
Salton Sea Restoration & Renewable Energy Initiative

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Southern California Renewable Energy Summit

October 6, 2014



www.iid.com

QSA: Exposed Playa



Salton Sea: Playa Exposure

Current Coordinate System: GCS_North_American_1983
Datum: D_North_American_1983

2012 RapidEye Mosaic Image

Salton Sea Restoration & Renewable Energy Initiative

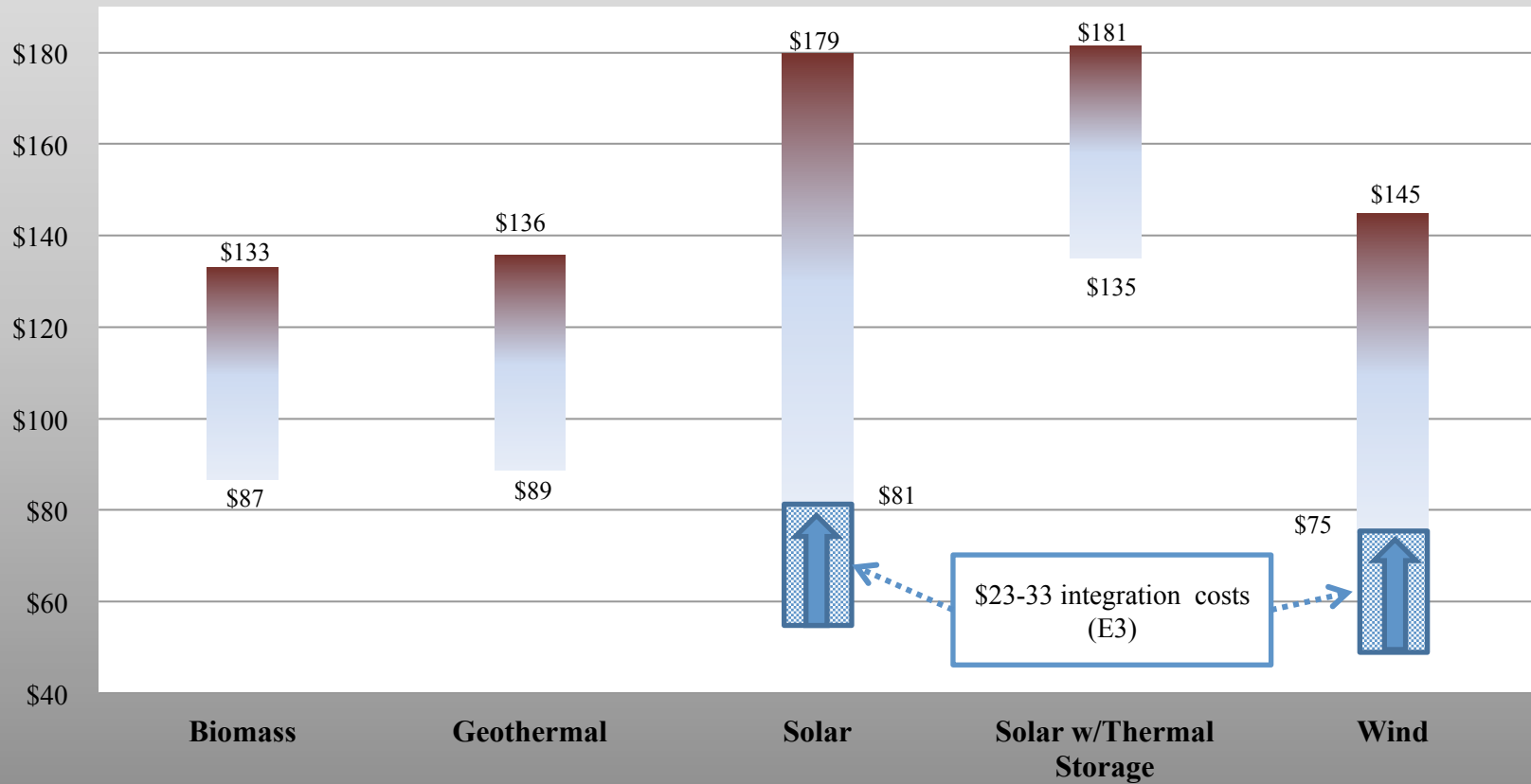
- Senate Bill 1139 - State carve-out of 500 MW of renewable energy
 - *Status*
 - 4/29/14 - Senate Energy, Utilities and Communications Committee – Passed on 6-2 vote
 - 5/23/14 – Senate Appropriations Committee – Passed on 5-2 vote
 - 5/28/14 - Senate floor – Passed on 21-11 vote
 - 6/23/14 – Assembly Utilities and Commerce Committee – Passed on 8-5 vote
 - 6/26/14 - Assembly Natural Resources Committee – Passed on 6-2 vote
 - 8/6/14 – Made it out of the Assembly Appropriations Committee
 - 8/18/14-8/31/14 – The bill became eligible for a vote before the Assembly floor, but never made it to the floor; lacking one vote for approval.

