East Bay Community Energy

Local Development Business Plan

Net Energy Metering Strategy

Overview of Draft Deliverable

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LDBP Project Team:

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The Offset Project

Clean Coalition
Making Clean Local Energy Accessible Now

eco·shift CONSULTING

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Why offer NEM?

- Without NEM, opt-out risk greatly increases
- Expectation of offering; other CCAs offer excess generation (export) credit
- Support local generation and job-creation
- Local demand curve can accept more DER in the short-term
- Use NEM structure to incent storage and other solutions to help manage the neck and tail of the duck curve

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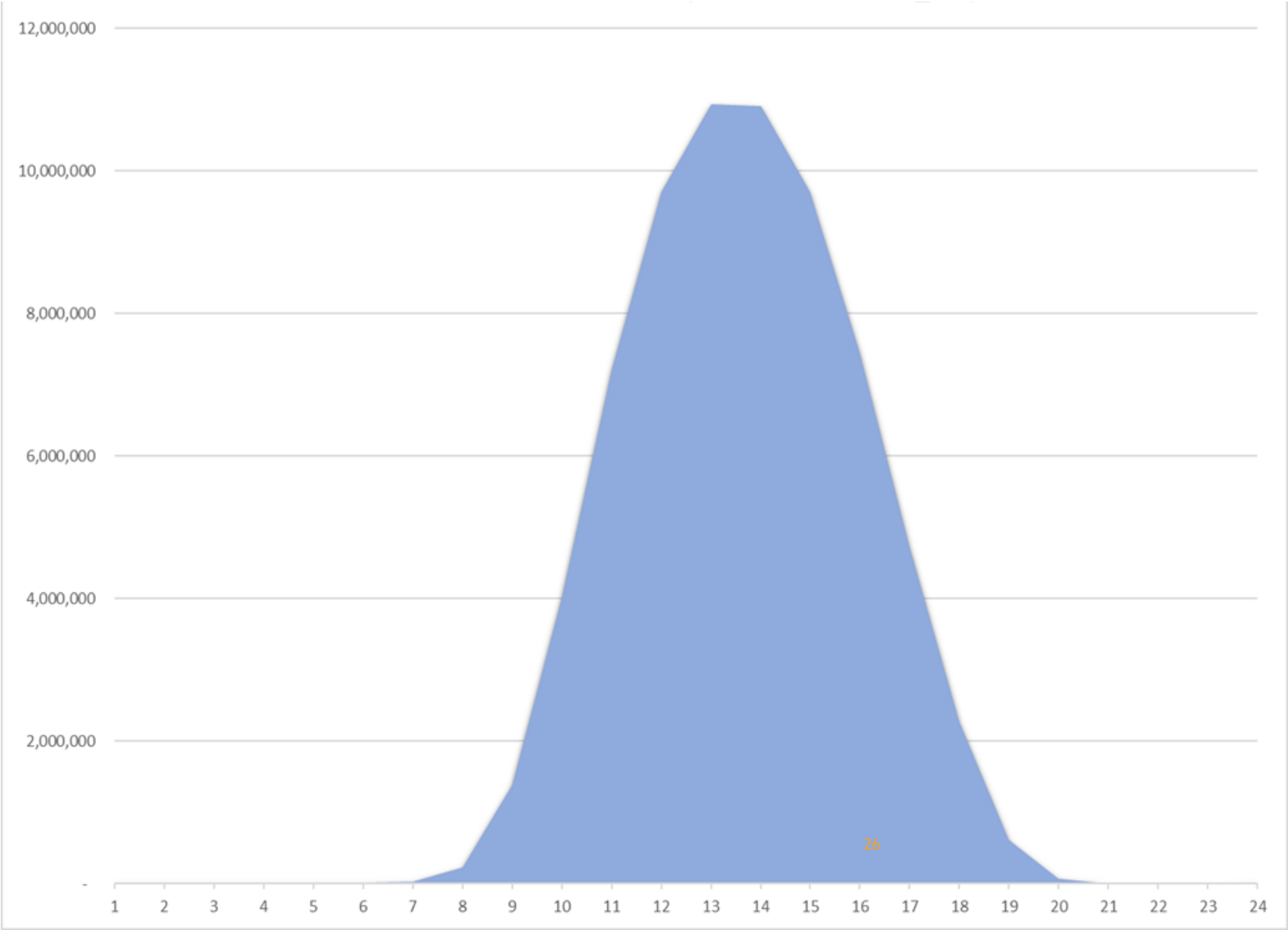
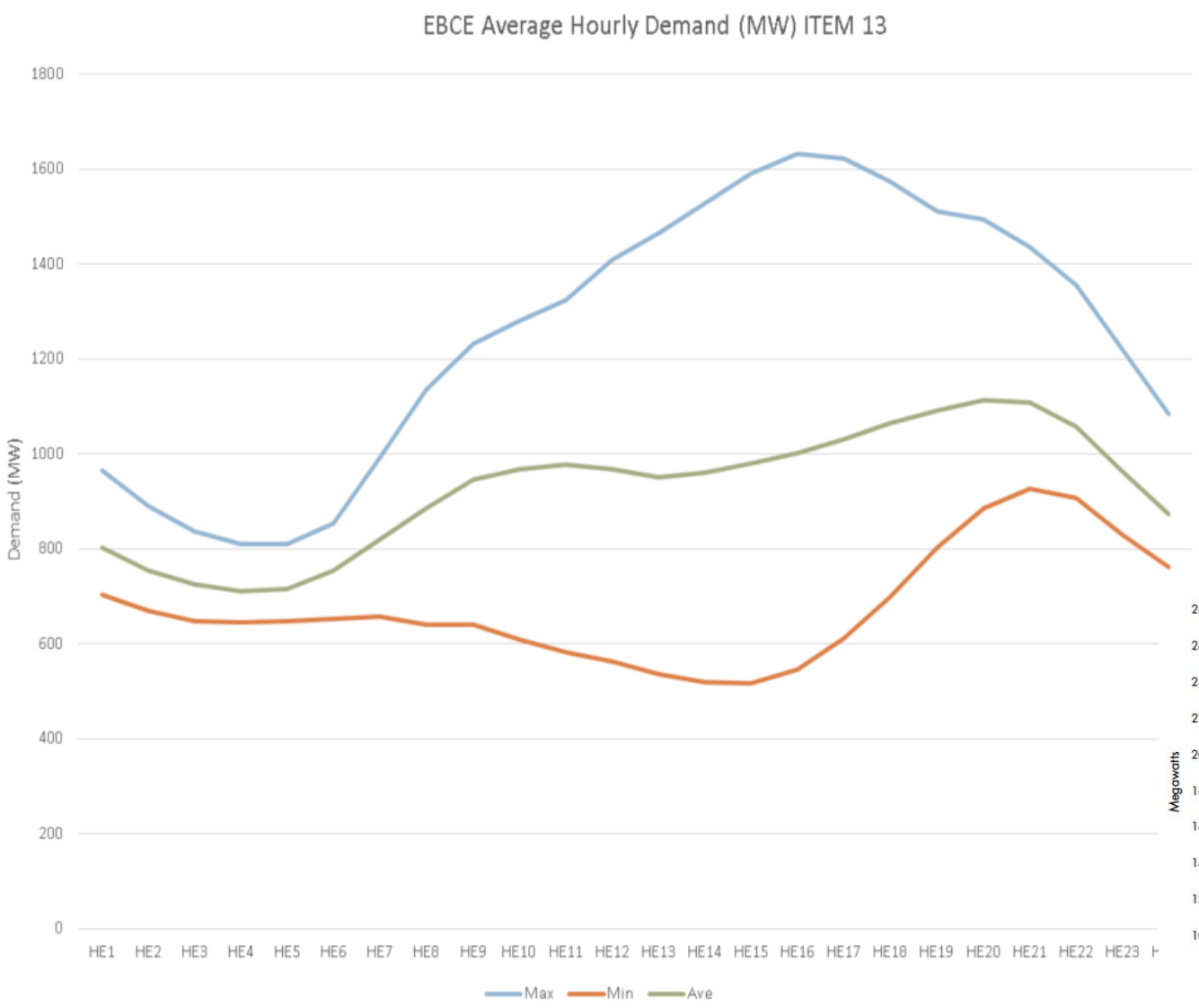
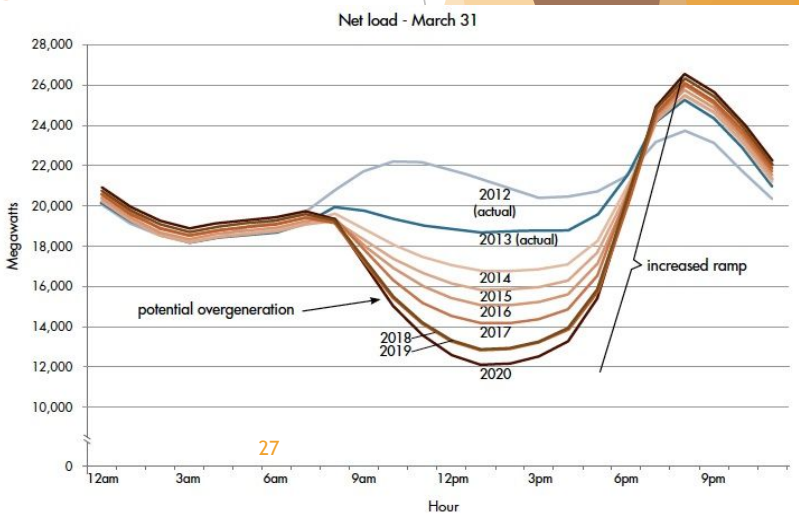
NEM HOURLY kWh	
Hour	NEM kWh
1	10,918
2	13,286
3	13,413
4	16,646
5	14,380
6	16,828
7	29,588
8	226,980
9	1,390,568
10	4,033,571
11	7,215,972
12	9,709,437
13	10,939,845
14	10,907,614
15	9,705,253
16	7,463,186
17	4,729,960
18	2,282,935
19	617,082
20	62,002
21	2,357
22	2,009
23	6,514
24	9,042







