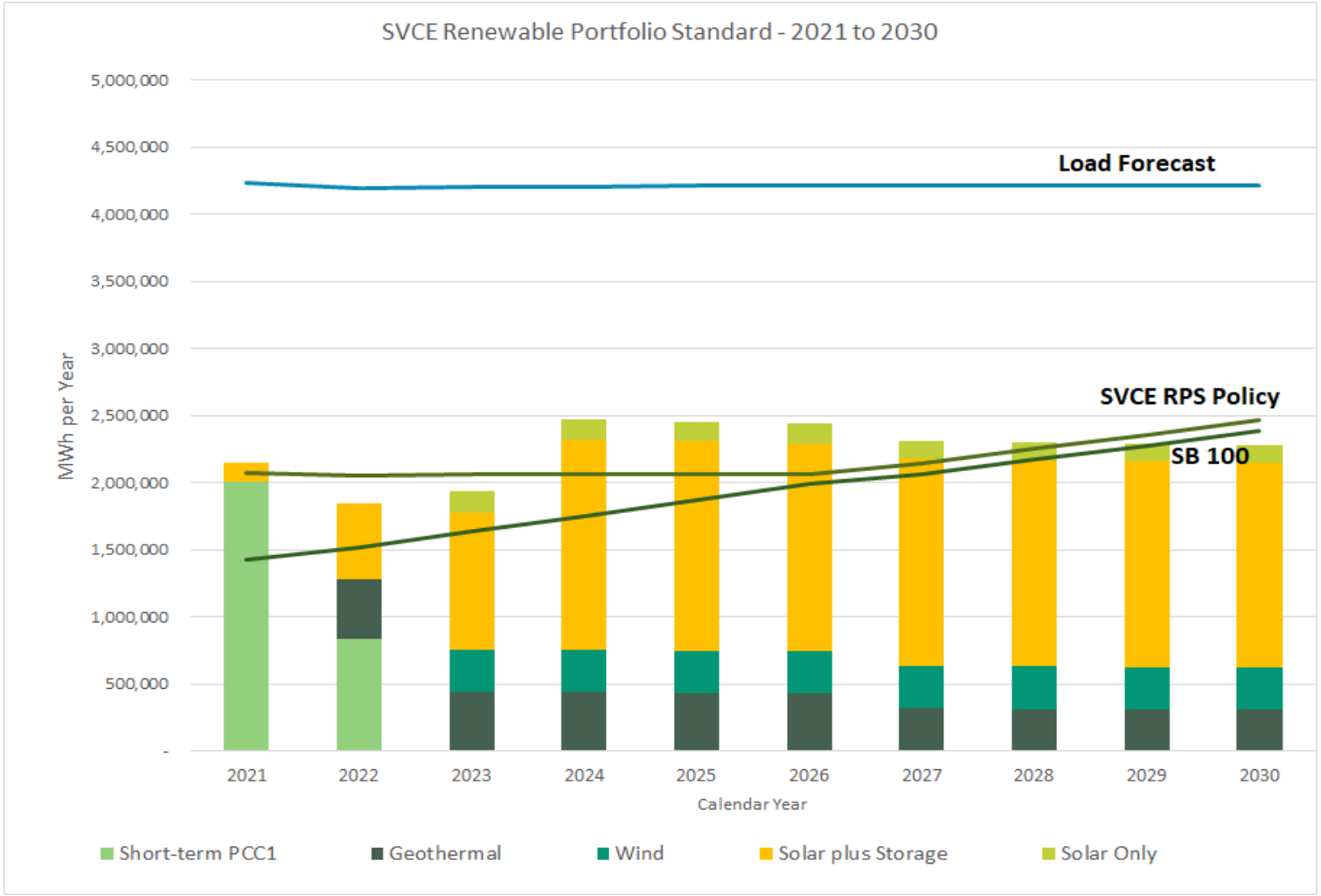
- Renewable Portfolio Standard & Carbon-free Goals
- Mid-term Reliability Procurement Order
- Reliability & Resource Adequacy
- PPA Updates
- Future Clean Energy Goals



