Northwest **Power** and **Conservation** Council



September 7, 2016

**MEMORANDUM**

**TO:** **Council members**

**FROM:** **Elizabeth Osborne, Washington staff**

**SUBJECT:** **Presentation by Inland Power and Light Company**

## BACKGROUND:

Presenter: Chad Jensen, Chief Executive Officer, Inland Power and Light Company

Summary Mr. Jensen will provide an update to the Council on Inland Power and Light Company's operations and programs.

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# Inland Power


Northwest Power & Conservation Council

Chad Jensen & John Francisco

Inland Power and Light Company

# WHAT DO WE WANT TO TALK ABOUT:

1. Inland's Renewable Program
2. Ductless Heat Pumps
3. Electric Vehicles
4. Q&A

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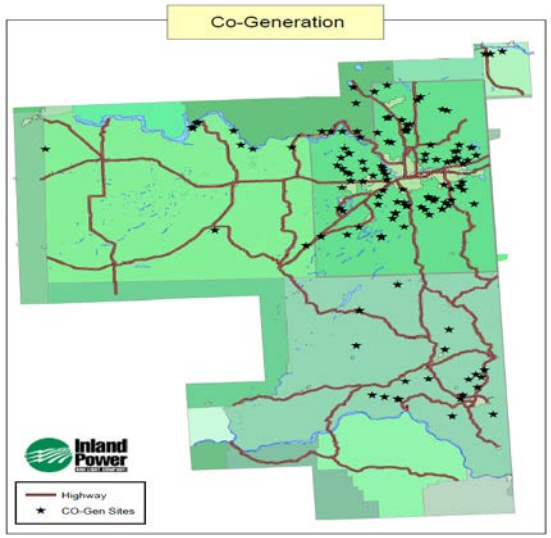
# RENEWABLE PROJECTS BACKGROUND INFO:

- Two State Regulations
  - RCW 80.60 – Mandates that Inland allow for net metering of electricity
  - WAC 458-20-274 – Provides for State Incentive Program (optional)

- Inland currently has 152 individually owned net metering locations, 1 Company owned Community Solar and 2 Utility Owned Community Solar Projects

- During 2016, our Members produced 829,383 kWh resulting in Washington State incentive payouts totaling $323,130.99
  - Inland's load in 2015 = 932,182,000 kWh. Renewable Projects equate to 0.09% of our load.

- Inland Goes "Green" in 2014-2015
  - Geiger Community Solar installed 9/9/14 = 29.68 kW = 88 participants at $300 per unit total of 526 units. Total Project Cost = $158,000 / 5,317 per kW.
  - West Plains Community Solar installed 2/4/15 = 20.16 kw= 60 participants at $300 per unit total of 373 units. Total Project Cost =$112,000 / 5,551 per kW.

