ITEMS 6 & 7
CF#23-0383 / CF#21-0352

Los Angeles Department of Water & Power

STRATEGIC LONG-TERM RESOURCE PLAN (SLTRP)

POWER SYSTEM UPDATE

APRIL 14, 2023

LADWP'S STRATEGIC LONG-TERM RESOURCE PLAN

LADWP has engaged in comprehensive planning for our energy future since the 2000 Integrated Resource Plan (IRP) to chart the course for a cleaner, more reliable power future.

In 2017, SLTRP replaced LADWP's traditional IRP, which is now a regulatory requirement and submitted to the California Energy Commission once every 5 years to comply with Senate Bill 350.

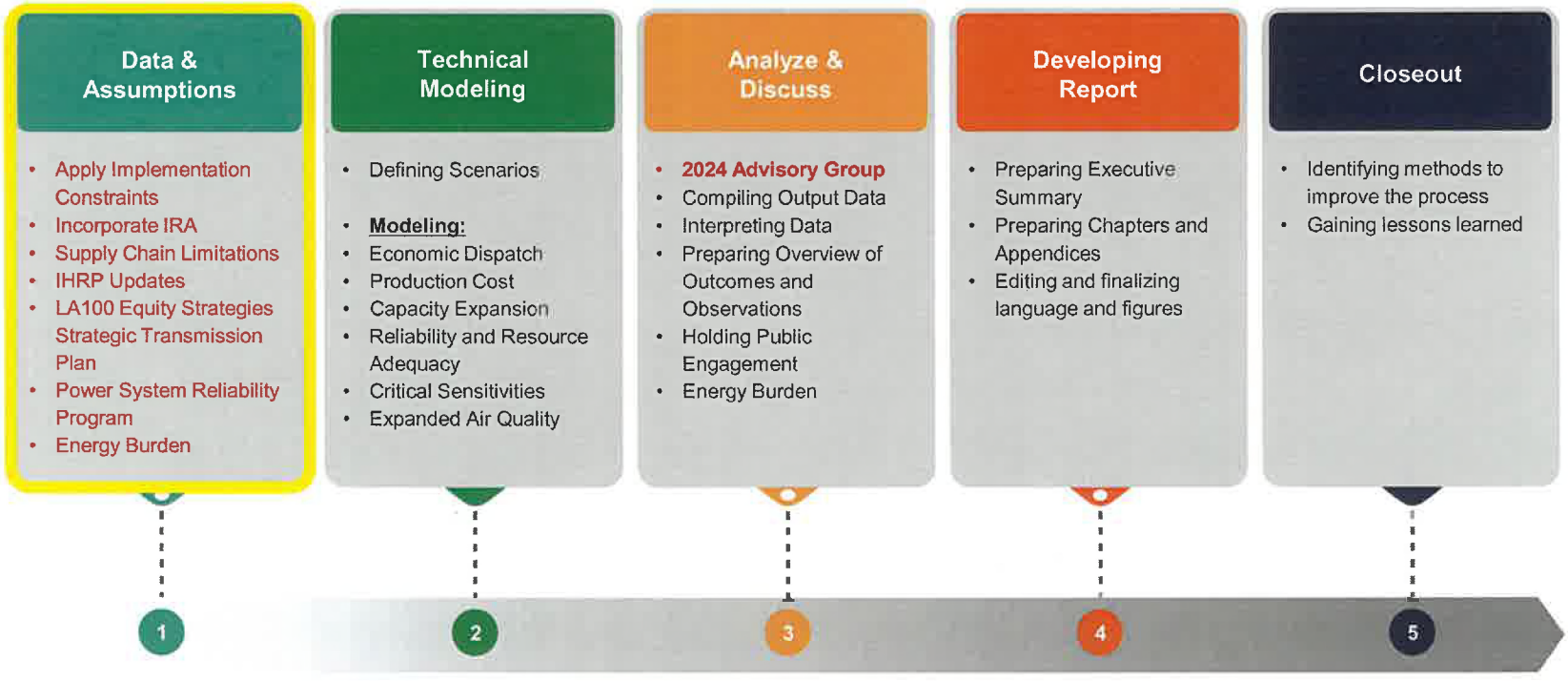
Data is updated yearly; extensive public outreach conducted every 2 years.