Renewable Portfolio Standard

SVCE has exceeded SB100 RPS requirements since 2017 and expects to exceed SB350 long-term PPA mandate

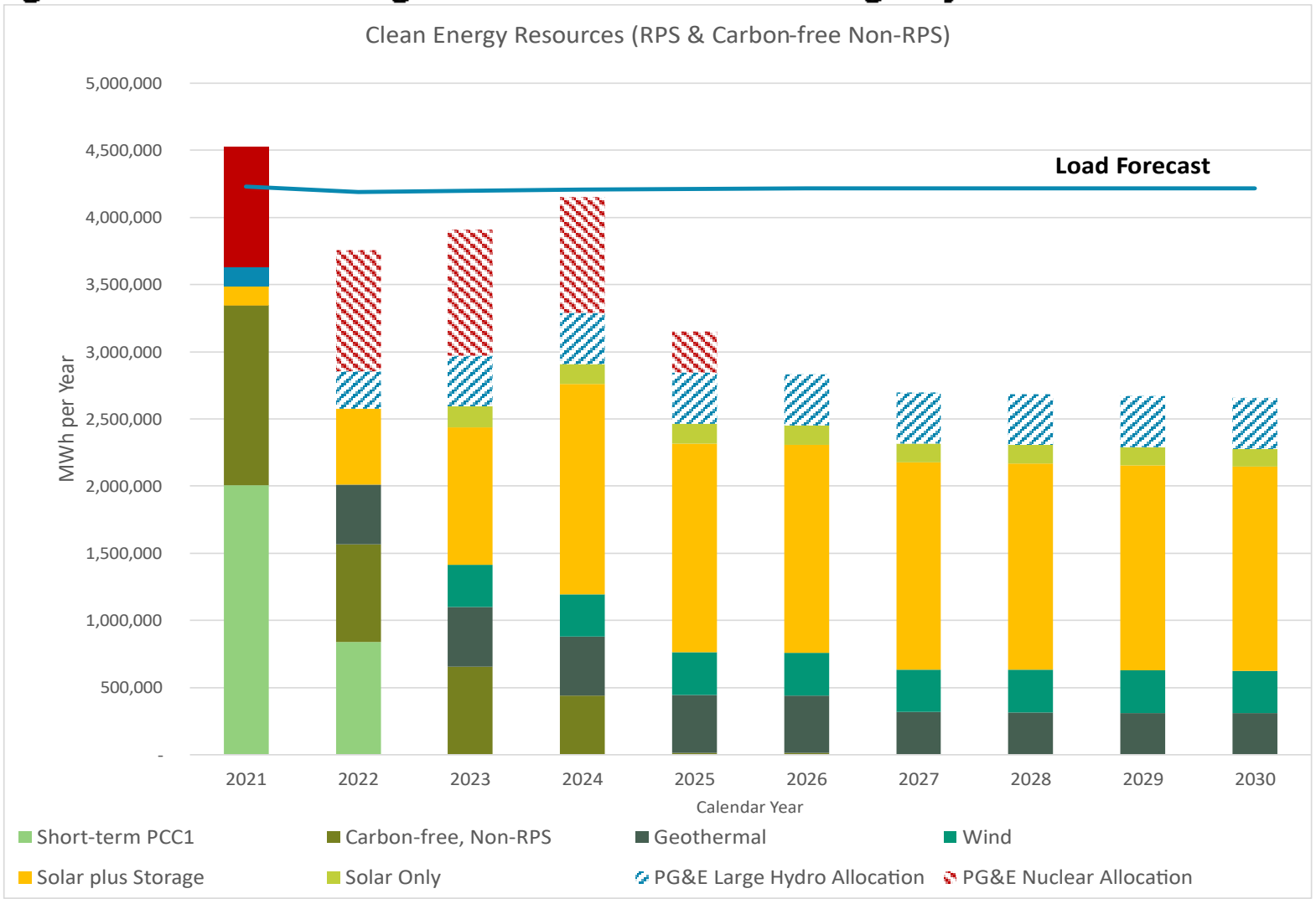
- **SVCE's RPS policy ~50%**
- **Historically met RPS through existing short-term contracts**
- **2022 new long-term resources (PPAs) start on-line in 2022**
- **SVCE's RPS via PPAs in 2024 >60% and 57% in 2030**
- **2030 RPS Requirement 60%**
- **Long-term requirement is 65% of overall RPS per compliance period**



