



### Filling the Measure Pipeline: An Examination of Six Utilities' Emerging Technology Measure Development Processes

John Cornwell Evergreen Economics

IEPEC Long Beach 2015



### Research Background

#### Research Goals:

- Document utilities' internal measure development processes
- Identify information gathered for the processes;
- Identify particularly useful process steps and information sources
- Document the sources of potential new measures.

#### Participating Utilities







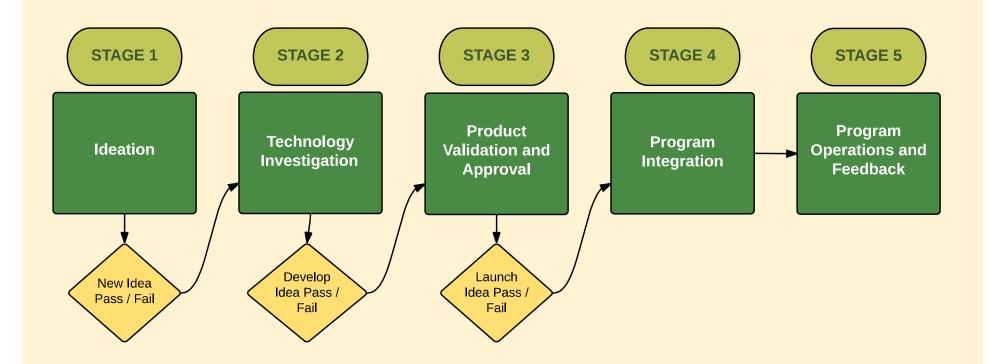








### **General UIMD Process**

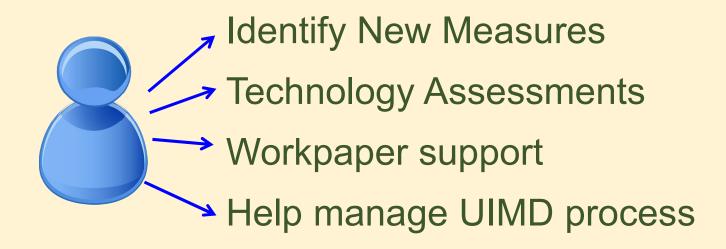


IEPEC Long Beach 2015



# **Key Staff**

 Emerging technologies program staff (and POU equivalents) play a key role

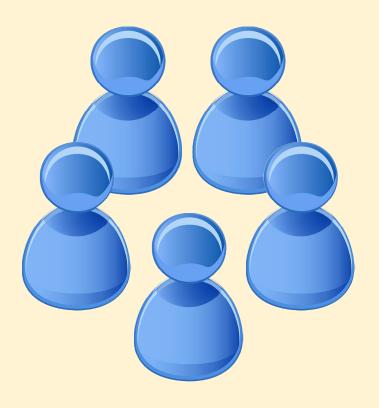


BUT .....



### **Key Staff**

There are many other staff involved in the UIMD process teams:



Product Managers
Engineering Staff
Program Managers
Strategy and
Compliance Staff
Marketing Staff



### **New Measure Assessment Factors**

 Staff use a wide range of assessment criteria:

<b>Quantitative Factors</b>	Qualitative Factors
<ul> <li>Carbon Emissions</li> </ul>	Alignment with Regulatory Goals and Mandates
<ul> <li>Cost Effectiveness</li> </ul>	Barriers to Adoption
<ul> <li>Demand Reduction</li> </ul>	Fit with Corporate Strategy
• Effective Useful Life	Fit with Customer Strategy
<ul> <li>Energy Savings Potential</li> </ul>	Fit with Existing Programs
<ul> <li>Market Size / Potential</li> </ul>	Impact on Customer Satisfaction
<ul> <li>Non-Energy Benefits</li> </ul>	Market Need
<ul> <li>Price Point of Product</li> </ul>	Market Opportunity
<ul> <li>Program Budget</li> </ul>	Market Readiness
	Organizational Capacity
	Strength of Manufacturer
	Technical Performance Risk

IEPEC Long Beach 2015



### Sources of New Measures

- Vendors & Manufacturers
- > Customers
- Industry Organizations
- Academic Institutions and Research Labs
- > Internal Staff
- > Other utilities



## **Cross Utility Collaboration**

- Emerging Technology Coordination Council meetings - ETP
- Public meetings TRIO, ET Forums
- Formal and informal communication between program staff
- Workpaper collaboration
- Participation in technology consortiums
- Conferences



#### **Conclusions and Lessons Learned**

- > Significant differentiation between UIMD processes.
- ETP play an important role in the UIMD process, but ...
- A broad range of utility staff are involved in the process
- Utilities assess promising technologies using a wide variety of quantitative and qualitative information.
- All utilities access a diverse range of information sources to gather information and identify potential new technologies.
- There is significant cross-utility collaboration in new measure development.



## Questions?

#### **John Cornwell**

cornwell@evergreenecon.com

(503) 741-8227

**Evergreen Economics** 

Berkeley, CA and Portland, OR