Distributed Generation in Maine

ISO DGFWG

December 8, 2015

Denis Bergeron MPUC

Incentives

- Maine's incentive mechanism for PV is currently limited to a net metering program.

- MPUC Chapter 313 requires annual reports to disaggregate net metered agreements by technology type: wind, solar, biomass, hydro, or fuel cell.

- Solar PV makes up 78% of reported net meter capacity and is the fastest growing component.
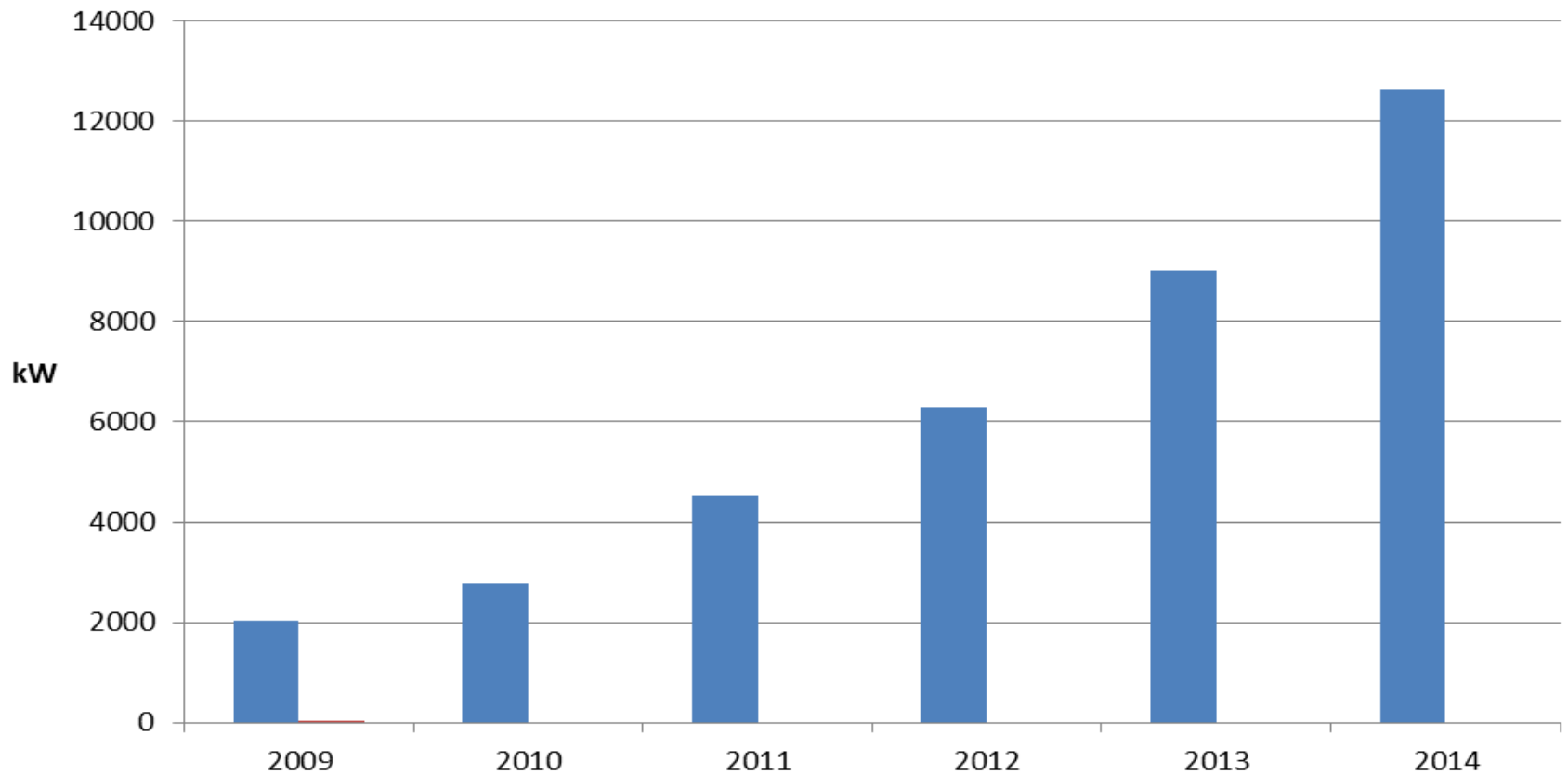
Incentives

- Resolve To Create Sustainable Growth in Maine's Distributed Energy Sector That Uses Market Forces To Fairly Compensate Energy Producers" (H.P. 863 - L.D. 1263, 2015)

- Resolve directed MPUC to initiate a Solar Policy Design Stakeholder Process (Docket 2015-00218) to examine alternative policy to net metering.