100% Carbon-Free

100% Carbon-free Goal since 2017 through the use of existing RPS and Carbon-free large hydro & nuclear

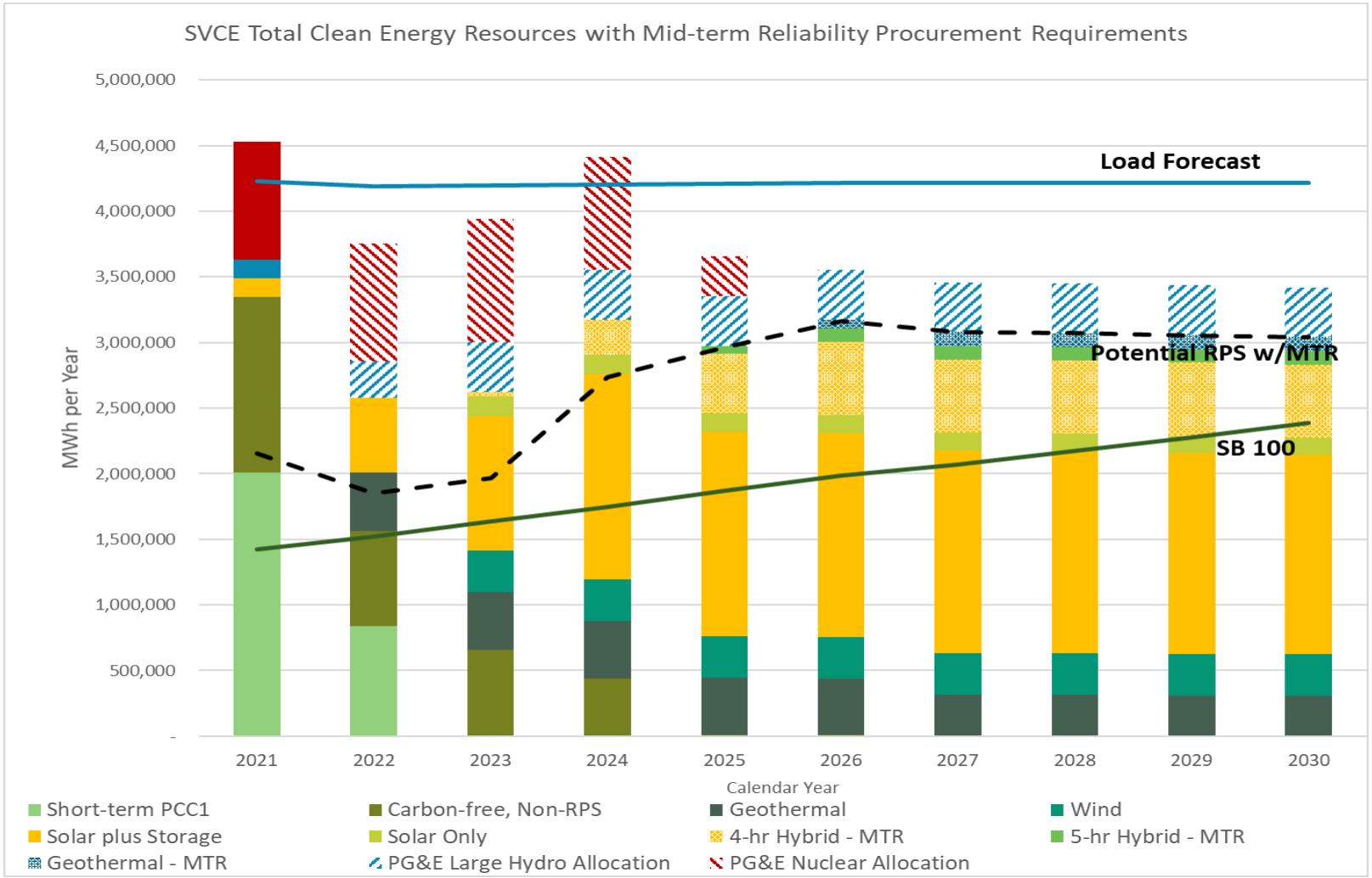
- **Heavy reliance on non-firm, large hydro resources, which are becoming less available**
- **RPS resources meet 50 to 60% of Carbon-free goal**
- **PG&E allocations may meet 10 to 30% of Carbon-free goals**
- **Carbon-free measured on an annual basis, but push to move closer to 24x7**