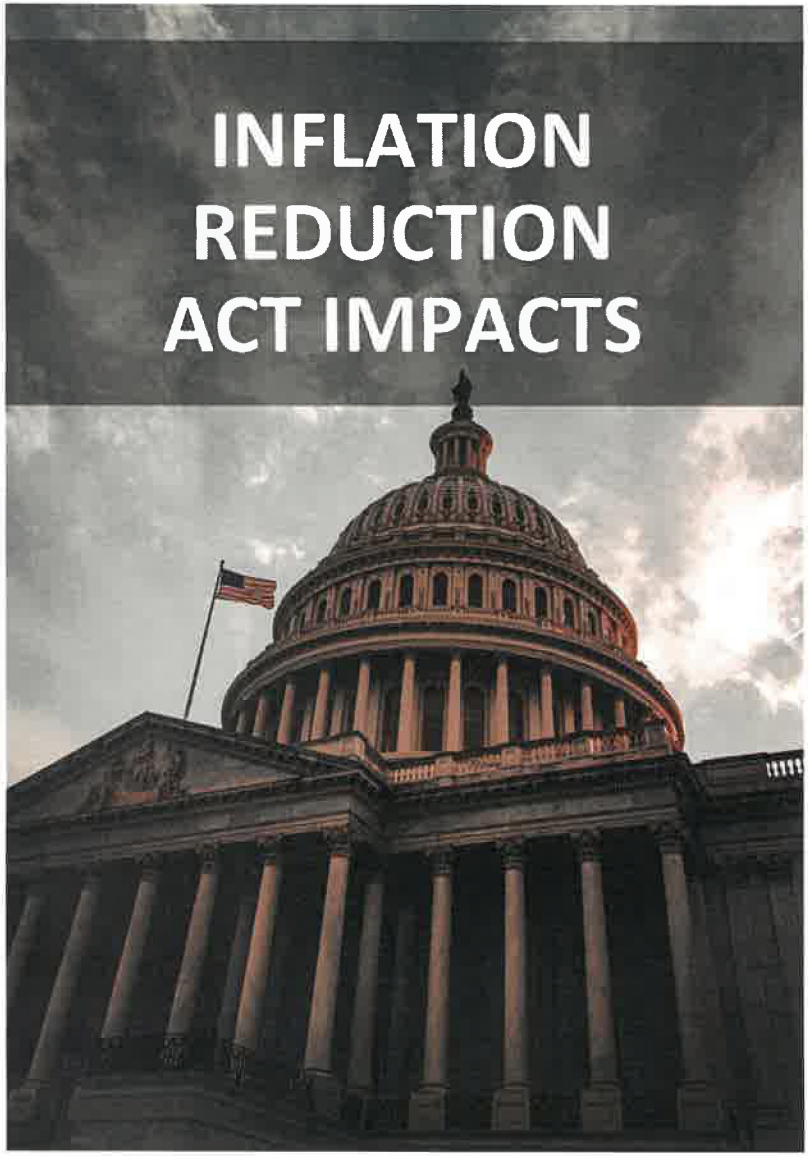
Paused after 2017 until completion of LA100 Study and re-started in 2022.

The Strategic Long-Term Resource Plan (SLTRP) is a roadmap to meet L.A.'s future energy needs and regulatory mandates while maintaining reliable service and reduce emissions in a cost-effective manner.

NEXT SLTRP PROCESS

Future considerations and alignment that needs to occur for the next iteration





Clean Energy Tax Credits

(Potential cost savings for SLTRP resource mix)

- Extension of existing solar, wind and the adoption of a general clean energy credit

Clean Vehicles

(Increased load from electric vehicles translates to lower rates)

- $4,000 consumer tax credit for lower/middle income individuals to buy used clean vehicles, and up to $7,500 tax credit to buy new clean vehicles

Residential Energy Efficiency

(Potential reductions in Energy Efficiency budget)

- $9 billion in consumer home energy rebate programs, focused on low-income consumers, to electrify home appliances and for energy efficient retrofits

Community Investment & Energy Justice

(Align with LA100 Equity Strategies)

- Funding to help leverage private investments in projects that combat climate change, specifically focused on disadvantaged and low-income communities