Stakeholder process

- Legislative resolve directed the MPUC to, "Develop at least 3 aggregate market size scenarios representing low, medium and high estimates of the total installed capacity that would be developed under existing rate structures if net energy billing were to continue through 2021."
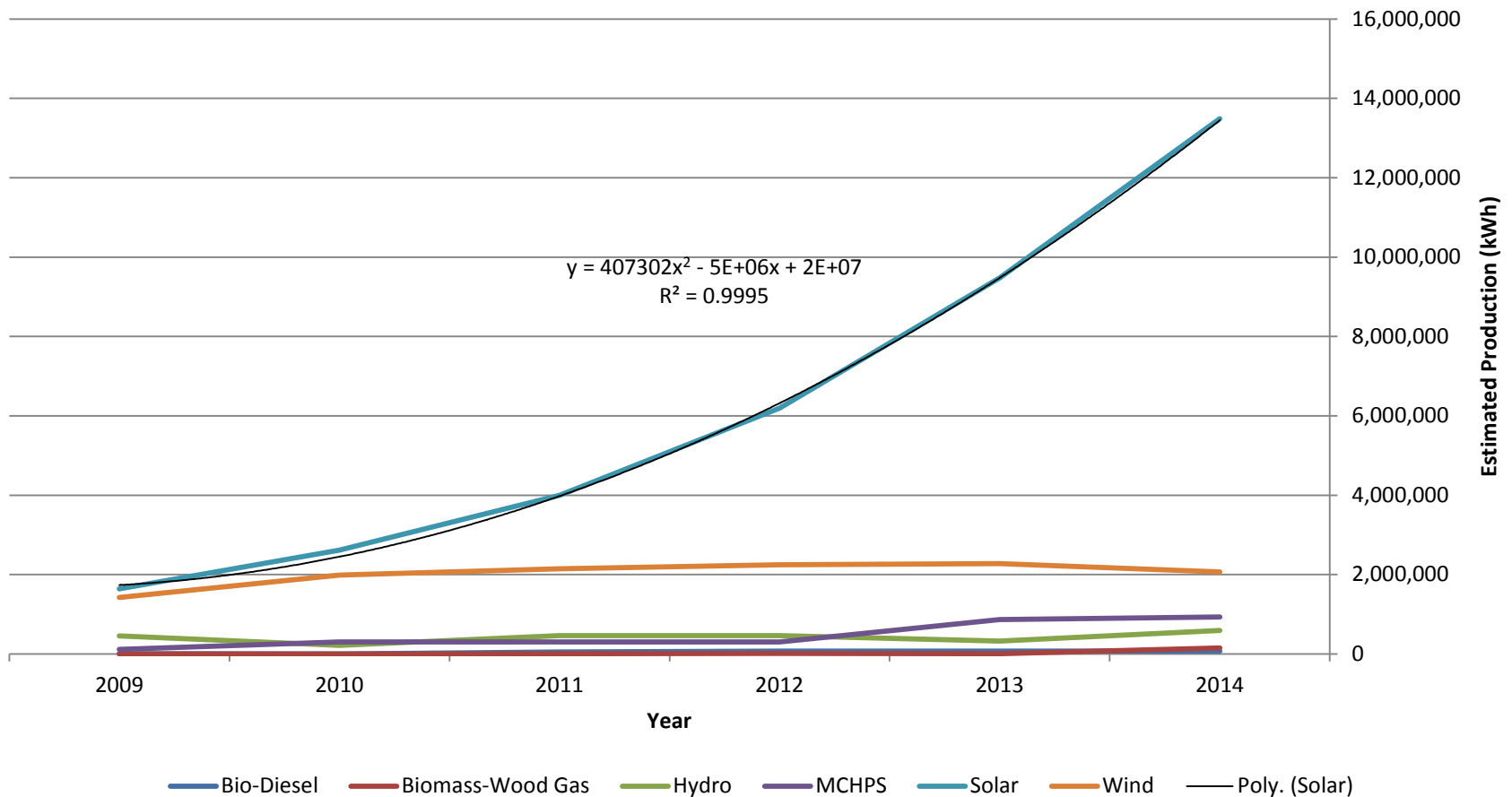
Net Metering Report Data