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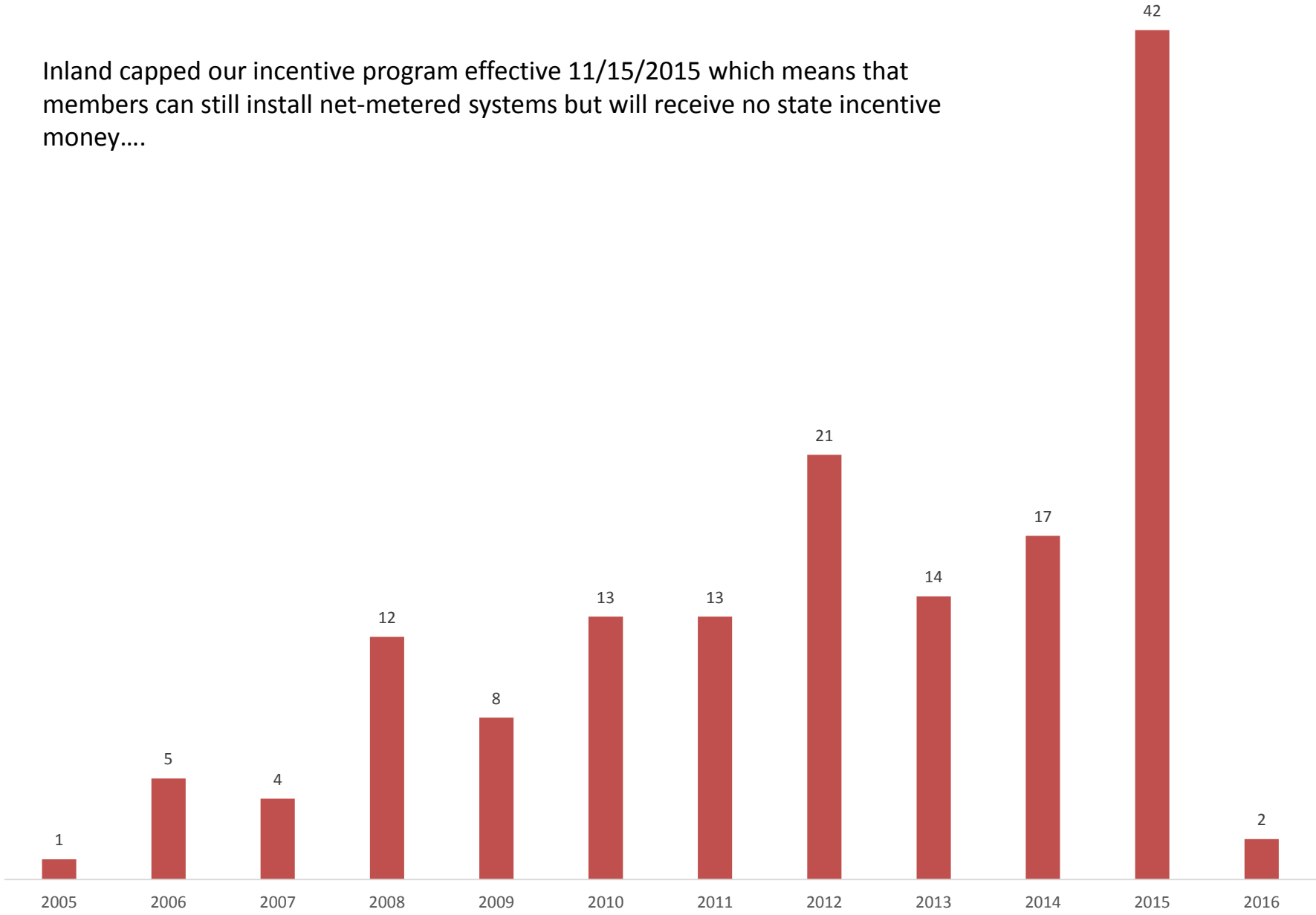
# Net Metering Systems Added by Year

Inland capped our incentive program effective 11/15/2015 which means that members can still install net-metered systems but will receive no state incentive money….



# Net Metering Systems by Generation Type

**What incentives do our participating members receive?**

Washington State pays co-generators money for producing electricity. Inland processes and pays the consumer for generating electricity and then deducts the payments from our yearly excise tax bill.

