

# EE and Load Forecast Agenda



## (1) Models:

- How does EE show up in Idaho Power's modeling of future load requirement?

## (2) Process flow:

- How EE was incorporated in load forecast and is the flow today different?

## (3) Options:

- Are there different options available to us today

# EE and Residential End-Use Modeling



Use Per Customer =

**Heating Responsive Load**

- Resistance, Heat Pump Saturations
- Heating Efficiency
- Thermal Efficiency
- Home Size
- Heating Degree Days

+

**Cooling Responsive Load**

- Central, Room AC Saturations
- AC Efficiency
- Thermal Efficiency
- Home Size
- Cooling Degree Days

+

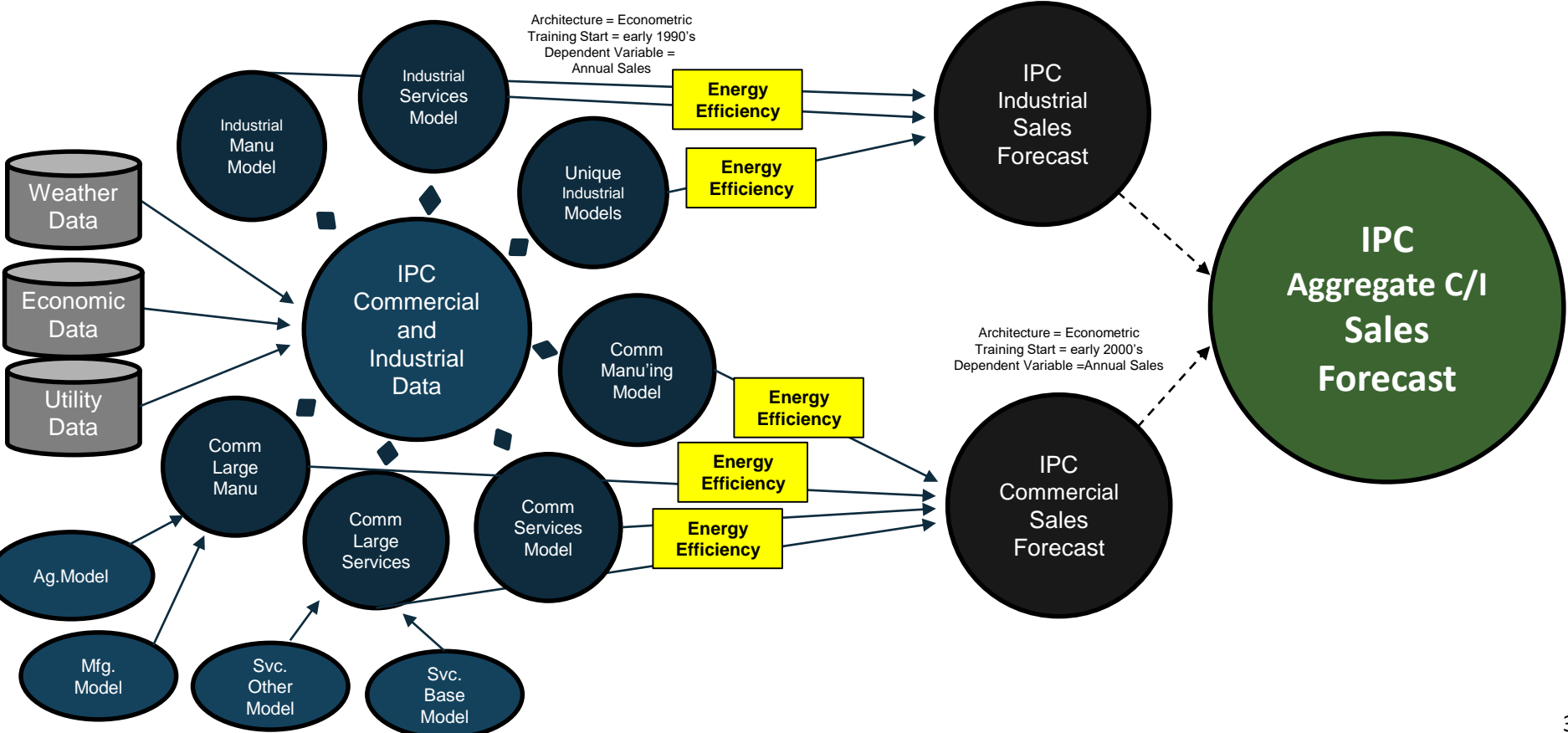
**Components of Other Load**

- H2O Heat, Lighting, Plug Load Saturations
- Appliance Efficiency
- Home Size
- Billing Days

