“What’s In Your Wallet?”

Janet Purchase
Energy Manager
Riverside County Economic Development Agency
1. Riverside County
2. Generation Expansion
3. Past Energy Efficiency Endeavors
4. Lots of Demands
5. What’s in Your Wallet?
Riverside County Background

- 10th Largest US County in Population
  - 2.3 MILLION

- 4th Largest County in California
  - 7,303 square miles

- 27 Cities in County

- Board of Supervisors
  - 5 Districts
Riverside County Background

- County Owned Buildings
  - 695 facilities

- County Leased Buildings
  - 458 facilities

- 54 Utility Service Providers

- 15,208,069 Square Feet
Riverside County Challenges

- Inland Empire Region
  - Riverside/San Bernardino Counties

- Poor Economy
  - Recession
  - Unemployment
  - Decline in Tax Base

- Recovering, Then Declining Budgets
Riverside County Challenges

- Public Safety
  - Realignment of State Prisoners To County
- County Detention Facilities
  - New 1,636 bed jail in Indio
- Prisoner Health Care
  - Lawsuit Against County
Solar Expansion

OPTERRA
ENERGY SERVICES
Special Tariff Initiated by the CPUC

- Created by PU Code 2380 (AB 2466)
- Local Governments can generate solar on one site and transfer the credit to other existing electric accounts

Renewable Energy Self-Generation Bill Credit Transfer Tariff
The Opportunity—Solar Expansion

Otherwise Known As
The
Aretha Franklin

“R-E-S-B-C-T”
Tariff
The Process—Solar Expansion

Dollars are transferred—NOT kWh

Regional Medical Center

Southwest Justice Center Campus

Crestmore Manor
The Process—Solar Expansion

- The transfer of credit generates energy cost savings
- Project pays for itself PLUS
- Guarantees an additional $127,000 per year for 20 years
- Banc of America Public Capital Corporation
- **Solar Equipment - security for loan**
- $54.6 million project costs
- 19.5 year term
- Competitive Interest Rate
- $127,000 per year additional savings (more expected)
- Financing includes:
  - Solar System Maintenance
  - Weed Abatement for ground-mount sites
  - Measurement & Verification
  - $5 million in CSI rebate reservations
Strategic Efforts

SCE/SCG Partnership + Board of Supervisors Policy = Energy Conservation Fund

Policy creating the Energy Conservation Fund approved August 10, 2010
Energy Conservation Fund

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<td>2012</td>
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<td>2016</td>
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Utility Bill Management System
EnergyCAP

- Went live with system in July 2012
- Audit savings and utility incentives exceeded the initial system cost within 15 months ($133,790)
- Total audit savings to date exceeds $326,000
- EnergyCAP ranks buildings by performance
  - Cost/SF
  - Use/SF
- Feeds EE project decisions
Energy Efficiency (2009-13)

- **EE Projects:**
  - Boiler Upgrades (7)
  - HVAC Upgrades (3 large)
  - VFDs & Motors (2 large)
  - Lighting Upgrades (4)
  - Controls Upgrades (2 large, many small)

- **Savings by Design:**
  - Completed 17 projects

- **All rebates and incentives deposited in Energy Conservation Fund**
Energy Efficiency—PBx (2012-14)

- Persistence-Based Retrocommissioning Projects using Energy Conservation Fund ($246K)
- Third-party program available through Edison
- Funds spent on PBx at:
  - Southwest Justice Center
  - Perris Sheriff-CHA
  - Western Riverside Animal Shelter
Energy Efficiency—PBx Results

- **Energy Savings:**
  - 669,828 kWh
  - 26 KW
  - 34,444 Therms

- **Cost Savings:**
  - $79,752 Electric Savings
  - $21,896 Gas Savings
  - $101,649 Total Savings

