



Hawaii Solar Energy Association



Legislative Informational Hearing

Tuesday, January 20, 2015

- Status of the solar interconnection queue
 - non-export solar interconnection
 - future integration of PV

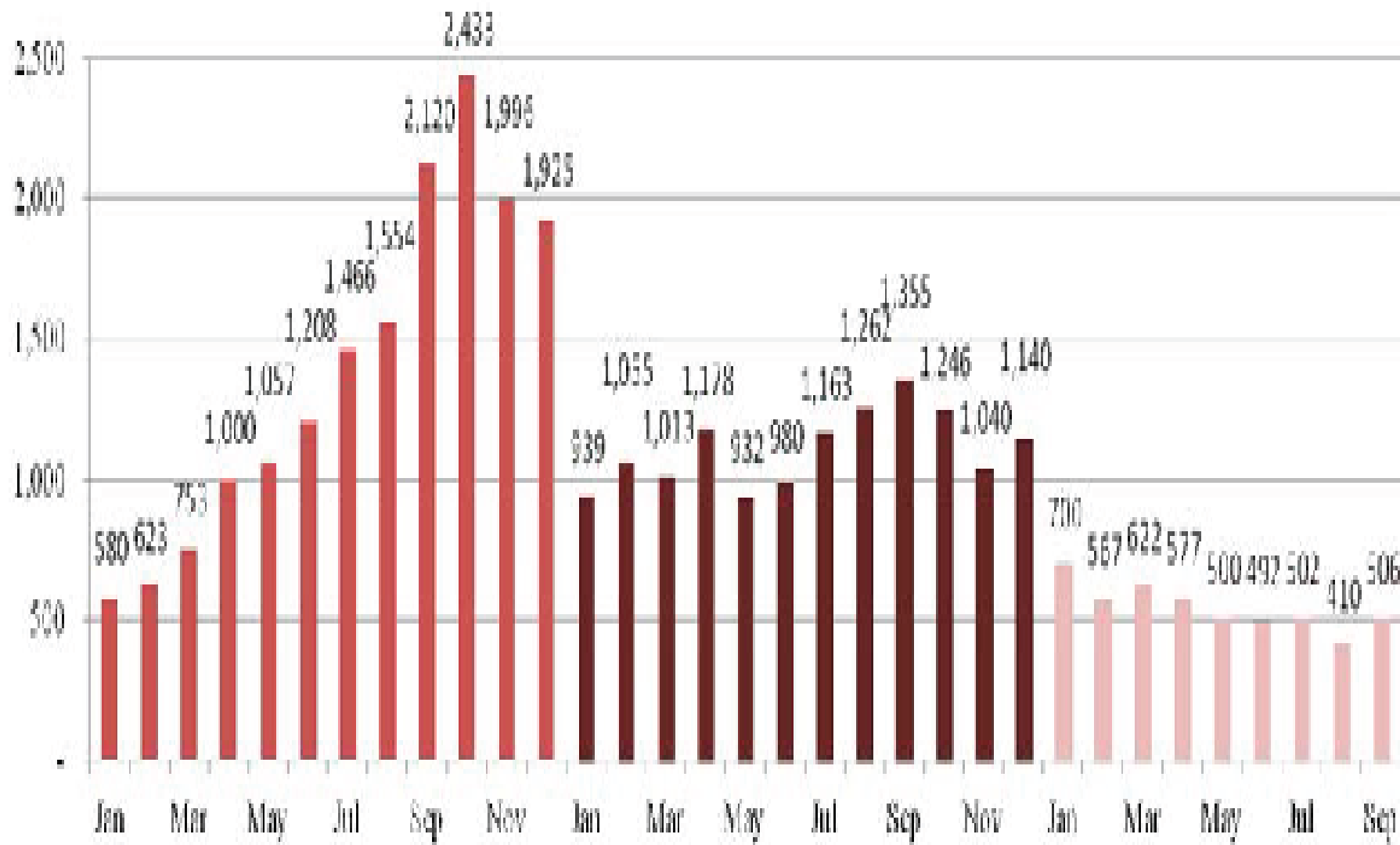


Hawaii Solar Energy Association



- HSEA incorporated in 1977 in Hawaii
- Currently has 90 member companies
- Supports the adoption of both solar hot water and photovoltaics

2012-2014 O'ahu PV Permits Issued





HECO's Proposals



- Clear majority of queue by April 2015
- Increase MDL to 250%
- Increased transparency
- Pilot on controlled export



NEM to schedule Q ?