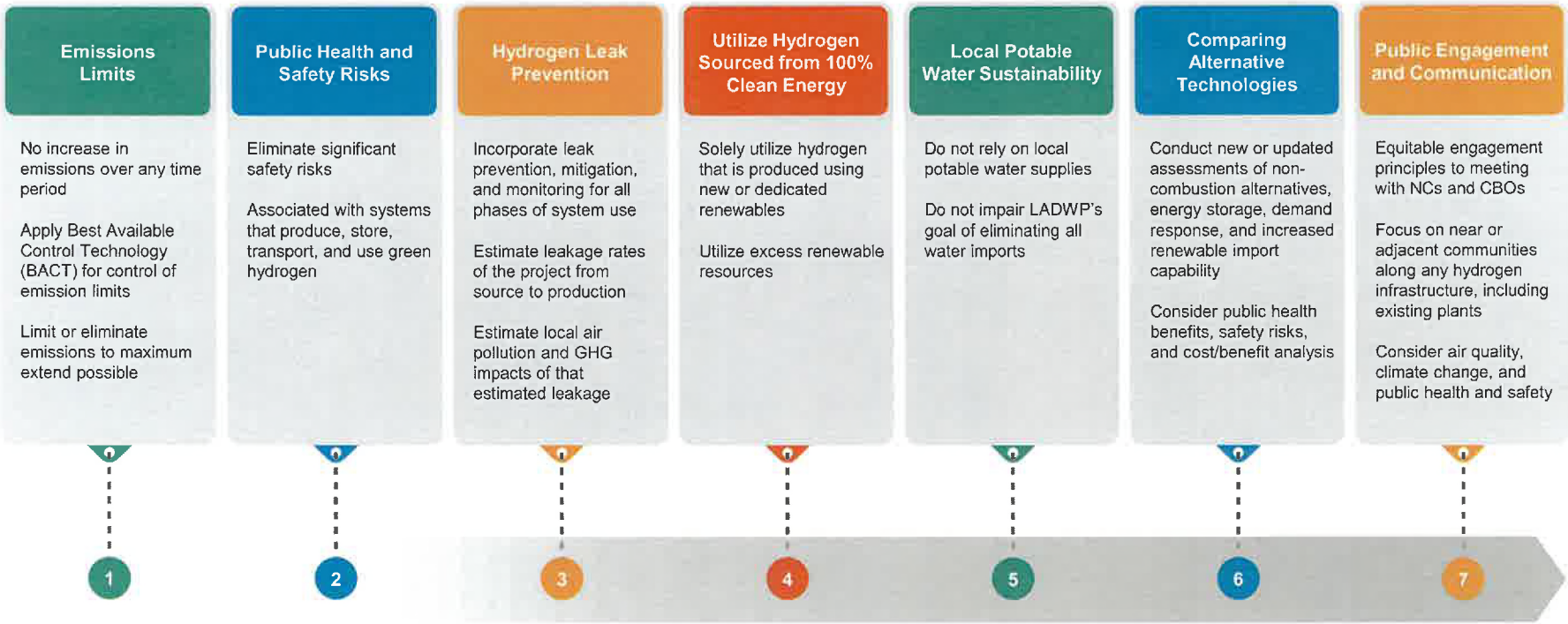
Carbon Management

(Opportunities for economy wide decarbonization)

- Clean energy tax credits and carbon sequestration

COUNCIL FILE 23-0039 REPORTING REQUIREMENTS

All items will incorporate updates from the LA100 Equity Strategies Recommendations



LA100

ACHIEVING 100% RENEWABLE ENERGY IN LOS ANGELES

LA DWP

LA100 Study

Completed

Unprecedented analysis ID'd multiple paths to achieve 100% target

Considers reliability, equity, sustainability and affordability

- Confirmed 100% by 2035 achievable
- Community & stakeholder input

Common Investments Across All Scenarios

LA100 Equity Strategies

Fall 2021-23

Community-driven, objective to achieve equity

Robust community engagement

Areas of Focus

- Improve air quality
- Solar access
- Energy Efficiency
- Affordable rates
- Demand management
- Debt relief
- EV charging access

2022 SLTRP

Fall 2021-2022 | 2035 & 2045 Targets

Our comprehensive integrated power plan

Recommends path forward to achieve our goals

- Integrates findings of LA100
- Community & stakeholder input
- Prioritizes reliability, resiliency, equity, affordability, sustainability