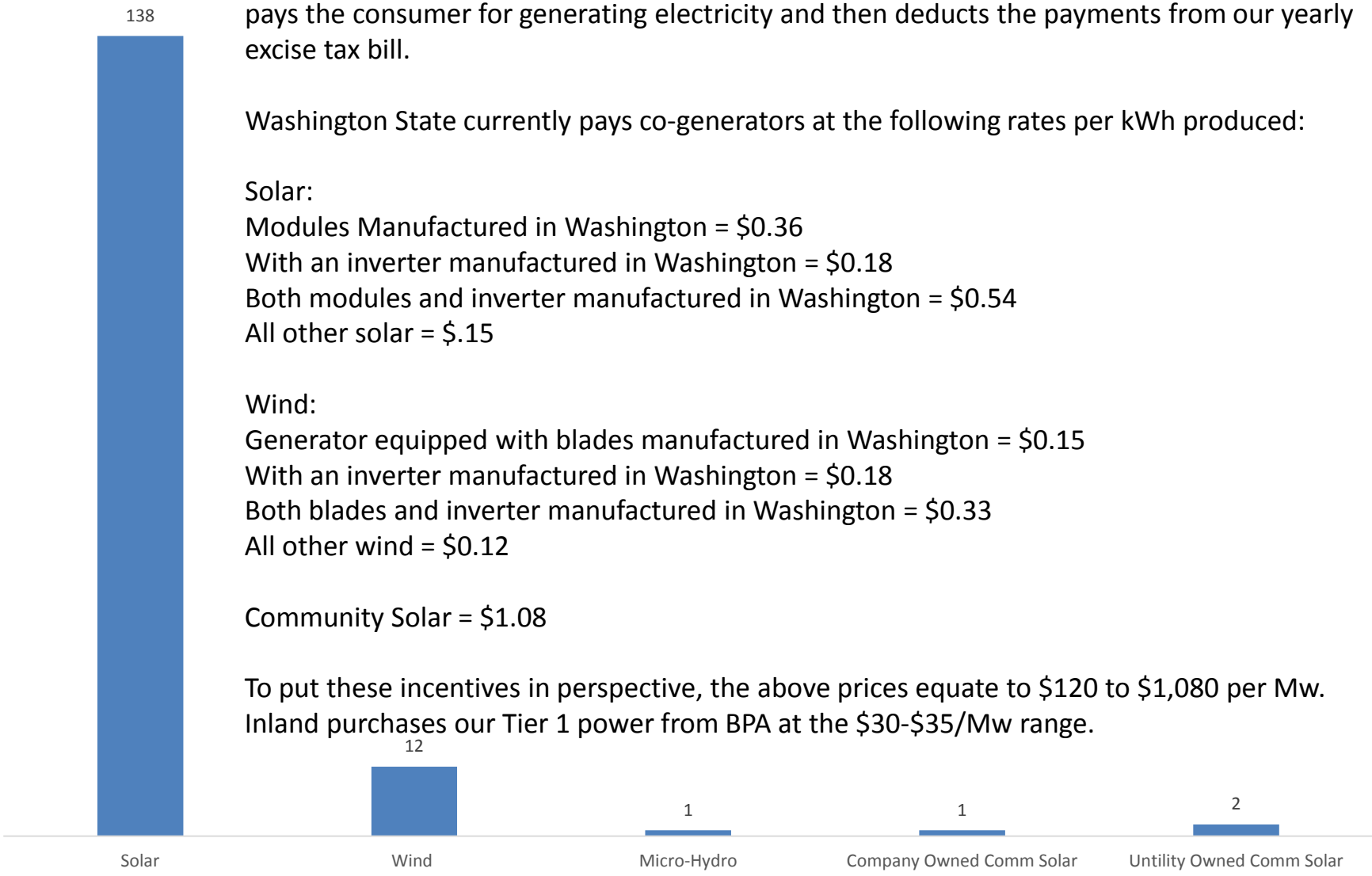
Washington State currently pays co-generators at the following rates per kWh produced:

Solar:
Modules Manufactured in Washington = $0.36
With an inverter manufactured in Washington = $0.18
Both modules and inverter manufactured in Washington = $0.54
All other solar = $.15