- **Total SCE/SCG Incentives:**
  - $133,644

**Total Project Costs:** $246,519

**Total Project Savings:** $235,293
Changing Demands–Project Process

Southwest Justice Center Campus PBx Project

- Project Submitted to Edison: 8/3/2012
- Conditional Approval by CPUC: 8/29/2012
- Installation Report Submitted to Edison: 8/28/2013
- Project Released by CPUC (1 Year): 11/27/2013
- Project Paid by Edison (2 Years Total): 8/7/2014
- Project Selected for CPUC Review: 1/28/2013
Competing Demands (Internal)

- CEC EV Charging Station Grant (3/2014)
- New Title 24 (6/2014)
- Final Solar Site Selection (7/2014)
- Solar Project Approved (10/2014)
- EE ESCO Project Proposed (12/2014)
Controlling Demands (External)

AB109/11
PUBLIC SAFETY REALIGNMENT

Riverside County Accepts State Grant $100,000,000

Plans Approved

Bids Awarded

2011 2012 2014 2015
Resources—What’s in Your Wallet?
Cash Back Rewards—"Quick Silver"

Cash Back Rewards
Earn unlimited cash back on every purchase.
See Cash Back Cards

Pre-Title 24 change
- Rebates for most measures
- New Construction incentives—no building size limit
- CSI Rebates
- Minimal “to code” requirements
- Calculated rebates

Post Title 24
- Rebates are upstream & midstream
- New Construction > 25,000 square feet
- CSI Rebates--gone
- Rebates for above code only
- Calculated & Express rebates gone
Impact—IOU Partnership

- Can’t get savings credit for the Partnership if there is no rebate
- Issue of many facilities that are not “to code”
- EE projects are more expensive with very few rebates = low ROI
Travel Rewards—Project Processing

- Mostly timely processing of project
- Plenty of 3rd Party programs
- No extra CPUC review
- Less 3rd party review by utility

Pre-Title 24 change

- IOU and CPUC processing is very lengthy
- 3rd party programs have ended
- CPUC can pull projects
- Heavy IOU 3rd party review

Post Title 24
Impact—Last Minute Money

Process Prevents the Project
Average or Building Credit—Low Budget

Pre-Title 24 change

- Direct Install programs available
- Grant funding possible (EECBG)
- Good ROI on ESCO projects
- Good ROI on lighting

Post Title 24

- Direct Install limited
- Grant funding very competitive
- Lower ROI on ESCO projects
- Lower ROI on lighting
Impact—Declining Conservation Fund

- Already a declining return to fund
- Already have competition between multiple utilities for funding
- Due to county jail, reduced new construction programs in IOU territory
- No rebates coming back to fund future projects
- Fund will eventually run out of money
Popular Cards--Other Resources

Non-EE Activities with better resources

- Solar for local government–RES-BCT program
- Electric vehicle charging station opportunities–CEC, SCAQMD, SCE
- Municipal utility programs
- Battery storage
- Micro-grids
Impact—What’s in My Wallet?

Riverside Public Utilities

- Easy Process
  - No reservation
  - Quick pre-inspection
  - Simple application
    - One page
    - Before/After information
    - Cut sheets
- Rebates for most measures
- Payment in 4-6 weeks
Integration of Distributed Energy

Perris Sheriff Station
Integration of Distributed Energy

Western Riverside Animal Shelter
It’s a Balancing Act

Demand

EV Charging Stations

Resources

CEC Grant

SCAQMD Rebate

SCE Charge Ready

Full Wallet
It’s a Balancing Act

Demand

Energy Efficiency

Resources

Lack of rebates

Low ROI

Long Process

Empty Wallet
Multi-task to the Max
### Final Thoughts

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<th>Demand</th>
<th>Prioritize demands with an eye on capacity</th>
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<tr>
<td>Resources</td>
<td>Manage budgets and schedules with an eye on ROI</td>
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<td>Flexibility</td>
<td>Expect the unexpected</td>
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Semper Gumby
Mom Said There Would Be Days Like This
Do you have any questions?