Considerations

- Workforce
- Building, Operating & Maintaining
- Cost to customers
- Supply Chain Risk
- Implementation and Feasibility

LA100 EQUITY STRATEGIES

Identify implementation-ready strategies to achieve community-driven, prioritized equity outcomes in LA's clean energy transition

Recognition Justice

Understand and address past and current energy inequities

- Acknowledge past injustices
- Include factors influencing current inequities
- Co-develop implementation-ready strategies that redress these issues

Distributional Justice

Ensure just and equitable distribution of benefits and negative impacts of clean energy transition

- Model pathways to achieve prioritized, community-driven, equity outcomes

Procedural Justice

Enable community leadership in the process

- Identify and prioritize energy justice outcomes
- Identify and understand energy problems

LA100 EQUITY STRATEGIES STEERING COMMITTEE

- Alliance of River Communities (ARC)
- City of LA Climate Emergency Mobilization Office (CEMO)
- Climate Resolve
- Community Build, Inc.
- DWP-NC MOU Oversight Committee
- Pacoima Beautiful
- RePower LA
- The South Los Angeles Transit Empowerment Zone (SLATE-Z)
- South LA Alliance of Neighborhood Councils
- Strategic Concepts in Organizing and Policy Education (SCOPE)
- Enterprise Community Partners
- Esperanza Community Housing Corporation
- Los Angeles Alliance for a New Economy (LAANE)
- Move LA
- Pacific Asian Consortium in Employment (PACE)

Steering Committee meets monthly

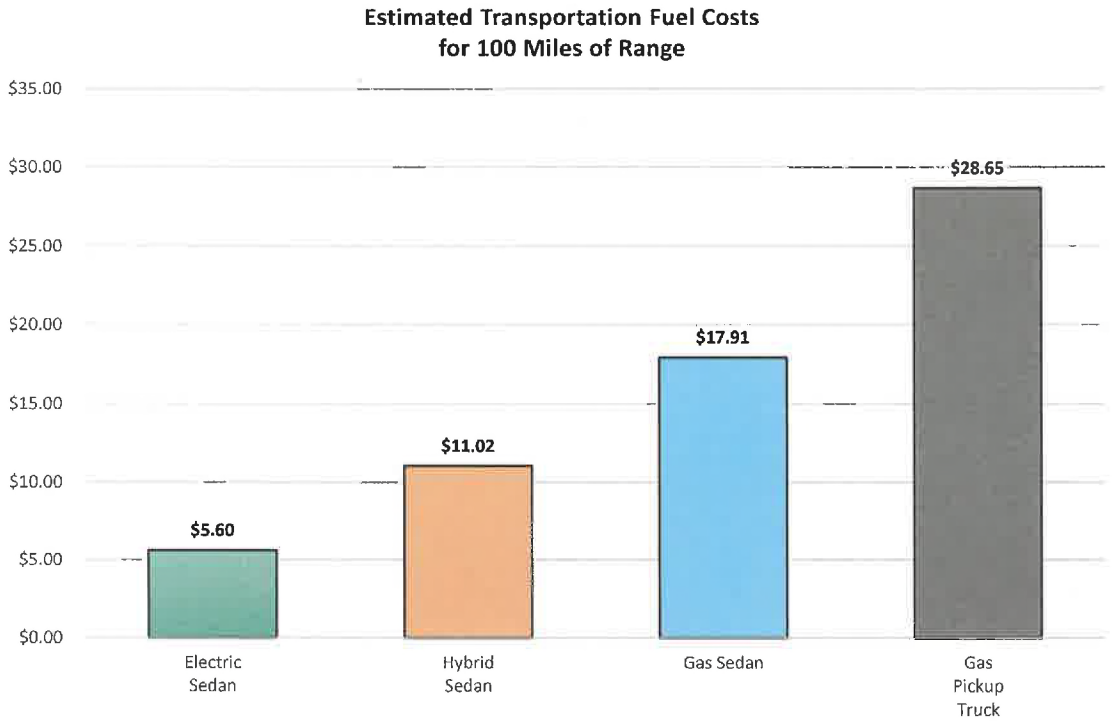
LA100 ES AND SLTRP ADVISORY GROUP

- 9 City Departments and Agencies
- 3 Environmental Advocacy Groups
- 1 Labor Union
- 2 Innovation/Non-Profit Organizations
- 1 Educational Institution
- 1 Neighborhood Council Alliance