Maine Net Meter Installs

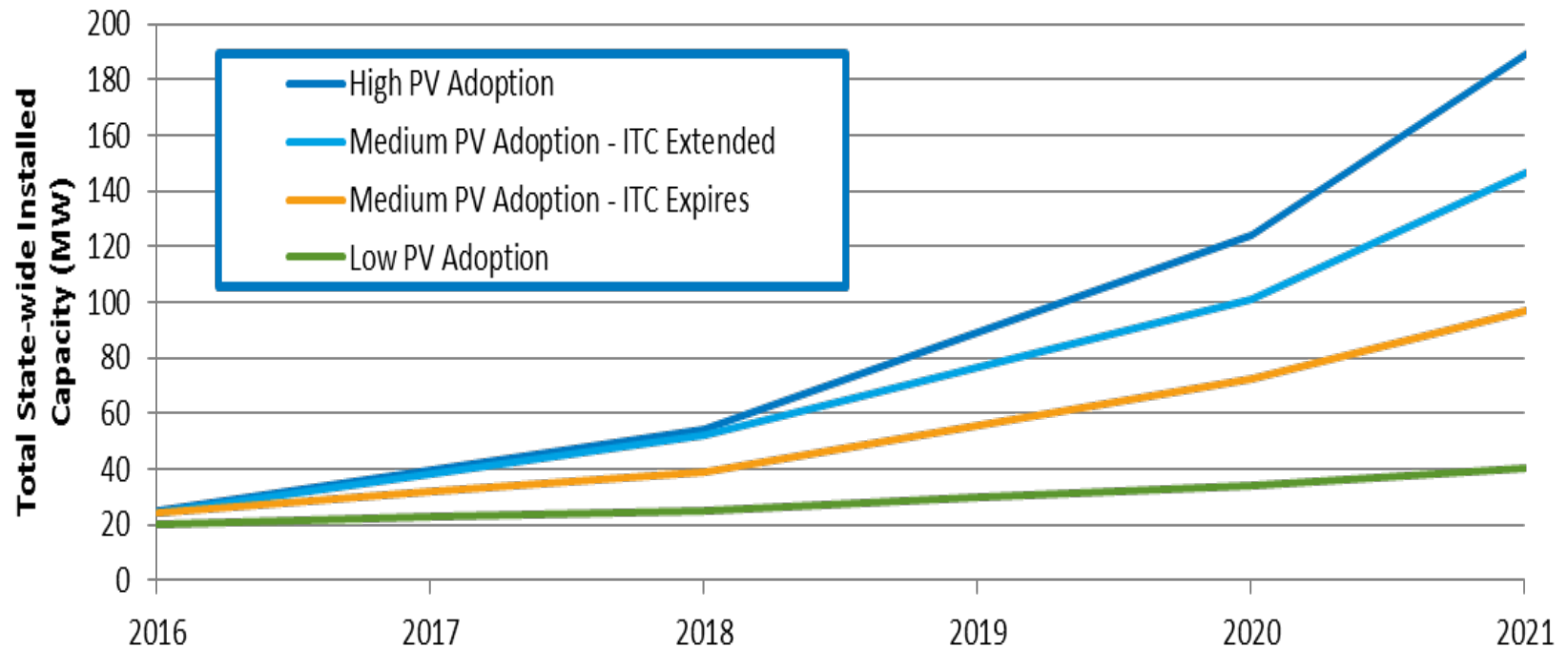# PV Increase is not a straight line

kWh subject to Net Billing in Maine, by fuel type

$y = 407302x^2 - 5E+06x + 2E+07$
$R^2 = 0.9995$

Estimated Production (kWh)

Year

Bio-Diesel — Biomass-Wood Gas — Hydro — MCHPS — Solar — Wind — Poly. (Solar)

NREL Forecast

Maine Specific Projected DG Penetration 2015 - 2021

Column1	2014	2015	2016	2017	2018	2019	2020	2021
MPUC High								200
NREL High	10.4		25	40	54	89	124	189
Bloomberg NEF (B)		19	29	41	69	100	133	169
NREL ITC	10.4		24	38	52	76	101	146
MPUC Medium								100
NREL no ITC	10.4		24	32	39	56	72	97
Bloomberg NEF (A)		19	29	35	41	48	56	64
MPUC Low								50
NREL Low	10.4		20	23	25	30	34	40
ISO-NE	10.4	12.7	15	17.3	19.6	21.9	24.2	26.5

Observations

- Initial projection for Maine rested on straight line annual incremental growth (little data).

- More data show increases are actually curvilinear.

- Beside Net Metering the only other incentive in Maine is the Federal ITC.

- There is no proposal to eliminate net metering, but other options are being examined.

Questions?