

#### MCE's Planning to Support Greater Building Electrification

12/22/21

MCE was formed for the express purpose of empowering its member communities to choose supply-side and demand-side resources that reflect their specific values and needs. Member community values and needs are reflected in the procurement principles, goals, targets, and directives reviewed and adopted by MCE's governing Board via MCE's <u>Operational Integrated Resource Plan</u> (OIRP). MCE's 2022 OIRP (this document) has a planning period of 2022 through 2031 and takes into account numerous dimensions:

- Load forecasts based on the number and types of customers, potential service territory expansions, opt-out rates, electrification trends, demand-side resources, and weather;
- Renewables and emissions targets;
- Agency-wide budgetary considerations and customer rate implications;
- Long-term contracting requirements and goals for new steel in the ground;
- Grid reliability needs and capacity requirements, including regulatory mandates;
- Market price hedging needs;
- Goals for local resources, local resiliency

# MCE's Procurement Process MCE has a well-established procurement process that includes the following ten key activities:

- 1. Forecasting load based on the number and types of customers, potential service territory expansions, opt-out rates, electrification trends, demand-side resources, and weather;
- 2. Integrated resource planning based on load forecasts, renewables and emissions targets, agency-wide budgetary considerations and customer rate implications, long-term contracting requirements and goals for new steel in the ground, grid reliability needs and capacity requirements, market price hedging needs and goals for local resources, local resiliency, and local workforce development;
- 3. Calculating open positions and interim volumetric needs based on MCE's risk management policies;
- 4. Soliciting volumetric needs through Requests for Offers (RFOs), bilateral discussions or brokers;
- 5. Evaluating offers using a combination of proprietary and public models;
- 6. Negotiating (and ultimately executing) power purchase agreements, while enabling agreements and confirmations including credit provisions and collateral requirements;
- 7. Managing pre-Commercial Operation Date (COD) executed contracts and monitoring progress towards key development milestones (such as interconnection status, deliverability studies, siting, zoning, permitting, financing, construction, commercial operation, etc.);
- 8. Managing post-COD executed contracts: obtaining generation forecasts, bidding and scheduling resources into the CAISO, validating and paying invoices;
- 9. Bidding and scheduling MCE's load into the CAISO; and
- 10. Regulatory compliance reporting.

Electrification assumptions come from the CPUC's Integrated Energy Policy Report (IEPR) which accounts for state level policy goals for building and transportation electrification. To learn more please see the report <a href="https://example.com/here">here</a>.

Below are slides from:

11/10/21 Power Association of Northern California (PANC) Presentation from the CEC - On Future Planning



# Seven Broad Strategies of Building Decarbonization

- 1. Building end-use electrification
- 2. Decarbonizing electricity generation system
- 3. Distributed energy resources
- 4. Refrigerant conversion and leakage reduction
- 5. Energy efficiency
- 6. Demand flexibility
- 7. Decarbonizing gas system

# DER ACTION PLAN 2.0

# Structure and Initiatives List

#### **TRACK ONE**

#### Load Flexibility & Rates

- Net Energy Metering
- PG&E Day Ahead Hourly Real Time Pricing (DAHRTP) Rate and Pilot Application to Evaluate Customer Understanding and Supporting Technology
- SDG&E, PG&E and SCE GRC Phase 2
- Rate Design Applications for evaluating and implementing default residential TOU rate designs
- SDG&E Application for Approval of Electric Vehicle High Power (EV-HP) Charging Rate Application
- Load Flexibility Management, recommended by CPUC staff
- CEC's Load Management Standard

#### **TRACK TWO**

## Grid Infrastructure

- High DER Grid Planning
   Streamlining Interconnection of Distributed Energy
- Resources and Improvements to Rule 21
  • Microgrids
- PG&E, SCE and SDG&E
  General Rate Case Phase 1

### TRACK THREE

## Market Integration

- Resource Adequacy
- Successor Storage and/or Demand Response, as recommended by CPUC staff
- Streamlining Interconnection of Distributed Energy Resources and Improvements to Rule 21
- FERC Proceedings
- Potential CAISO Initiatives:
  - Energy Storage and Distributed Energy Resources,
  - Energy Storage Enhancements,
  - Hybrid Resources,
  - Transmission Planning Process,
  - Storage as a Transmission Asset,
  - Dispatch Enhancements

#### **TRACK FOUR**

#### **DER Customer Programs**

- Integrated Distributed Energy Resources
- Self-Generation Incentive Program
- Energy Efficiency
- Building Decarbonization
- Transportation Electrification
- Demand Response
- · Net Energy Metering
- Energy Savings Assistance Program

California Public Utilitles Commission