Advisory Group meets bi-monthly

CONSIDERING ENERGY BURDEN

ELECTRIC VEHICLES AND ENERGY EFFICIENCY PROGRAMS CAN BE AN OPPORTUNITY TO SAVE MONEY

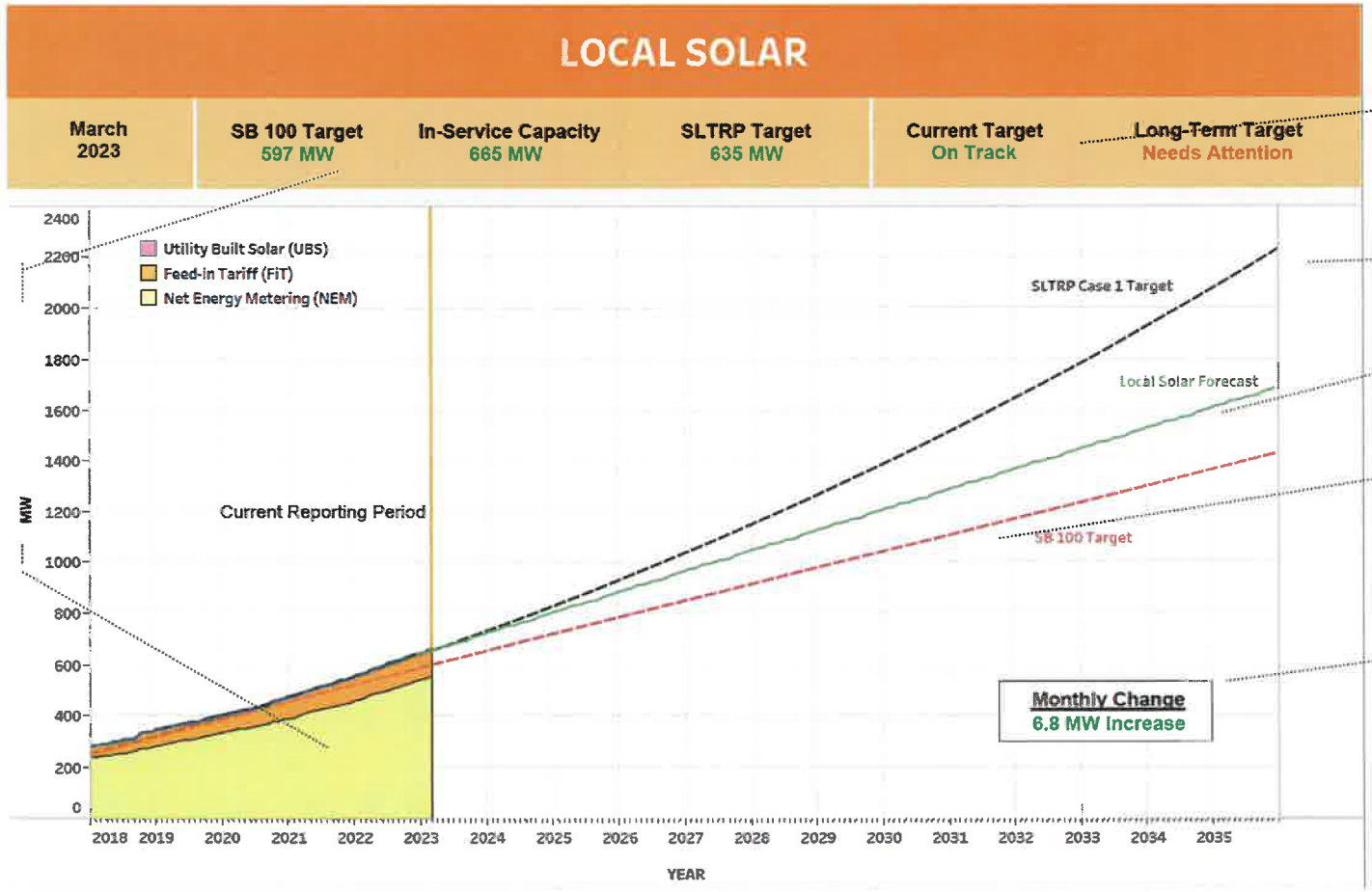


- Fueling an electric sedan is currently less expensive
  - ***49% less than*** a hybrid
  - ***69% less than*** a gas sedan
  - ***80% less than*** a gas pickup truck
- Potential annual fuel savings from an electric sedan, driving 15,000 miles/year
  - ***$812 less than*** a hybrid
  - ***$1,846 less than*** a gas sedan
  - ***$3,457 less than*** a gas pickup truck
- Free calculator at fueleconomy.gov and rebates at LADWP.com/EV
- Additionally, customers can take advantage of energy efficiency program **incentives** to further lower their costs and bills
  - LADWP.com/save

Sources: LADWP (electricity cost), EIA (gasoline cost), Toyota/Ford/Chevrolet (vehicle specs), fueleconomy.gov (emissions)

LOCAL SOLAR STATUS REPORT

Monitoring and Forecasting Resource Developments



Status Tracker

Current Date Targets & Actuals

Case 1 Requirements

Forecast and Trends for Real Values

SB100 Requirements

Historical Data

Monthly Changes

LOCAL SOLAR & ENERGY STORAGE PROGRAMS

- **Net Energy Meter Program (NEM)**
  - 559 MW in-service
  - Paid $ 338.9M in Incentives
- **Feed-in Tariff Program (FiT)**
  - 101.7 MW in-service
  - FiT+ Pilot 10 MW Goal
  - VNEM+ Pilot 5 MW Goal