Mid-term Reliability Procurement Order

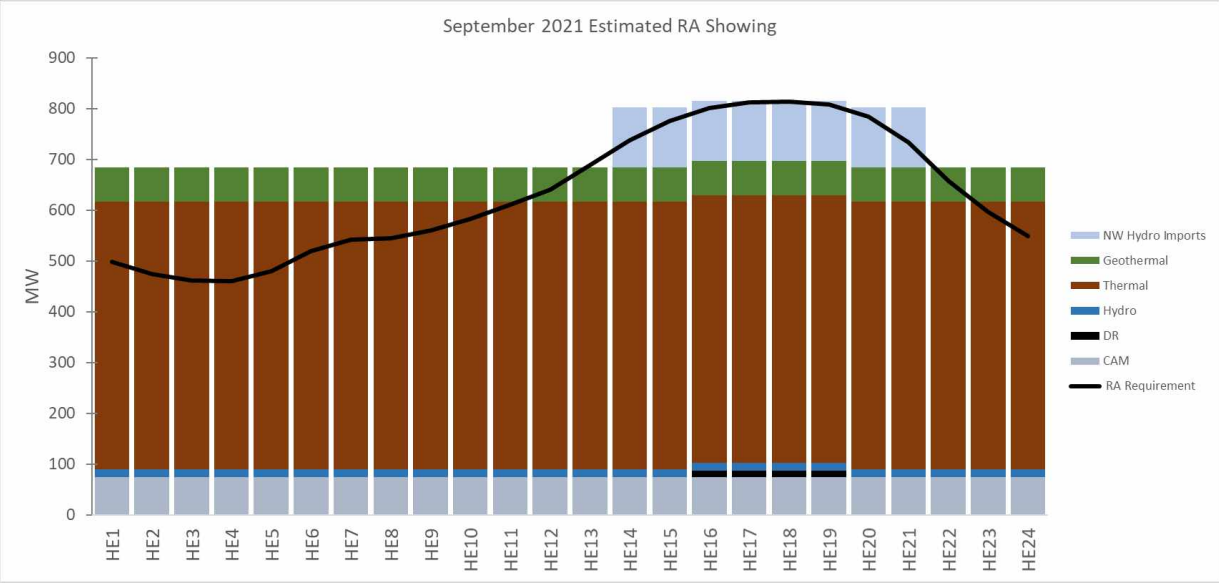
CPUC's order to build additional capacity will require additional clean energy procurement