CA demand curve (source: CAISO, 2013)

EBCE Enhanced NEM Adders

Other CCAs: MCE, PCE, SCP offer $0.01/kWh for export; SVCE $0.008/kWh if subscribing to Green Prime premium product

EBCE:

Export Adder $0.005/kWh

For all existing and new NEM customers (prevent opt-out)

Community Benefit Adder: $0.005/kWh

Additional incentive to income-qualified residential customers and local tax-exempt entities who may otherwise not be able to access solar installations

Workforce Adder: $0.005/kWh

Addresses the pressing desire in the EBCE community to incent projects that use skilled local labor paid at livable wages

Supply-Shift Adder: $0.005/kWh

Incents west-facing solar, small wind, energy storage—with capacity-sharing

**Qualified projects only get one adder per category*
Room for more adders overtime

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Financial Impacts from Adders

NEM Export Adders ($/kWh exported)	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6
Standard ($0.005)	$355K	$710K	$806K	$902K	$998K	$1.09M
Community ($0.005)	$18K	$36K	$54K	$72K	$90K	$108K
Workforce ($0.005)	$18K	$45K	$81K	$126K	$180K	$234K
Supply-Shift ($0.005)	$30K	$63K	$117K	$180K	$264K	$363K
Annual Totals	**$421K**	**$854K**	**$1.06M**	**$1.28M**	**$1.53M**	**$1.80M**

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New Generation Impacts

Technology Installed - Cumulative New NEM (MW)	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6
Solar PV	30	60	90	120	150	180
Small Wind	0	0	2	4	6	8
Energy Storage	1	3	7	14	25	41
Total New Power Capacity (MW)	**31**	**63**	**99**	**138**	**181**	**229**
Total New Production (MWh)	**45K**	**90K**	**139K**	**188K**	**237K**	**286K**

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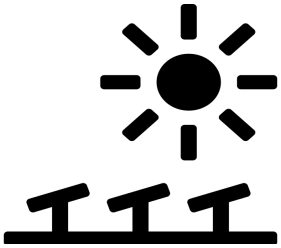
Community Benefits of NEM program



229 MW

Solar, Wind, Storage

$634 Million

Local Project Development

480

Local Jobs (annual)

Assumes: 188 MW solar+wind @ 2.50/W & 41 MW storage @ $4/W.
Job impacts: JEDI Model, NREL

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EBCE Benefits from NEM Program

- Mission Progress
- Community relationship-building
- Reduced energy procurement costs and risks
- Reduction in Resource Adequacy purchasing
- Reduction in likelihood of energy imbalance penalty fees from CAISO
- Increased Congestion Revenue Rights (CRR) revenues
- Increased opportunity for PG&E collaboration
- Increased access to state and national grants

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NEM Program Parameters

- Transition existing customers after true-up date
- True-up on a monthly billing basis, rather than on annual basis
- Pay-out credits in late Spring
- Clear term of NEM adder eligibility

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Planning for NEM Successor Programs

- Start to prepare for life after NEM, with set date—set precedent for CCAs/IOUs
- Instantaneous-netting/export-credit models are developing: “Value of Distributed Energy Resources (VDER)” in NY
- Provides means of valuing renewable production based on offset of wholesale procurement and other costs
- Value should include Local Marginal Pricing (LMP) as well as environmental benefit, social equity, job creation, community health considerations

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NEM Recommendations

- Finalize NEM guidelines for immediate marketing and on-boarding
- Carve out monthly and annual budget requirements for NEM export credits and marketing
- Develop internal processes to track and allocate NEM export credits
- Track uptake of various export credit programs
- Explore opportunities for pilot programs, such as VPP-enabled energy storage or small wind systems
- Pursue state or national grants for pilots
- Identify steps needed to obtain and manage outside funds for LMI, tax-exempt, or other target customer groups

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