- **Utility Built Solar Program**
  - 26.1 MW in-service
- **Solar Rooftops Program**
  - 1 MW Goal
- **Shared Solar Program**
  - 10 MW Goal
- **Commercial Energy Storage to Grid (CES2G) Pilot Program**
  - 20 MW Goal
  - Scheduled for E2 Committee consideration on 4/14/23



PROGRAM IMPLEMENTATION WORKSHOPS

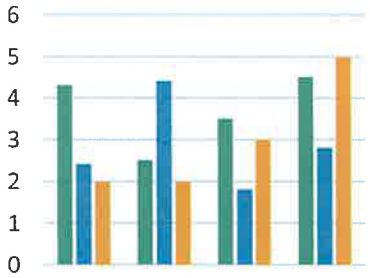
2022 SLTRP & LA100 EQUITY STRATEGIES – SUMMER 2023

Equity

Local Jobs

KICK-OFF

Accomplishments
Equity Strategies and Transmission
Resource Plan Updates
Program Workshops



Local Residential Solar and Demand Response

Overview of residential distributed energy resources (DER) programs and collect feedback

Local Commercial Solar and EE Workshops

Overview of commercial solar and energy efficiency programs and collect feedback

Rates

Solution

Transportation Electrification

Overview of transportation electrification programs

SLTRP and LA100 ES Update

Update on SLTRP and final results of LA100 Equity Strategies Study

California's Energy Challenges

- CA Governor, Gavin Newson, issues letter to CPUC, CEC, and CAISO
  - Expresses concerns of recent de-energization events in CA
- California Proclamation of a State of Emergency
  - Signed July 30, 2021 & August 31, 2022
  - In response to increased electric demand which strains the grid
  - Calls for increase in procurement of clean storage and demand response programs

