




# Presentation to City of San Diego Sustainable Energy Advisory Board (SEAB) - Final

Bill Powers, P.E.  
Protect Our Communities  
Foundation  
October 8, 2015



**City of San Diego**

## COMMUNITY CHOICE ASSESSMENT

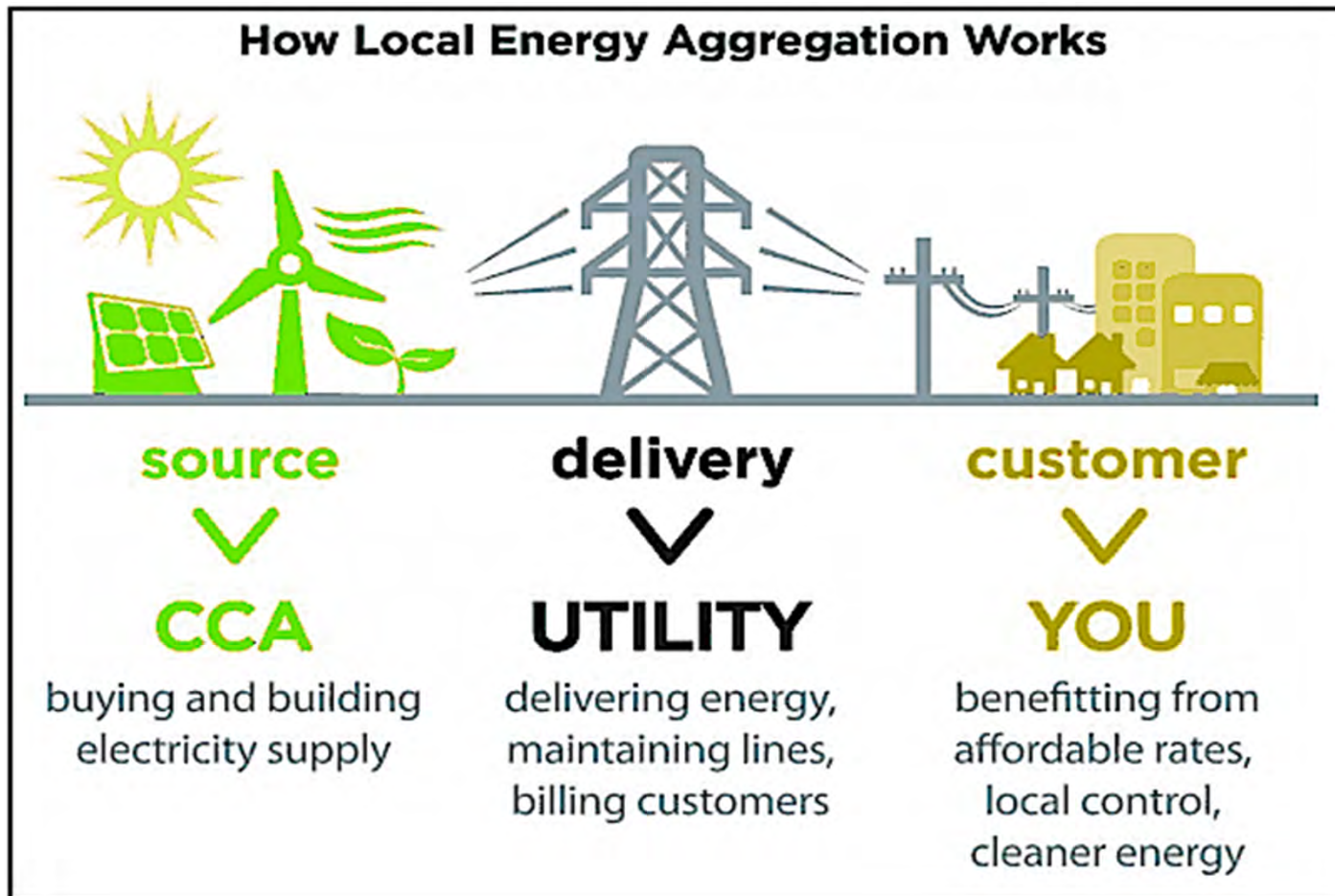
September 2015

---

# History of project

- 2005 – San Diego County CCA study, Navigant, mixed financial benefit conclusions (depends on level of non-bypassable charges).
- 2010 – Marin County CCA launched.
- 2012 – No local political will to fund another CCA study, despite initial success of CCA in Marin County.
- 2012 – Protect Our Communities Foundation (POC) allocates funds for CCA study to fill “gap”.
- 2012/2013 – Bob Filner elected mayor, approves moving forward on CCA study for City of San Diego.
- 2014 – Interim Mayor Todd Gloria approves moving forward with CCA study.
- 2014 – Sonoma Clean Power begins operation.
- 2015 – City of Lancaster CCA begins operation.
- 2015 – City of San Diego CCA assessment completed by POC.