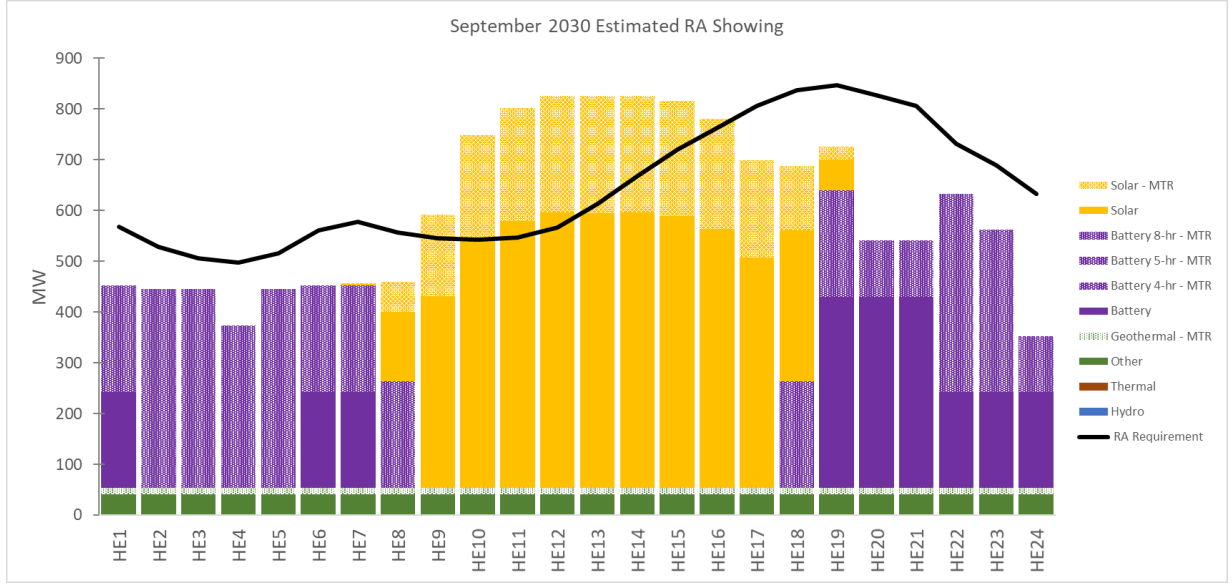
- **MTR Procurement Order 11.5 GW of new capacity to replace once-through cooling units and Diablo Canyon Power Plant**
- **SVCE obligation is 237 MW**
- **Some of SVCE's PPAs may count towards requirement – need ~180 MW**
- **Could add up to 20% additional clean energy through MTR by 2030 (~76% RPS)**
- **Clean energy in 2030 may be as high as 85% - annually**



Resource Adequacy Reform

How SVCE will meet RA Requirements are expected to change dramatically in the future





Currently SVCE leans heavily on thermal RA products to meet its RA obligations.*

By 2030, the majority of SVCE's expected hourly obligations can be met with batteries and firm resources from recent IRP procurement orders.

**current RA accounting only checks 1 hour of the day for compliance. RA reform is expected to change this standard. The above graph is illustrative.*

MTR Procurement Updates

SVCE making progress towards meeting MTR requirements

- Long Duration Storage (2026) – procurement through California Community Power
  - LS Power Tumbleweed, contract negotiations still in process – approval delayed to January 2022
- Firm Clean Resources (2026) – new geothermal and/or biomass –
  - RFO is out through CC Power – submittals due mid-December 2021
- Other requirements (2023-2025) – stand-alone storage, zero emitting resources (solar + storage)
  - SVCE will issue new RFO with Sonoma Clean Power and Central Coast Community Energy
  - Expect to bring agreements for approval to SVCE Board by Q3 2022

PPA Expected Commercial On-line Dates over the next 9 quarters

2021- Q4	Slate & Big Beau Solar + Storage
2022 – Q1	Coso & Casa Diablo Geothermal
2022 – Q3	Rabbitbrush Solar + Storage
2022 – Q4	Yellow Pine Solar + Storage & Atlas Solar
2023 – Q1	Mountain View & Cameron Crest Wind
2023 – Q2, Q3	Angela & Aratina Solar + Storage
2023 – Q3, Q4	Victory Pass & San Luis West Solar + Storage

PPA Updates

Projects are coming on-line but face interconnection and other challenges

- Recurrent's Slate solar plus energy storage plant testing and CAISO grid synchronization started. Slight delays due to PG&E's transmission interconnection work.
- EDF's Big Beau solar PV testing and CAISO grid synchronization started in November 2021. Storage system delayed.
- Coso's existing Geothermal project will deliver to SVCE starting on January 1, 2022
- Ormat's Casa Diablo geothermal on track for March 14, 2022 start date.
- AES's Mountain View Wind project started construction on August 2021.
- Leeward's Rabbitbrush solar plus storage project started construction in November 2021.
- Other projects continue to face delays due to COVID-19, labor shortages and/or supply-chain delivery issues

Project Construction



Slate Solar (93 MW) + Storage (46.5 MW)
COD January 2022

Big Beau Solar (70 MW) + Storage (22 MW)
COD April 2022



Project Construction



Ormat's CD4 New Geothermal 7 MW
COD March 2022

Mountain View Wind – Repowered 33.5 MW
COD January 2023



Project Construction





Rabbitbrush Solar (40 MW) + Storage (8 MW)
COD August 2022

Pathways to 2045 100% Clean Energy

How to meet California's GHG reduction goals affordably and reliably?