- PUC should determine “fairness” questions
- DER—Distributed Energy Resources (2014-0192) pending



What does schedule Q mean?



- Base rate + ECAC (energy cost adjustment charge)
- Ranges from 12-16 cents/kWh
- Anything else?



Uncompensated Benefits Under Proposed NEM Changes



- Reduced line loss
- Delayed need for upgrades
- Reduced afternoon peak
- Increased energy independence
- Customer invested and maintained
- Reduced greenhouse gas emissions



What does it cost?

Hawaiian Electric Company

Estimated Lost Contribution to Fixed Costs and Surcharges, based on NEM installations as-of December 31, 2013

Rate	Total Lost kWh/yr ¹	Base Energy Rate ² , cents/kWh	Eff. PPAC ³ cents/kWh	REIP & DSM ⁴ cents/kWh	RAM ⁴ cents/kWh	Eff. Base Energy Rate Dec, cents/kWh	Production Energy Rate ⁵ cents/kWh	Lost Contribution to Fixed Cost, cents/kWh	Total Lost Contribution to Fixed Cost, \$/Yr
	A	B	C	D	E	F = sum(B:E)	G	H = F - G	J = A * H / 100
R	233,744,027	22.4707	3.3179	0.1278	0.5524	26.4688	15.3950	11.0738	\$25,884,346
G	6,437,210	21.3317	2.8427	0.1274	0.5524	24.8542	15.4450	9.4092	\$605,690
J	39,040,280	16.9734	2.5845	0.1274	0.5524	20.2377	15.4560	4.7817	\$1,866,789
P	635,304	14.9013	2.4266	0.1274	0.5524	18.0077	15.3860	2.6217	\$16,656
Total	279,856,820								\$28,373,481

Rate	Total Lost Contribution to Fixed Cost, \$/Yr	Forecast 2014 Sales ⁶ kWh/yr	Estimated Impact on Rates, ¢/kWh
	K = J	L	M = (K / L) * 100
R	\$25,884,346		
G	\$605,690		
J	\$1,866,789		
P	\$16,656		
Total	\$28,373,481		
Total Company		6,525,400,000	0.43

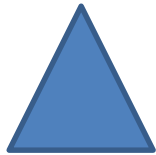
Notes:

- Annualized kWh generated from NEM Installations as of 12/31/13: Hawaiian Electric Distributed Technology Applications.
- Source: Base Energy Rates from Docket 2010-0080 (HECO 2011 Test Year).
 sched R: Docket 2010-0080 (HECO 2011 Test Year); Final revised tariffs, Exhibit B, Attachment 1, page 5, filed 07/24/2012.
 sched G: Docket 2010-0080 (HECO 2011 Test Year); Final revised tariffs, Exhibit B, Attachment 1, page 13, filed 07/24/2012.
 sched J: Docket 2010-0080 (HECO 2011 Test Year); Final revised tariffs, Exhibit B, Attachment 1, page 24, filed 07/24/2012.
 sched P: Docket 2010-0080 (HECO 2011 Test Year); Final revised tariffs, Exhibit B, Attachment 1, page 126, filed 07/24/2012.
- PPAC Rates Effective December 2013.
- REIP and DSM rate from effective rate summaries for December 2013, RAM based on Decoupling Calculation workbook, Schedule A (with settlement revised 05/14/13), page 1.
- Source: Cost-of-service calculation, from Docket 2010-0080 (HECO 2011 Test Year); Final revised tariffs, exhibit C, page 80, filed 07/24/2012.
- Source: Hawaiian Electric Sales Forecast, May 2013.
 Since the lost kWh in Column A represents kWh from all installations since the inception of Net Metering, part of the lost contribution to fixed cost is already reflected in utility rates.



Impact to a customer's bill

- At 0.35/kWh and 600 kWh of use=
\$211.02
- At 0.3543 kWh (0.35 + .0043) and 600 kWh use=
\$212.58



=\$1.56/month



Immediate impact to customers

- Longer paybacks
- Leases less available
- GEMS—reduced value proposition



Status of non-export progress



Thank you



leslie.cole-brooks@hsea.org



www.hsea.org