# Community Choice Energy



---

# Benefits of CCA in City of San Diego

- Competition in energy supply – SDG&E has highest energy charges of investor-owned utilities in California.
- Revenues for local economic development.
- New local energy programs.
- Rate stability and lower costs.
- Local control of energy planning and pricing.
- The City of San Diego is currently considering CCA as an element of its draft Climate Action Plan – target is 100% clean energy by 2035.

---

## Findings of CCA assessment – Community Choice Partners, Inc. (CCPartners) analysis

- Initial CCA service offered to 45 percent of residential and medium commercial customers and 100 percent of all other commercial customers.
- Assumes 3-year initial phase to 3,400 gigawatt-hour per year (GWh/yr) load.
- A supply portfolio comprised of 33 percent renewable energy resources with no unbundled “RECs”.
- Savings on the order of 5 percent in energy costs for mixed commercial/residential program evaluated in detail in assessment.
- \$3 million allocated to CCA programs such as energy efficiency, demand response or feed in tariffs.
- City would have an adequate reserve at the end of the first year of CCA operation after paying off first-year debt.
- City’s CCA consultant should verify all inputs/outputs in the CCPartners model.

---

## Issues for further investigation by CCA consultant selected by City

- The initial phase of the CCA to 3,400 gigawatt-hours per year would result in a CCA roughly the current combined size of Marin Clean Energy and Sonoma Clean Power.
- Unlike existing CCAs in California, City of San Diego CCA at full build-out would comprise 50% of SDG&E's load.
- CCA customers departing SDG&E are required to bear above market rate costs incurred by SDG&E on their behalf (non-bypassable charges).
- These charges, known as Power Charge Indifference Adjustment (PCIA), are currently < \$0.01/kWh.
- The POC case study assumed a PCIA of \$0.01/kWh, and showed a net cost benefit at this PCIA level.
- Not clear whether or by how much the PCIA would increase as City of San Diego CCA customer base increases to full build-out.

---

## PCIA primarily driven by higher cost renewable energy contracts to meet California RPS

- Some issues for the City's CCA consultant to consider, if an unadjusted PCIA could impact the steady expansion of a City of San Diego CCA to full build-out, are:
  - Incorporating some of the renewable energy contracts that contribute to the PCIA into the City of San Diego CCA's energy supply portfolio.
  - Negotiating a lower PCIA if the renewable energy power purchase agreements that substantially contribute to the PCIA are markedly above mean contract prices for the same product.
  - Example: SCE warehouse rooftop solar project cost \$3.50/watt in March 2008 application (~100 MW built). What should SCE PPA cost have been if PPA structure had been used? SDG&E least cost/best fit solar PPAs was approved in 2011 and 2012, after 3-4 years of dramatic solar project cost reductions (\$2/watt?). City's CCA consultant should back calculate what reasonable PPA contract prices should have been based on fair market value (Zillow housing price analogy) solar \$/watt in contract year (reference: DOE Sunshot 2009 cost projections).
  - Assuring SDG&E's low-cost natural gas-fired generation is properly accounted for in PCIA calculation (El Dorado 500 MW, Palomar 550 MW).