Protecting the IID Balancing Authority: State Legislative Requirements

- Renewable Portfolio Standards - SBx1-2
 - *Requires publicly-owned utilities to serve retail load with renewables stepping up to 33% by the end of 2020 and beyond*
- AB32
 - *Cuts GHG emissions to 1990 level by 2020*
- AB 2363
 - *Ensures public utilities procure diverse, cost-effective mix of new and existing renewable resources to meet RPS and consider integration costs in renewable procurement decisions*
 - *In signing letter, Governor called for utilities across the state to procure more geothermal and bio-mass*

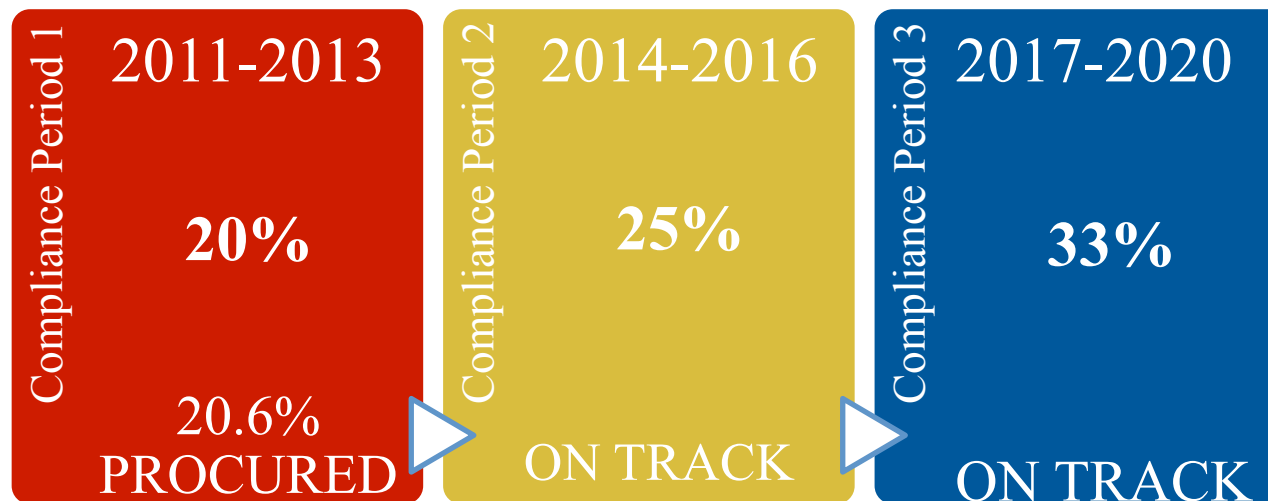


Current Costs of Renewable Energy (LCOE\$/MWh)