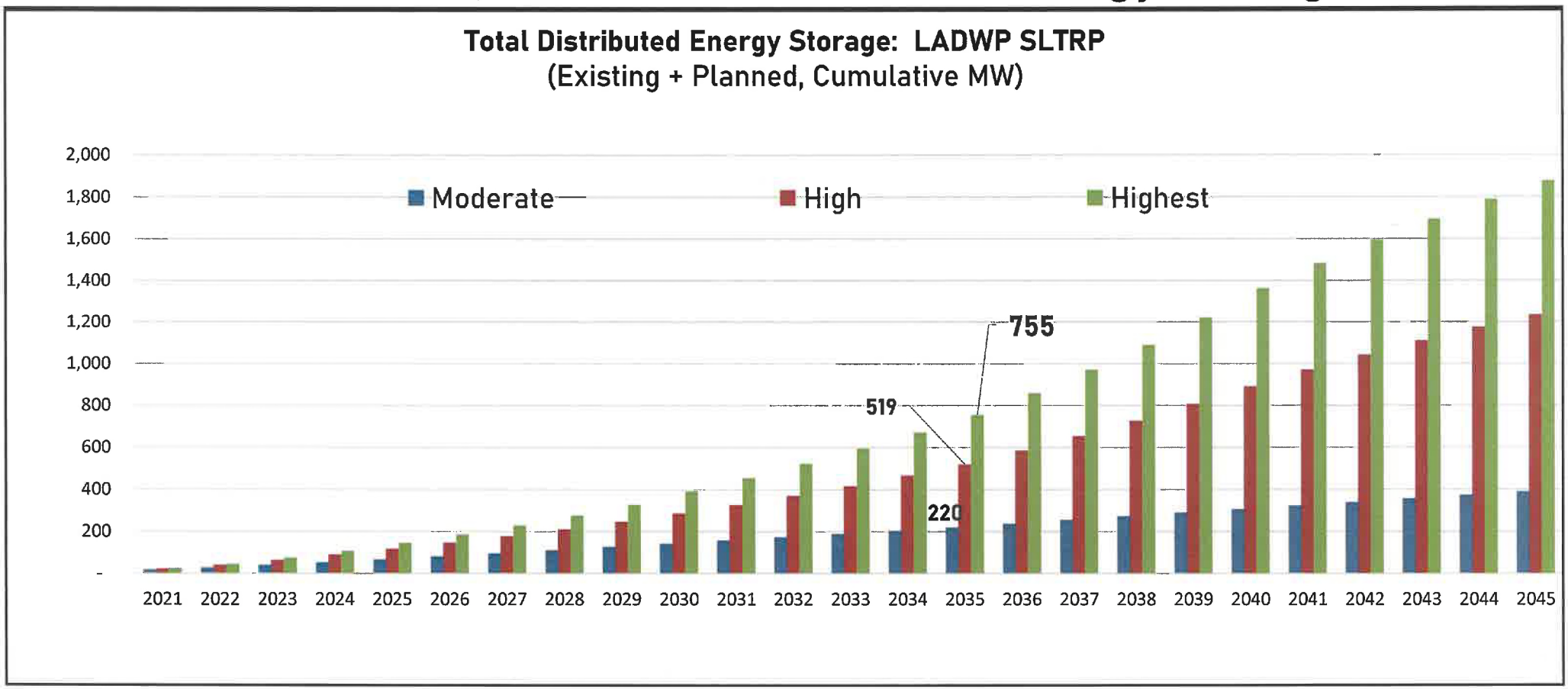
Decarbonization Goals

Initiatives

- EPA Updated Emissions Rules
- LA Executive Directive No. 25
- LA Metro/LAUSD/Long-Haul/Last-mile Delivery/University Fleet Decarbonization Plans
- Inflation Reduction Act (IRA)
- CEC Zero-Emission Transportation Investment ($2.9B) - 12/14/22
- Oct 2022 CA State Budget Amendment