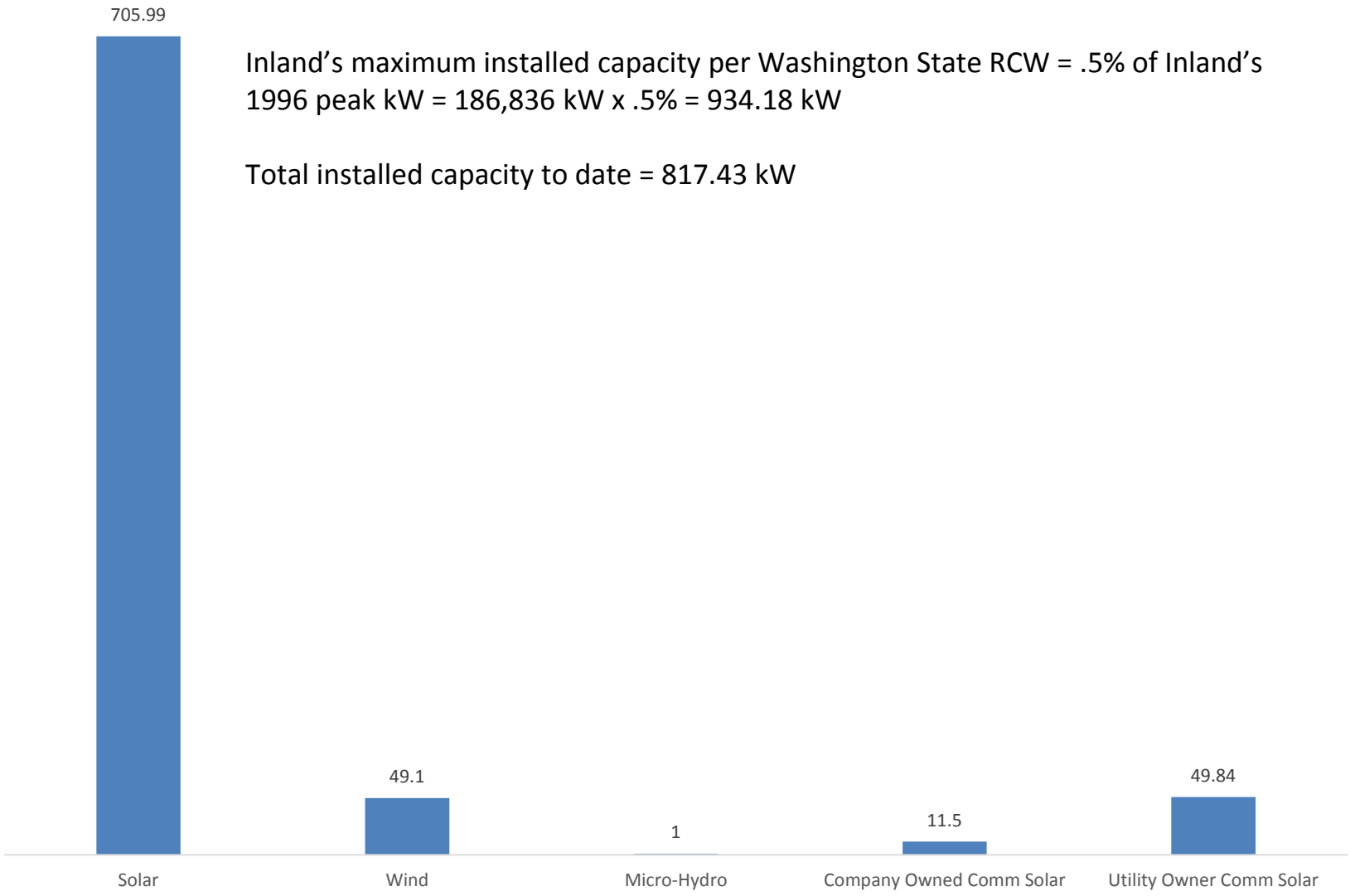
Wind:
Generator equipped with blades manufactured in Washington = $0.15
With an inverter manufactured in Washington = $0.18
Both blades and inverter manufactured in Washington = $0.33
All other wind = $0.12

Community Solar = $1.08

To put these incentives in perspective, the above prices equate to $120 to $1,080 per Mw. Inland purchases our Tier 1 power from BPA at the $30-$35/Mw range.