- Role of natural gas for reliability and integration of renewables
- Resource Adequacy Reform
- Role of large hydro in meeting goal
- Annual vs 24 x 7 accounting
- Long-term vs. Short-term commitments
- Integration of Distributed Energy Resources
- Electrification and impacts on load and clean energy needs
- Integrated Resource Plan and future procurement orders
- Direct Access and customer specific clean energy needs
- Cost of meeting clean goals
- Community/Board workshops in 2022

THANK YOU!



SVCE Information Update on 2022 SVCE Board Elections

SVCE Board Meeting
December 8, 2021

Purpose

Review the selection process and timeline for SVCE appointments of Chair, Vice Chair, and committees.

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Proposed Process

- Email with call for letters of interest for Chair/Vice Chair send Friday, December 10th
- Chair, Vice Chair, and Executive Committee members selected at annual meeting on January 12th
- Email with proposed committee matrix worksheet distributed to Board members January 14th
- Committee assignments made at the February 9th Board of Directors meeting

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Proposed Timeline

December

Dec. 8: SVCE Board Meeting information item
Dec. 10: Written Instruction

January

Jan. 3: Chair/Vice Chair Interest Letters & Executive Committee Interest due
Jan. 12: Chair/Vice Chair and Executive Committee selections made at BOD meeting
Jan. 14: Written instruction for committee interests distributed
Jan 28: Committee Matrix worksheets due

February

Feb. 9: SVCE Committee Assignments made

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2022 Committee Matrix Worksheet

NAME:
DATE:

Committee	Description	Meeting Details	Current Roster	Interest in serving for 2022	
				Yes	No
Executive Committee	The Executive Committee is a subset of the Board of Directors; they provide input and support to SVCE on operational and policy matters. The Executive Committee is made up of five Directors of the Board.	**Time:** 2:45 PM - 5 PM **Frequency:** Monthly, 4th Friday **Location:** Virtual	•Liz Gibbons (Chair) •George Tyson (Vice Chair) •Margaret Abe-Koga •Neysa Fligor •Javad Ellahie	☐ ☐ ☐ ☐ ☐	☐ ☐ ☐ ☐ ☐
			Not on committee, but interested for 2022	☐	☐
				Yes	No
Finance & Administration Committee	The Finance & Administration Committee consists of no fewer than three members and no greater than six members, and can be Board members, Alternate Board members, or a Board appointed Agency staff member. The Finance and Administration Committee works with SVCE staff on items related to financial and administrative issues that impact the agency.	**Time:** TBD **Frequency:** Quarterly & as needed **Location:** Virtual	•Rob Rennie (Chair) •Bryan Mekechuk (Vice Chair) •Yvonne Martinez Beltran •Liz Gibbons •Larry Klein	☐ ☐ ☐ ☐ ☐	☐ ☐ ☐ ☐ ☐
			Not on committee, but interested for 2022	☐	☐
				Yes	No
Audit Committee	The Audit Committee consists of no fewer than three members and no greater than six members, and can be Board members, Alternate Board members, or a Board appointed Agency staff member. The Audit Committee works with SVCE staff on the initiation and receiving of the annual audit.	**Time:** TBD **Frequency:** Twice yearly & as needed **Location:** Virtual	•Bryan Mekechuk (Chair) •Hung Wei (Vice Chair) •Evelyn Chua •Yvonne Martinez Beltran	☐ ☐ ☐ ☐	☐ ☐ ☐ ☐
			Not on committee, but interested for 2022	☐	☐

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Questions?



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