---

# PCIA also driven by the Market Price Benchmark

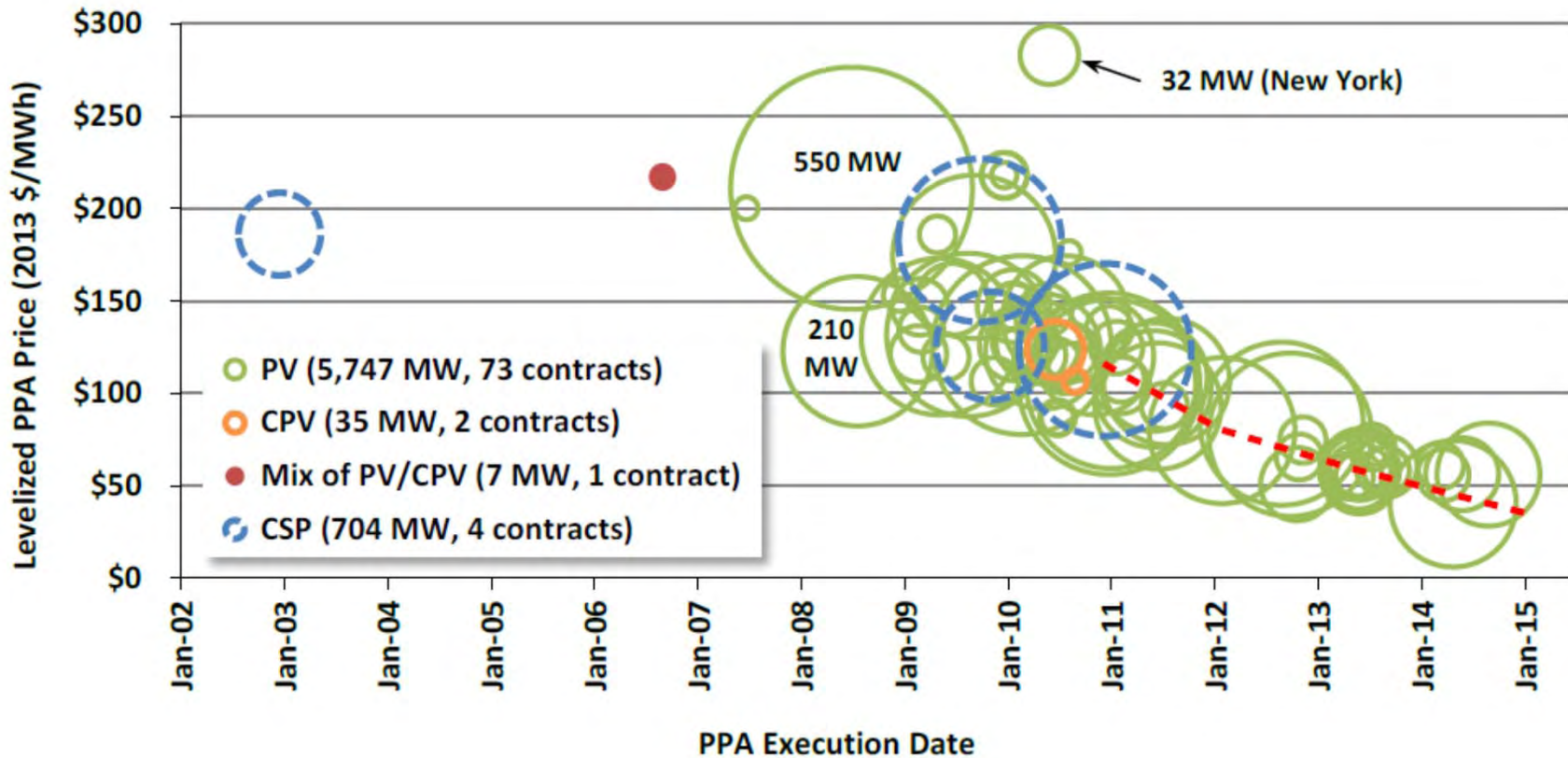
Source (of 2015 MPB): SDG&E Application A.15-04-014, Approval of 2016 Electric Procurement Revenue Requirement Forecasts, Prepared Direct Testimony of Yvonne M. Le Mieux, April 15, 2015, p. 9.

- Another issue for the City's CCA consultant to consider is the calculation of the Market Price Benchmark (MPB):
  - The MPB is that benchmark that SDG&E's energy cost is compared to in order to determine the magnitude of the PCIA.
  - SDG&E calculates the 2015 MPB at \$55.07/MWh.
  - The MPB includes an RPS adder that is supposed to reflect average additional costs of mandatory RPS contract commitments so MPB is an "apples-to-apples" comparison of a hypothetical average energy charge to SDG&E's energy charge.
  - Higher cost renewable energy contracts would tend to drive up the SDG&E PCIA, especially if the economic benefits of low-cost gas-fired generation in SDG&E's fleet are not fully accounted for.
  
- Issues for City's CCA consultant to address:
  - Is MPB RPS adder reasonable? Are mean PPA prices assumed in MPB representative of California IOU renewable supply diversity objectives?
  - Does it reflect solar "supply diversity" preference in SDG&E portfolio?