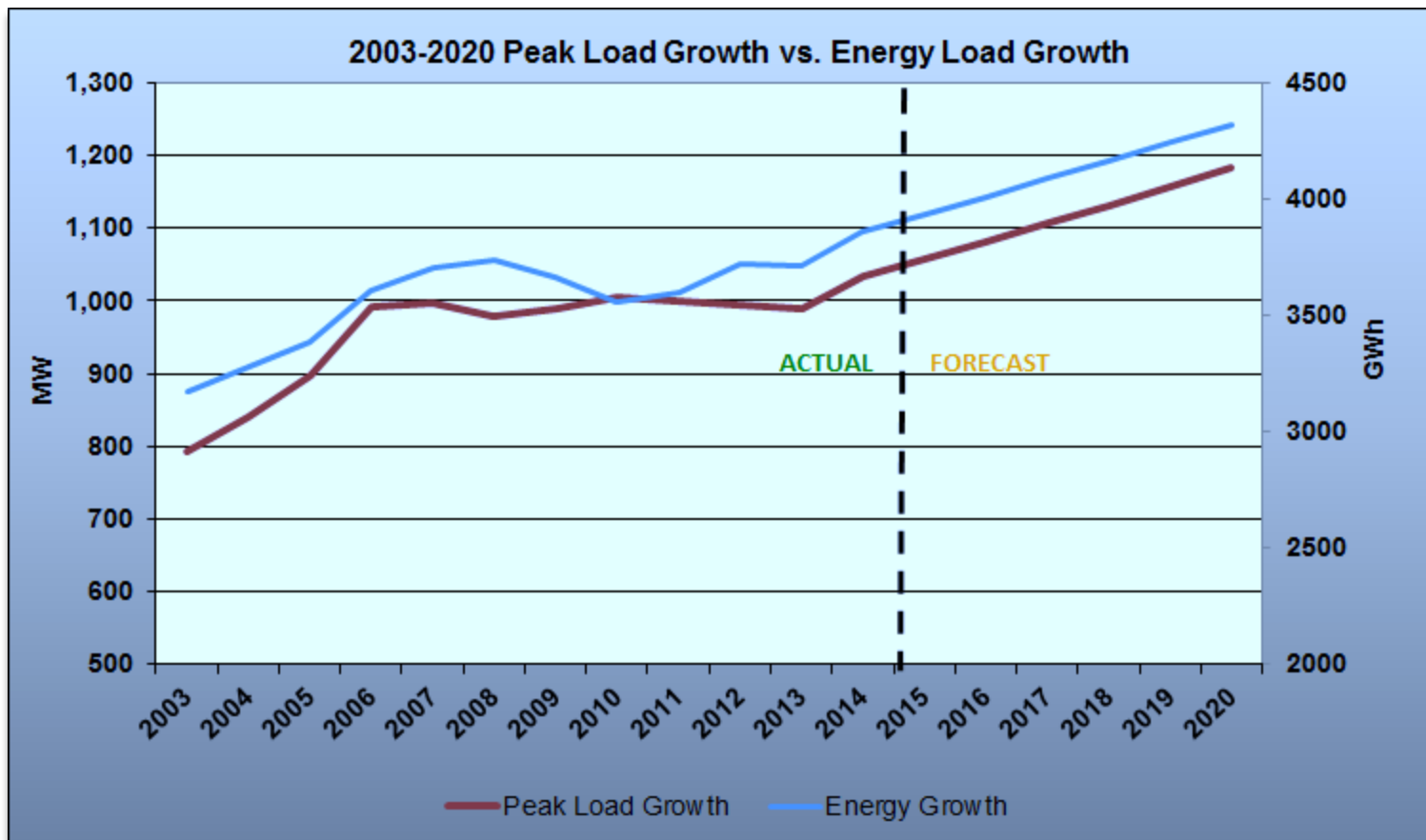


Resource Planning Outlook: Renewable Portfolio Standard

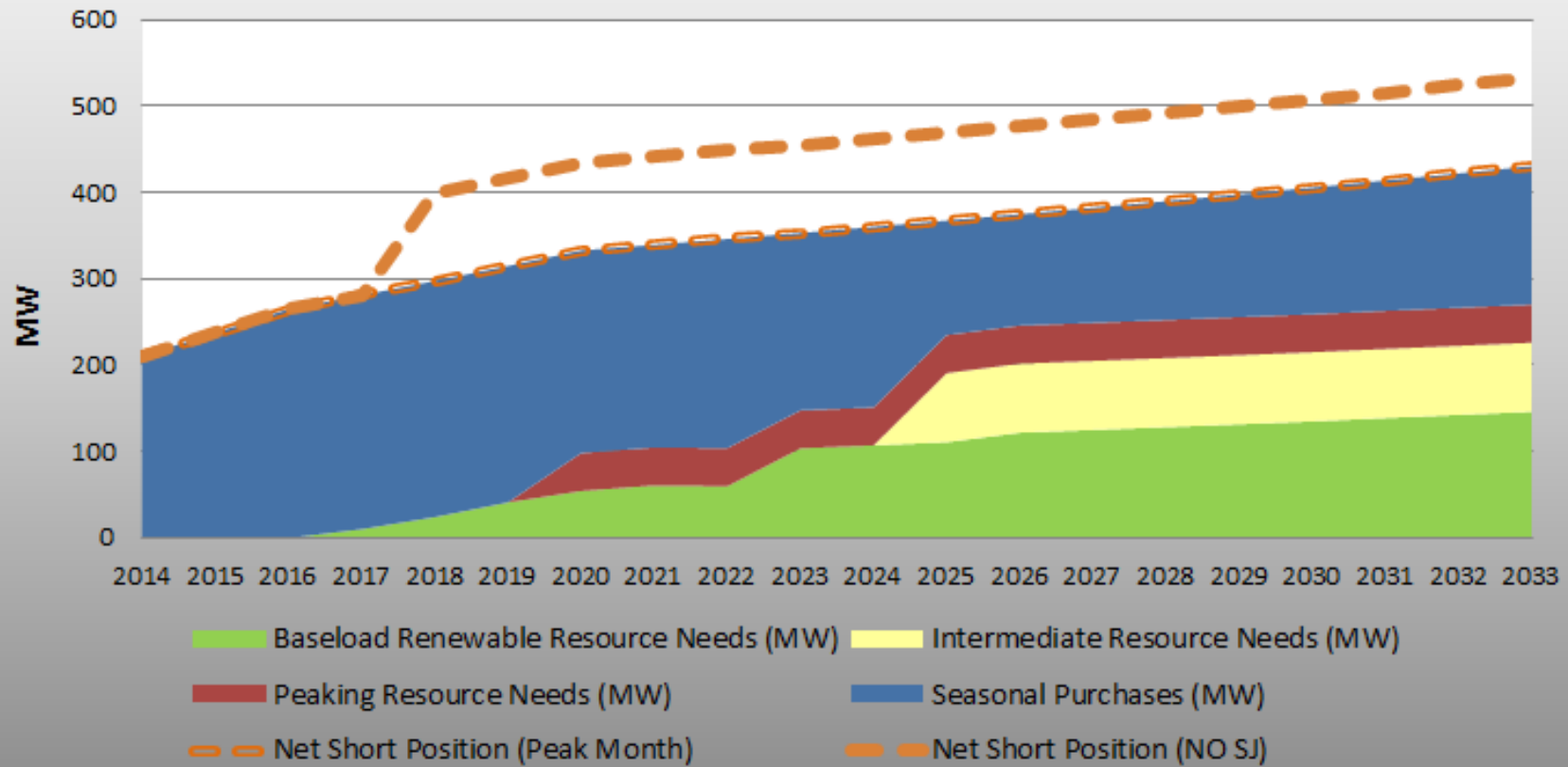
- RPS needs begin in 2017-2018
 - *Growth primarily due to load forecast growth, increases in RPS requirements and contract expiration*



System Requirements: Energy vs. Peak Load Growth (MW)



