

WREZ Model Extension Results

- Original WREZ Model
 - Calculated the delivered cost of power to a single load zone from a selected portfolio of renewables within one or more WREZ zones
 - Peer Analysis Tool looked at one load zone and derived supply curve of all resources from all WREZ zones
 - New WREZ Model version 2.1 ready for release
- LBNL's WREZ Model Extension
 - Derived the least cost solution to reach targeted level of renewable penetration (e.g., 33% Base Case) across all 20 load zones and the 55 WREZ zones



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LBL-3077E

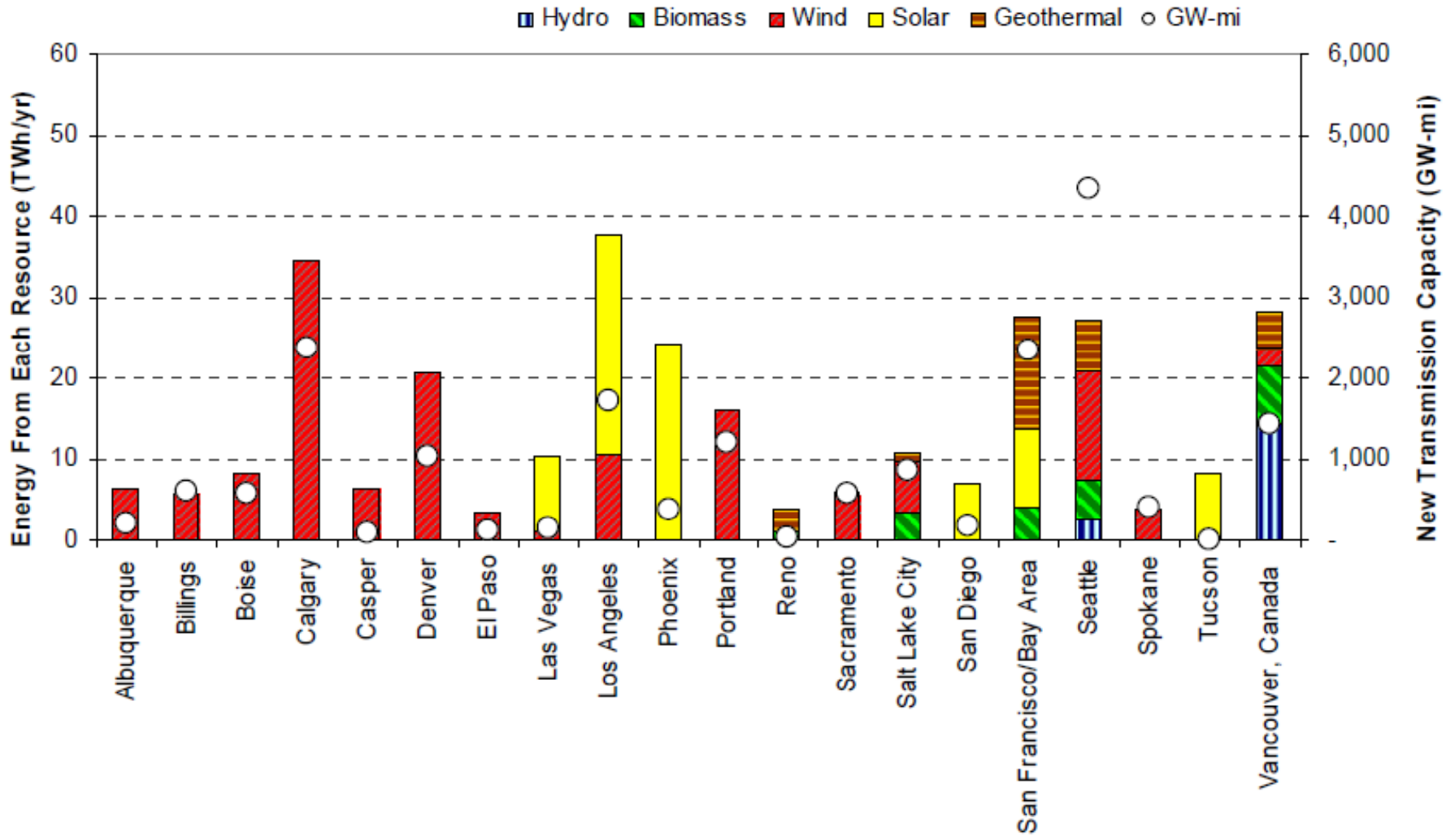
Exploration of Resource and Transmission Expansion Decisions in the Western Renewable Energy Zone Initiative

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February 2010

<http://eetd.lbl.gov/EA/EMP/reports/lbnl-3077e.pdf>



33% Base Case

- Wind
 - 49% of the incremental renewable portfolio
 - 9 of the 20 load zones 100% wind (NW, Rocky Mtn)
- Solar (thermal, wet cooled, 6 hr storage)
 - 29% of the incremental renewable portfolio
 - Significant in Southwest (Incremental demand in AZ 100%, NV 66%, and CA 56%)
- Other
 - 10% geothermal; 7% biomass; 6% hydro

Load Zone Source of Renewables

- Salt Lake City
 - Biomass, wind (WY, ID, UT) and geothermal
- San Francisco
 - Biomass, solar (CA) and geothermal
- Sacramento
 - Wind (CA), solar (CA)
- Denver
 - Wind (WY)