Draft 2022 SLTRP Estimates

- 2045: Max. of 1,877MW of Distributed Energy Storage



CES2G Pilot Program Overview

- Grid Connected – Separately metered systems apart from customer's normal load

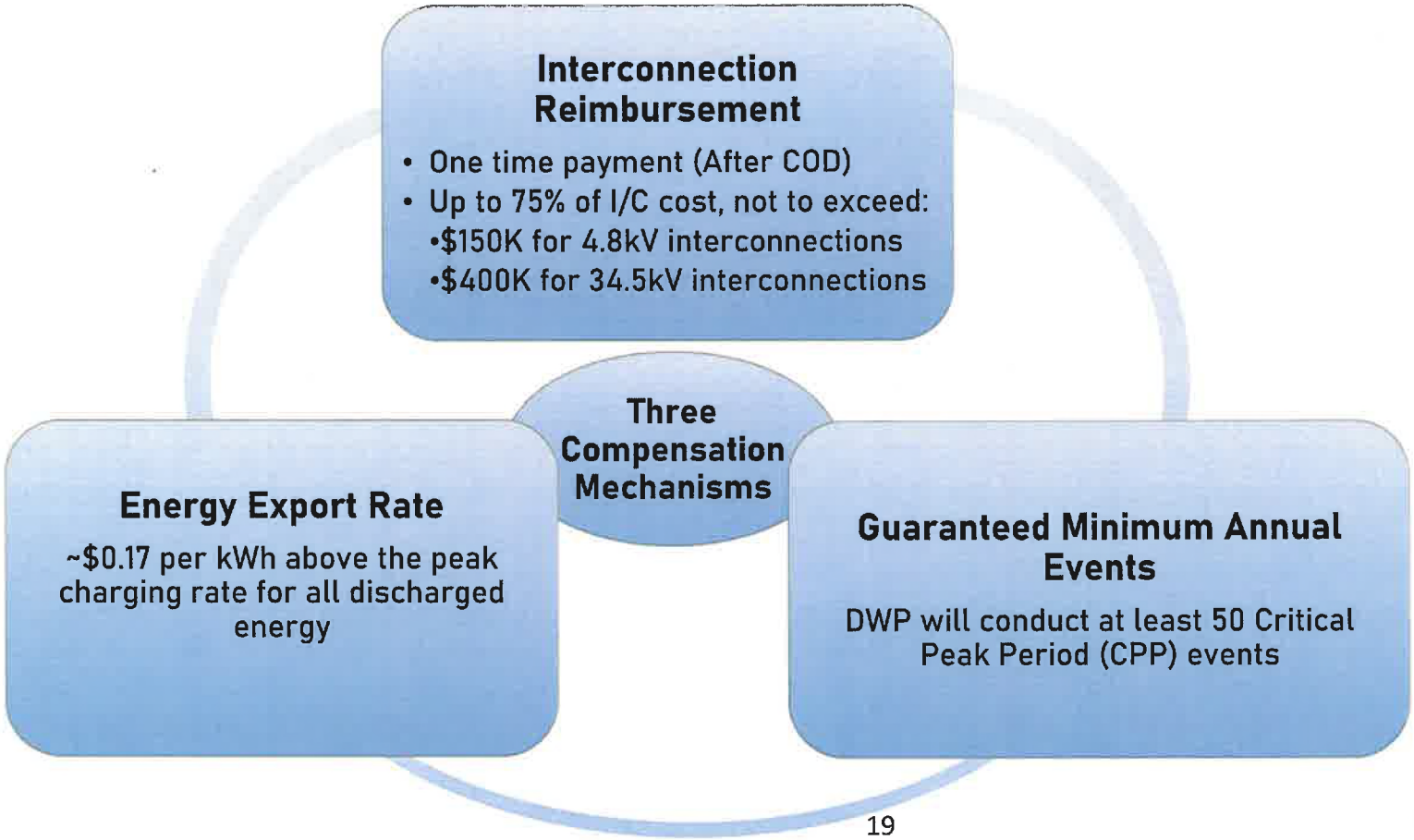
Stationary Energy Storage

Non-stationary Energy Storage

CES2G Pilot Program Overview

Major Components	Stationary and non-stationary energy storage types
	20 MW program capacity offering
	Standard Offer Rate Agreement – *Declaration of Critical Peak Periods (CPP) are at the full discretion of the LADWP Energy Control Center*
	Interconnection reimbursement to encourage participation
	Separately metered systems
	Contract term based on rated useful life of BESS (max 10 years)

Participant Compensation Structure



Total Pilot Program Budget

- **Total Program Budget** = $32M
  - Includes interconnection reimbursements up to a maximum of $6M
  - Includes program energy credit maximum paid to all participants of $26M
- **Est. Gross Program Revenue Generated from Energy Sales** = $45M
- **Est. Net Program Revenue** = $13M

Further Benefits

Advanced Distribution Management System	Dispatchable Energy	In-Basin Energy	Market Benefits	Environmental Benefits
• Learn to connect DERs with the Energy Control Center (ECC) • Establishes new intradepartmental policies and protocols to conduct this pilot	• ECC has visibility and control of energy storage systems • Peak Shaving • Time-shifting • Leverage unutilized energy capacity	• Reduces reliance on transmission • Non-wires alternative • Potential for outage sectionalizing	• Enables new marketplace for EV fleet operators and integrators to provide cost-competitive solutions that outperform fossil-fueled options • Empowers property owners to leverage available footprint for energy storage development that supports the grid and creates new revenue streams	• ~5,000 Metric Ton reduction of CO2 annually when compared to ICE vehicles • Improved local air quality

LA DWP Los Angeles Department of Water & Power

Q&A