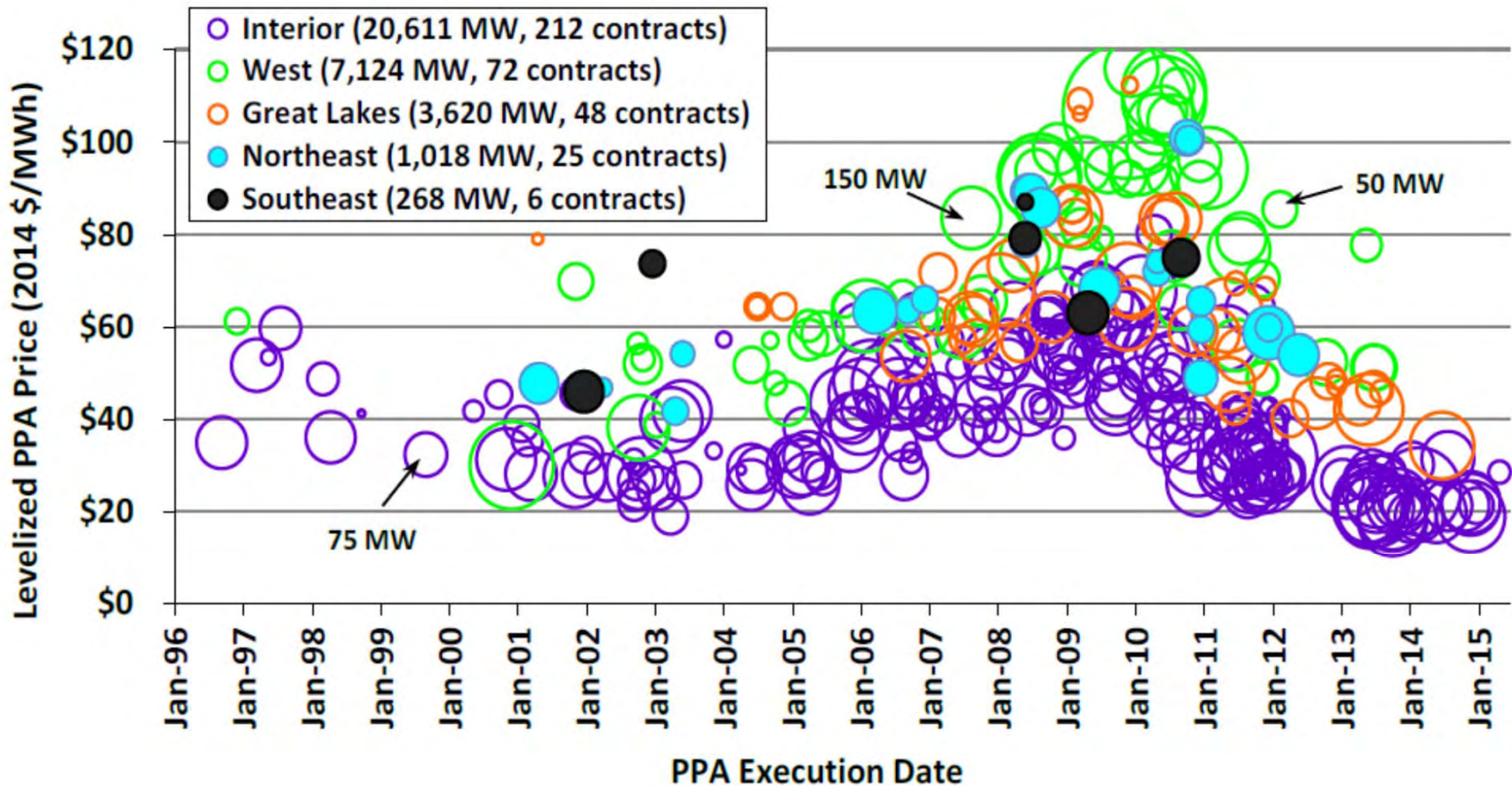
# SDG&E solar power purchase agreements signed in 2011 & 2012 – were they competitive?

Source: Lawrence Berkeley National Laboratory, *Utility-Scale Solar 2013*, September 2014, Figure 15, p. 28.