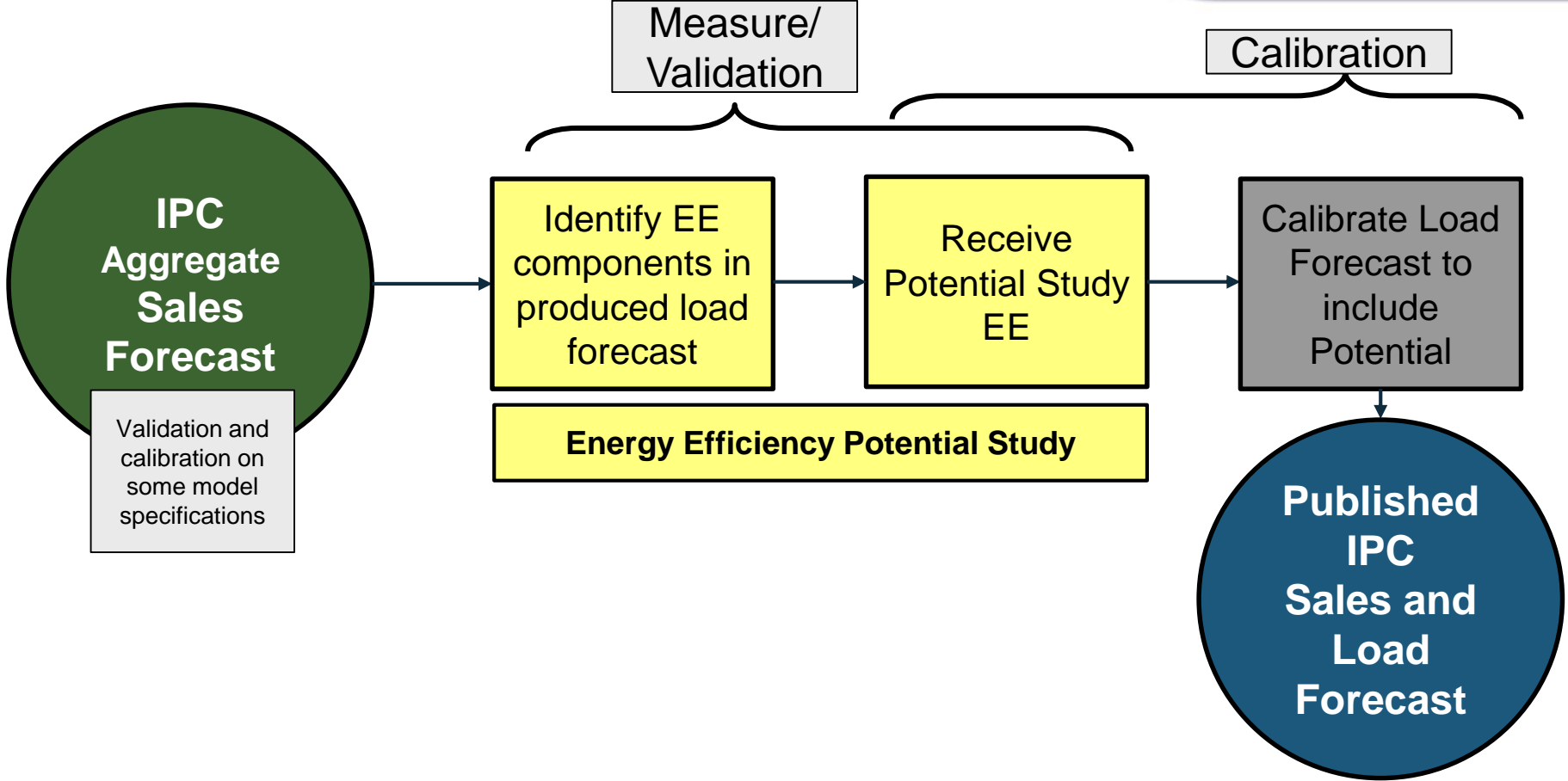
Elec/Gas Prices Elasticity

Income Elasticity

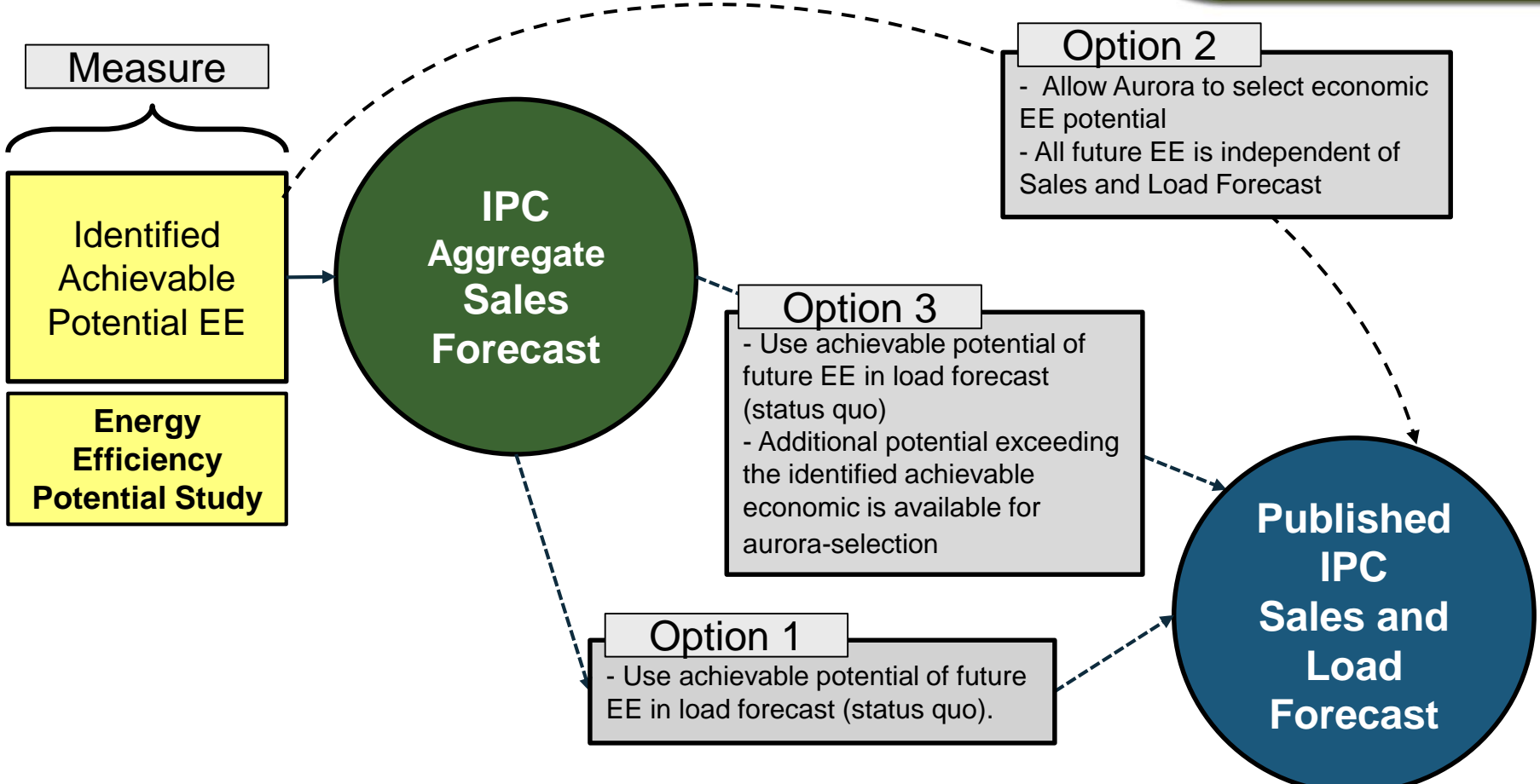
# EE and C/I Econometric Modeling



# Previous Calibration to Potential Study



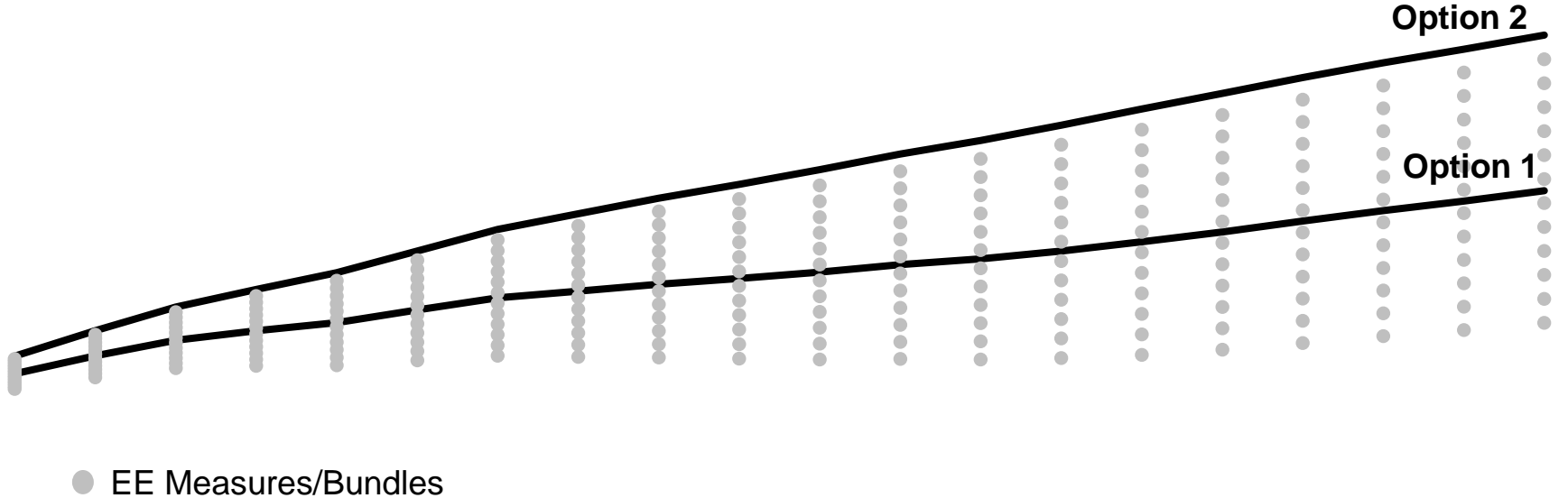
# Future Flexibility to Potential Study



# EE Potential – Flexibility into Load Models



## ILLUSTRATIVE – Load Forecast with EE Options



2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040

# Path Forward for 2021 IRP

## Option 1

- Status Quo. Use achievable economic potential of future EE in load forecast.

## Option 2

- Allow Aurora to select economic EE potential
- All future EE is independent of Sales and Load Forecast

## Option 3

- Status Quo. Use achievable economic potential of future EE in load forecast (option 1).
- Additional potential exceeding the identified achievable economic is available for aurora-selection

**Other Ideas or Thoughts?**