# kW System Capacity




Inland's maximum installed capacity per Washington State RCW = .5% of Inland's 1996 peak kW = 186,836 kW x .5% = 934.18 kW

Total installed capacity to date = 817.43 kW

# Generation and Incentives

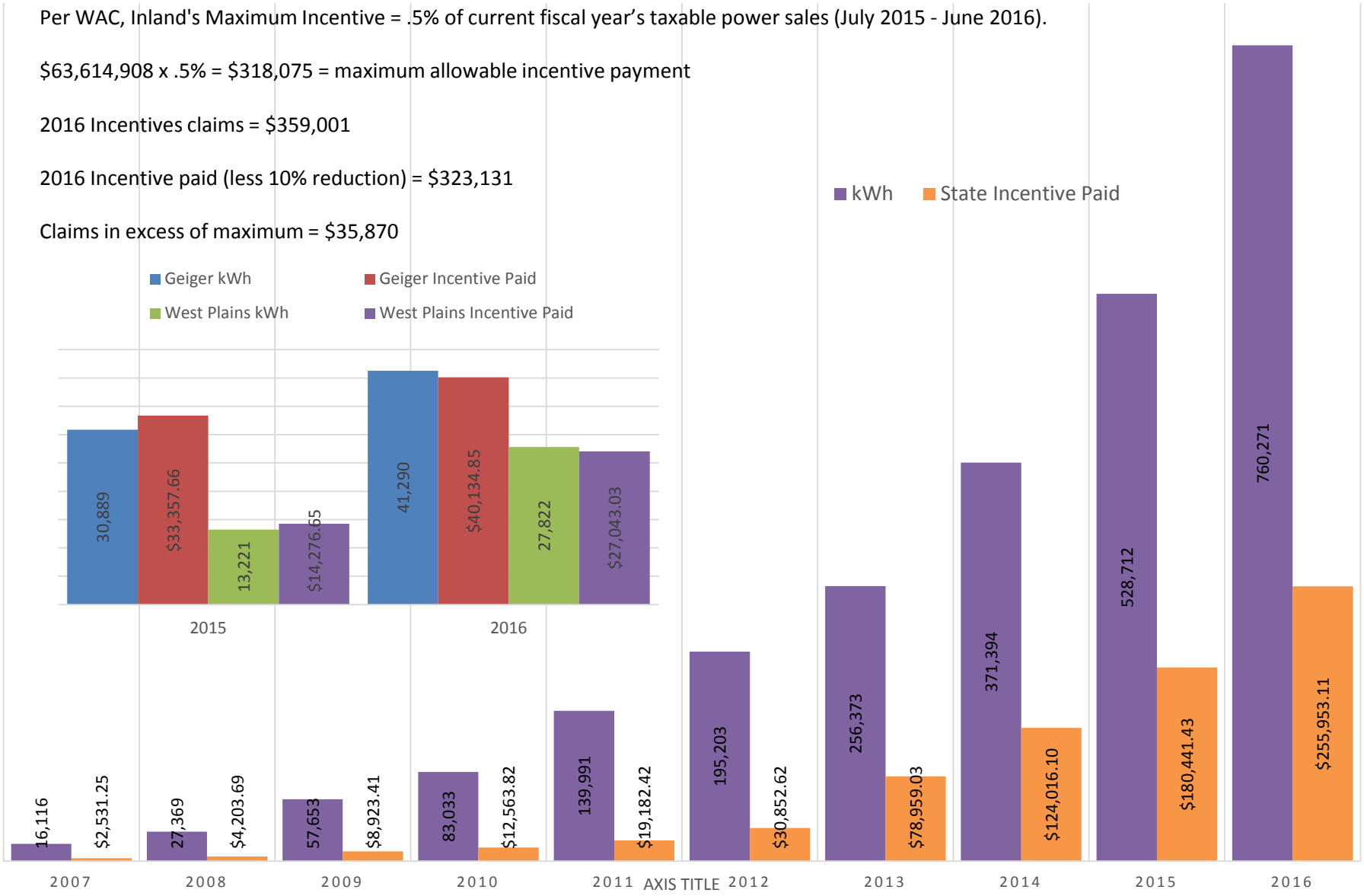
Per WAC, Inland's Maximum Incentive = .5% of current fiscal year's taxable power sales (July 2015 - June 2016).