Approximate Additional Resource Needs - 20 Years



Governor's Carbon Free Initiative



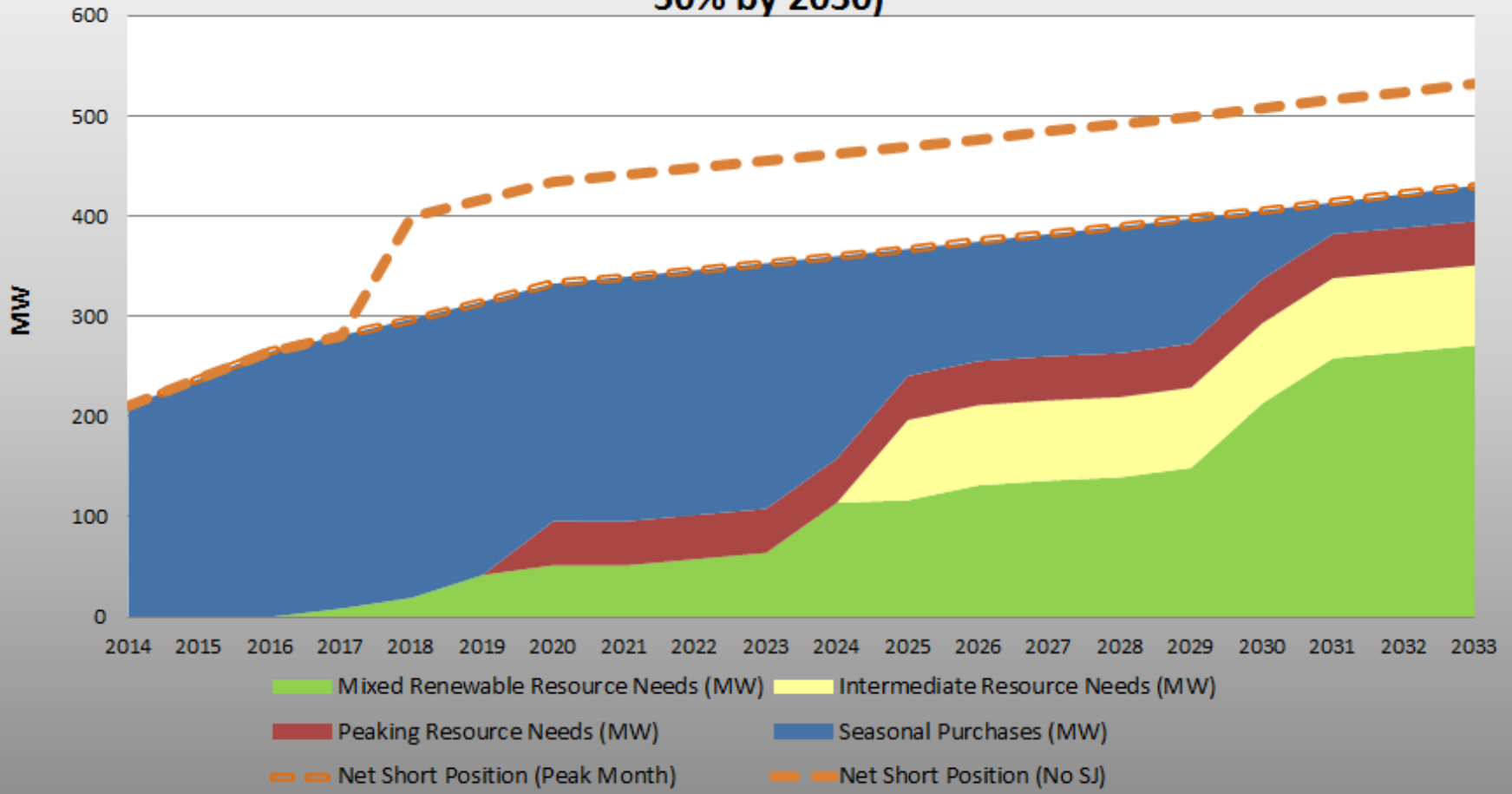
Resource Planning Outlook:

Renewable Generation by Resource Type

	33% RPS	40% RPS	50% RPS Large Solar	50% RPS Diverse	50% RPS Small Solar	50% RPS Rooftop Solar
Utility RPS Procurement						
Biogas	2,133	2,133	2,133	4,422	2,133	2,133
Biomass	7,465	7,465	7,465	9,754	7,465	7,465
Geothermal	16,231	16,231	16,231	20,811	16,231	16,231
Hydro	4,525	4,525	4,525	4,525	4,525	4,525
Solar PV - Rooftop	0	943	2,290	2,290	2,290	22,898
Solar PV - Small	6,536	9,365	13,405	13,405	31,724	11,116
Solar PV - Large	22,190	33,504	49,667	29,059	31,349	31,349
Solar Thermal	4,044	4,044	4,044	10,913	4,044	4,044
Wind (In State)	20,789	24,561	29,948	27,659	29,948	29,948
Wind (Out-of-State)	4,985	4,985	4,985	11,854	4,985	4,985
Subtotal, Utility Gen	88,897	107,755	134,693	134,693	134,693	134,693
Customer Renewable Generation						
Solar PV- Rooftop, net energy metered	10,467	10,467	10,467	10,467	10,467	10,467
Subtotal, Customer Gen	10,467	10,467	10,467	10,467	10,467	10,467
Total Renewable Generation						
Total, All Sources	99,365	118,222	145,160	145,160	145,160	145,160