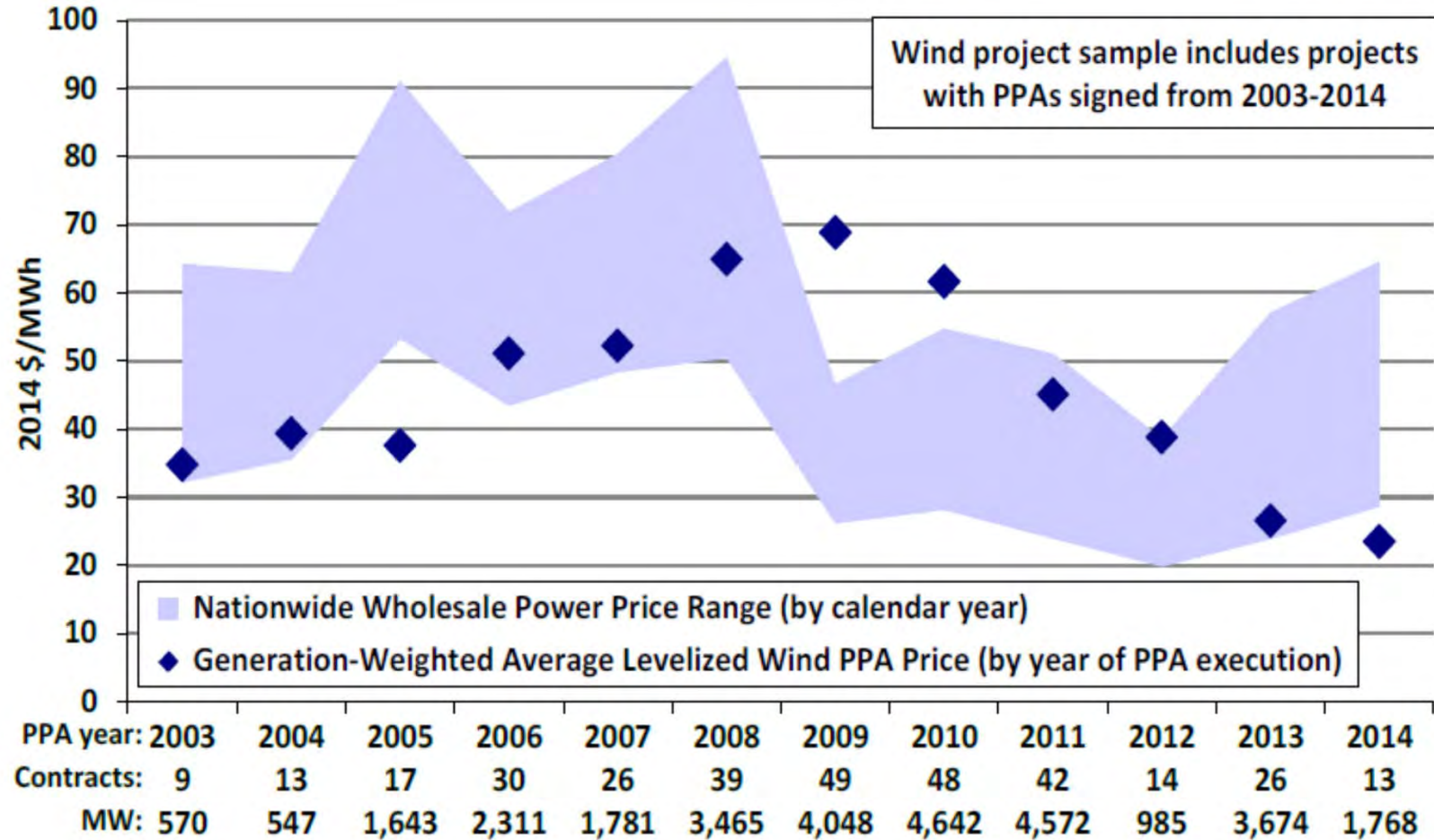
# 155 MW wind power PPA between SDG&E and Sempra – was \$106.50/MWh competitive when approved in 2012?

Sources: 1) Lawrence Berkeley National Laboratory, *2014 Wind Technologies Market Report : Summary*, August 2015, p. 49, and 2) CPUC, Public Business Meeting Agenda 3290, March 8, 2012, Item 20, p. 9. “PPA price is \$106.50/MWh, and will be time-of-delivery adjusted.”



