CITY OF VERNON 2018 POWER IRP

STAKEHOLDER ENGAGEMENT
FEBRUARY 14, 2018
Today’s Agenda

- Introductions
- IRP Team
- Background
- IRP Scope and Approach
- IRP Schedule
- Questions/Discussion
- Break
- Optional: Survey Walk-through
INTRODUCTIONS
BACKGROUND
Federal (FERC, EPA)

CA State Legislature (e.g., SB1x2, SB 350)

State Agencies (CEC, CARB, CPUC)

Local (Vernon City Council)
Examples:
- 15-18% Planning Reserve Margin
- Operating/Contingency Reserves
- Frequency Responsive Reserves

Examples:
- System Resource Adequacy (RA)
- Local RA
- Flexible RA
- Ancillary Services
RELIABILITY

Typical Outage Causes in Vernon by Type

- Vehicle: 8%
- Supply to City: 0%
- Overhead Equipment: 10%
- Underground Equipment: 5%
- Weather: 26%
- Metallic Balloon: 28%
- Trees: 0%
- Animal: 13%
- Other: 2%
- Human: 0%
- Unknown: 8%

Vernon Public Utilities was awarded Diamond Level Reliable Public Power Provider by the American Public Power Provider for 2016 - 2019

System Average Outage Indices

- **SAIFI** (System Average Interruption Frequency Index)
  - Vernon: 0.50
  - Publicly Owned Utilities: 1.00
  - Investor Owned Utilities: 1.50
  - Industry: 1.00

- **SAIDI** (System Average Interruption Duration Index)
  - Vernon: 50.00
  - Publicly Owned Utilities: 100.00
  - Investor Owned Utilities: 150.00
  - Industry: 100.00
An Integrated Resource Plan (IRP) is a standard utility process of planning to meet users’ needs for electricity services in a way that satisfies multiple objectives for resource use.
Statutory Goal of IRP
• “Strengthen the diversity, sustainability, and resilience … of local communities”
SOME IRP CONSIDERATIONS

GHG EMISSION REDUCTIONS

RENEWABLE PORTFOLIO STANDARDS

CUSTOMER PREFERENCE

TRANSPORTATION ELECTRIFICATION

COST & RISK

DISADVANTAGED COMMUNITIES

DIVERSE PORTFOLIO

RELIABILITY

MARKETS

February 14, 2018
IRP PROCESS

- Prepare/Present Final IRP Report
- Load & Resources
- Regulatory/Reliability Requirements
- Market Fundamentals
- Scenarios/Sensitivities
- Portfolio Design & Optimization
- Scorecards & Action Plan

Customer/Stakeholder Engagement Throughout
IRP MODELING APPROACH

- **SCENARIOS:**
  - Core sets of alternative policies, assumptions, and conditions

- **SENSITIVITIES:**
  - Test importance of individual variables on results

- **PORTFOLIOS:**
  - Combinations of supply and demand side resources
IRP PORTFOLIO SCORECARDS

Scorecard Factors
- Reliability
- Rate Impact
- GHG Emissions
- Flexibility
- Diversity
- T&D Impacts
- Customer Preference

Top Performing Portfolios
- Low Cost
- Sustainability

Recommended Portfolio
- Least Cost & Best Fit

February 14, 2018
SCHEDULE: NEXT STEPS

- PUBLIC MEETING 1:
  February 14, 2018
  INTRODUCTION/SURVEY

- PUBLIC MEETING 2:
  Mid March
  PRESENT PRELIMINARY ANALYSIS

- PUBLIC MEETING 3:
  Mid April
  GATHER/DISCUSS COMMENTS ON DRAFT IRP

- PUBLIC MEETING 4:
  Mid May
  PRESENT FINAL IRP TO CITY COUNCIL
VPU IRP Webpage:  
www.cityofvernon.org/irp

VPU IRP Questions/Comments? Email:  
IRP@ci.vernon.ca.us

Glossary & Acronyms  
www.cityofvernon.org/irp
QUESTIONS/ DISCUSSION
1. INTRODUCTION/BACKGROUND

2. CUSTOMER PLANS
   • Energy Usage
   • Electric Vehicles
   • Solar Photovoltaics
   • On-Site Generation
   • Energy Storage
   • Energy Efficiency

3. VERNON’S INTEGRATED RESOURCE PLAN

4. VPU COMMUNICATIONS

5. VPU CUSTOMER SERVICE

6. WRAP-UP