$63,614,908 x .5% = $318,075 = maximum allowable incentive payment

2016 Incentives claims = $359,001

2016 Incentive paid (less 10% reduction) = $323,131

Claims in excess of maximum = $35,870



# KEY POINTS:

- **How much does Inland pay members for generating power?**

  Nothing, the Washington law states utilities must give credit for excess kWh's generated on a one for one basis at our retail rate. Once a year (on April 30th) any excess kWh in the energy bank of the member is reset to zero. Members do not get paid for any excess kWh generation.

- **Can a member use the excess kWh on any of his meters?**

  Only recently did Washington State demand utilities wheel excess kWh to any location the member has electric service from the same utility. During the early years, excess kWh had to be used on the same property and by the same member as defined by the state. Inland is not allowed to charge for wheeling.

- **Doesn't Inland provide incentives or rebates for installing solar or wind generators?**

  No, Inland does not provide any monetary assistance or advice on installing solar or wind generators. All incentives are based on state mandates and funded via excise tax deductions. Inland did contribute roughly $5,000 to the incentive payments in 2016.

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# KEY POINTS-CONTINUED:

- **What is the maximum Washington state incentive payment per year?**
  $5,000 per individual.

- **How long is this program in effect?**
  The Washington State Incentive Program runs through June 30, 2020. Inland Power and Light's net metering agreement with our members has no sunset.

  Both Utility Owned Community Solar projects sunset in 2034.

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# ENERGY ASSISTANCE DUCTLESS HEAT PUMPS (EADHP)

- Inland Power created a program to install ductless heat pumps for qualifying candidates
  - Income below federal poverty level
  - Inland Power members
    - Do not need to own the residence
- Partnership with local CAP agency and select contractors
  - CAP agency performs all income qualifications
  - Local HVAC companies agreed to smaller margins for the work

# ENERGY ASSISTANCE DUCTLESS HEAT PUMP (EADHP) INSTALLATION

- All installation costs were paid by Inland
- Members were referred to the program internally, from local CAP agency or by request
- Inland Prequalified the residence to ensure DHP practical
- Inland also completed final inspection after installation
- Contractor was responsible for entire installation
  - HVAC equipment
  - Any necessary electrical
  - Permitting

# ENERGY ASSISTANCE DUCTLESS HEAT PUMP (EADHP) STATISTICS

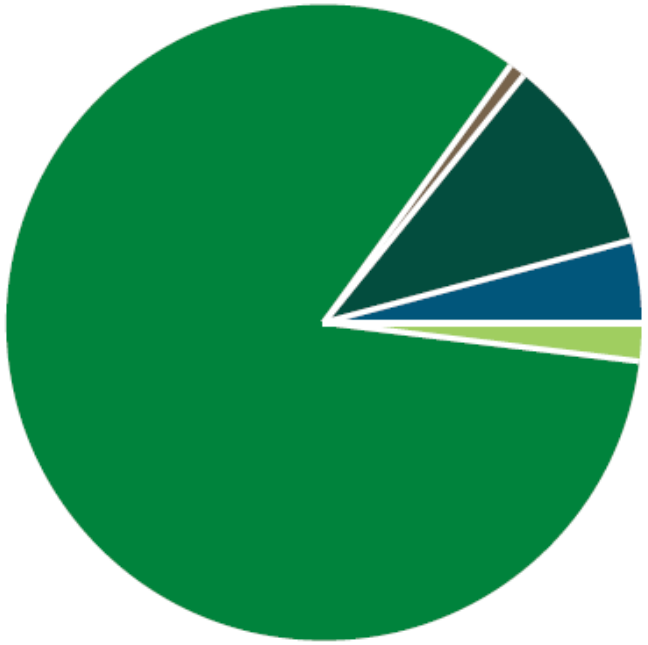
- First unit was installed in October 2015
- 66 units installed to date
- Program moratorium until savings data are analyzed fully
  - 3% average savings, Median of 10%
  - High of 34%
  - Low of -114%