# Affiliate wind power PPA between SDG&E and Sempra – wind power PPA should be lower cost than MPB and is not

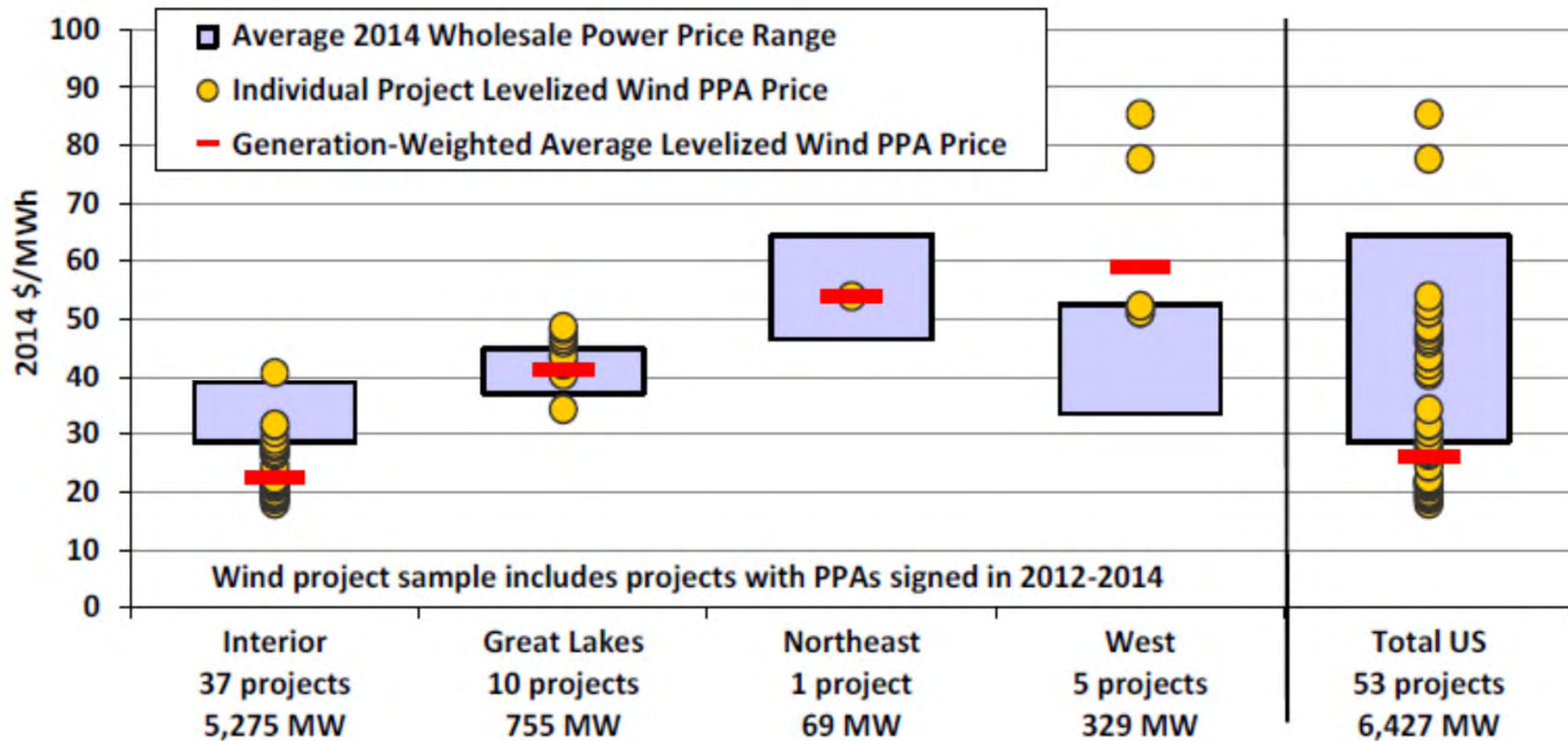
Sources: 1) Lawrence Berkeley National Laboratory, *2014 Wind Technologies Market Report : Summary*, August 2015, p. 51.





# Average 2012-2014 wind power PPA contract cost, in West, about \$60/MWh, not \$106.50/MWh

Sources: 1) Lawrence Berkeley National Laboratory, *2014 Wind Technologies Market Report : Summary*, August 2015, p. 52.



---

# Conclusions

- Initial assessment of City of San Diego CCA financial benefit is favorable.
- City's consultant should:
  - Verify CCPartners model results.
  - Obtain SDG&E solar PPA contract prices (via PRA request as necessary, 3-yr blackout period has passed) and compare them to PPA contracts signed by other California IOUs and other Southwest utilities in same year.
  - Do the same for SDG&E wind PPA contracts.
  - Identify any substantive discrepancies between SDG&E RPS contract pricing and industry-average pricing for same year and technology.
  - Evaluate reasonableness of SDG&E PCIA and MPB assumptions.
  - Develop suite of strategies if necessary, such as incorporating to some RPS contracts into the CCA portfolio, to assure PCIA issue does not impede steady build-out of City of San Diego CCA.