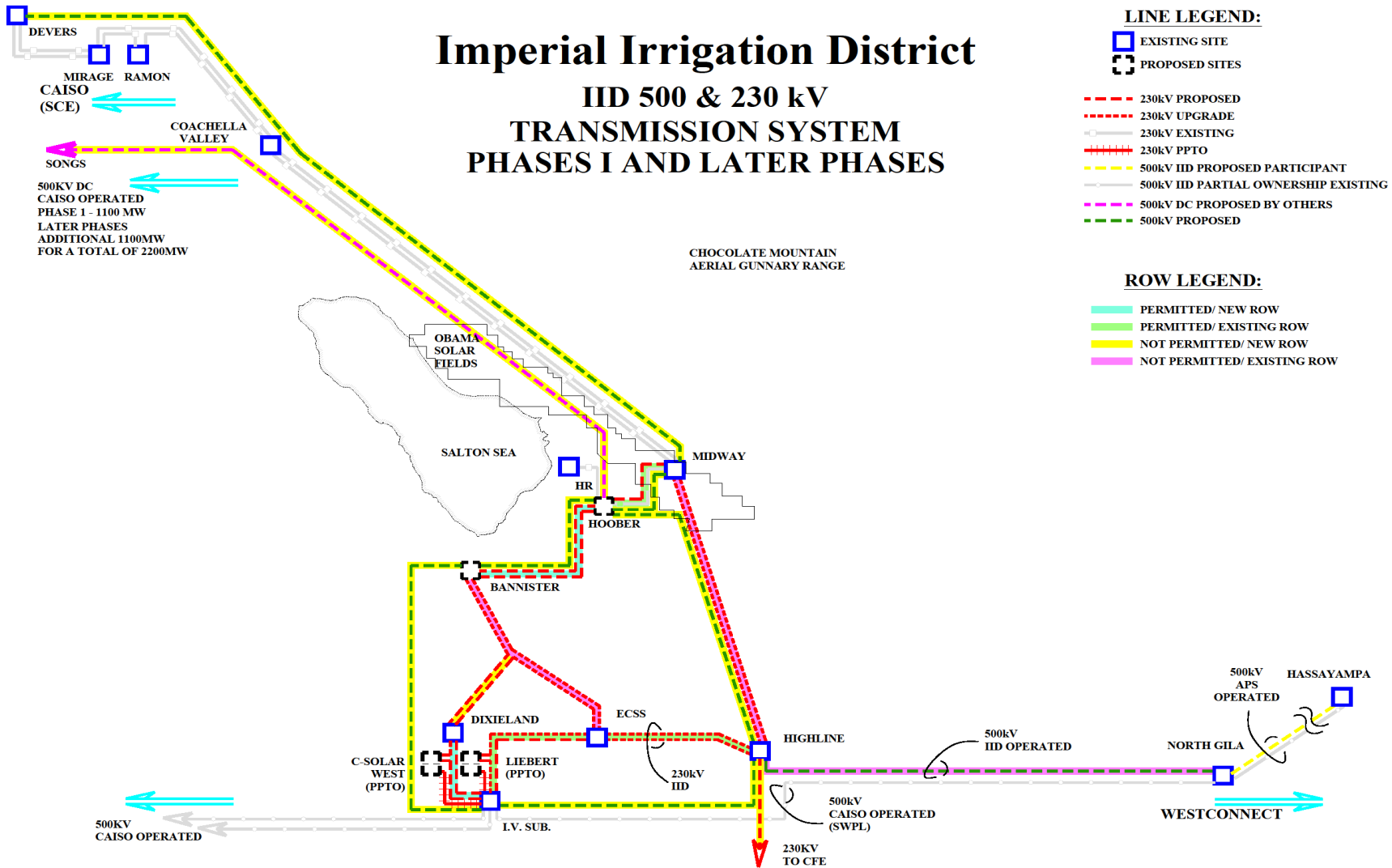
Source: E3, *Investigating a Higher Renewables Portfolio Standard in California*, Jan. 2014

Approximate Additional Resource Needs - 20 Years (40% RPS by 2024; 50% by 2030)



Transmission

Imperial Irrigation District IID 500 & 230 kV TRANSMISSION SYSTEM PHASES I AND LATER PHASES



For more information about the
Salton Sea Restoration & Renewable Energy Initiative,
please visit: <http://www.iid.com/saltosea>

Thank you!



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