- Cooling has been added to many of these residences for the first time and we need more time to determine actual overall savings

# ELECTRIFICATION OF TRANSPORTATION

- Over 40% of carbon emissions in Washington state are from the transportation sector
- Electricity as vehicle fuel approximately 70% less than gasoline
  - Based on 27 mpg, 6.5¢ per kWh and gas at $2.40 per gallon
- Electric sector fuel mix contains very low carbon
  - Even with natural gas as bridge fuel (Seventh Power Plan assumption)

# INLAND POWER FUEL MIX



83% HYDRO

10% NUCLEAR

4% WIND

2% COAL

1% NATURAL GAS

# ELECTRIC VEHICLE CHARGING INCENTIVE

**Get a $250 Rebate on a 240v Level 2 Electric Vehicle Charger from Inland Power.**

Take advantage of the many benefits an electric vehicle (EV) provides such as fuel efficiency, zero emissions, affordability and the convenience of charging at home.

Inland Power wants to help you charge faster with a Level 2 EV Charger. Level 2 chargers provide 240 volts of electricity, rather than the 120 volts a standard home outlet provides. This means faster charging!

Restrictions apply. Must be an Inland Power and Light member to qualify for this rebate. Receipt and proof of installation required. See application on reverse or visit InlandPower.com for additional information.

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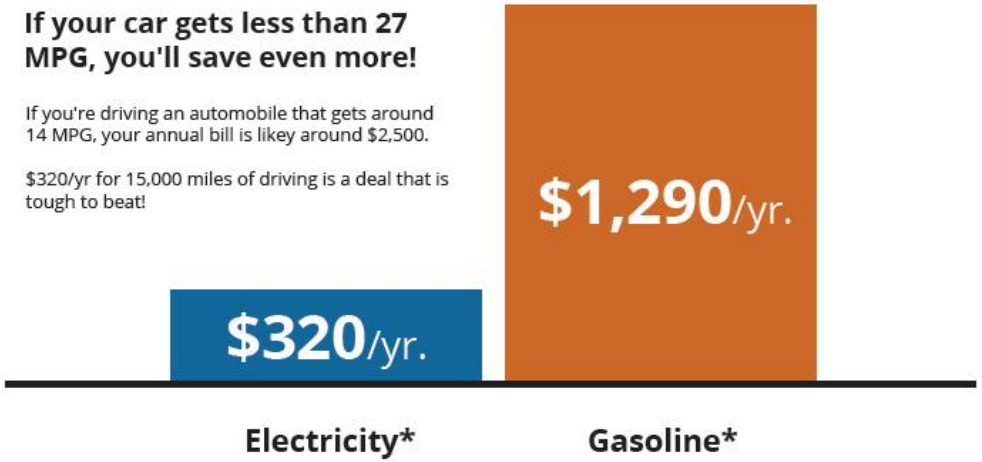
***Cooperatively - we all save more!***

**If your car gets less than 27 MPG, you'll save even more!**

If you're driving an automobile that gets around 14 MPG, your annual bill is likey around $2,500.

$320/yr for 15,000 miles of driving is a deal that is tough to beat!




This chart is based on a comparison between a 27 MPG gasoline powered car and the average kWh/mile of the top five selling electric vehicles in 2015 in the US (Source: U.S. Department of Energy). The gasoline price is based on an approximate current Spokane area average gasoline price of $2.40/gal and an annual driving estimate of 15,000 miles. The electricity rate is based on Inland Power's residential rate of $0.065/kWh.

*This is only an estimate, actual fuel savings will vary based on a variety of factors, such as equipment type, driving conditions, driving habits, weather conditions and changing oil prices. This calculator should only be used to gain a general understanding of fuel saving scenarios. Consult EV manufacturers and the U.S. Department of Energy website for additional information.

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Helping the NW make smart transportation decisions.

# QUESTIONS/DISCUSSION

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# THANK YOU!

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