

TRM EUI Measure Development Project



Stakeholder Kick Off Meeting

October 20, 2015

MEETING GOALS

- ❑ Introduce the GDS Team
- ❑ Outline Project Objectives and Deliverables
- ❑ Discuss Relevant Policy Issues
- ❑ Outline Our Proposed Project Methodology
- ❑ Present Preliminary List of Potential Measures
- ❑ Present Preliminary List of Evaluation Criteria
- ❑ Homework Assignments



GDS INTRODUCTION

- ❑ We are a multi-service consulting and engineering firm
- ❑ We were formed in 1986
- ❑ Our main office is located in Marietta, GA
- ❑ We have several smaller offices in the Midwest including MN, WI, and IL
- ❑ We employ a staff of more than 175
- ❑ Our expertise focuses on clients associated with, or affected by, electric, gas, water and wastewater utilities
- ❑ We offer engineering design, program implementation, rate analysis,
- ❑ Regulatory compliance, expert witness, information technology, market research, and statistical analysis services to a diverse client base



THE GDS TEAM

- ❑ **Project Lead**

Travis Hinck, Project Engineer



- ❑ **Distribution Expert**

Kevin Mara, Principal



- ❑ **Generation Expert**

Rich Polich, Managing Director



- ❑ **TRM Writing Expert**

Josh Duckwall, Project Manager



- ❑ **Smart Measures**

Christy Torkelson, Analyst



PROJECT OBJECTIVES

Identify a set of Electric Utility Infrastructure (EUI) measures to quantify energy efficiency savings

For each of these measures:

- ❑ Create savings algorithms for inclusion in the TRM
- ❑ Determine incremental cost to implement the measure
- ❑ Create a Smart Measure™ for stakeholders' use on ESP™
- ❑ Provide references for algorithms, assumptions, and values
- ❑ Recommend an ongoing measure update schedule



PROJECT OBJECTIVES

- ❑ The goal of this project is to provide utilities with additional tools to help meet their CIP goals
- ❑ Similar to existing C/I or RES TRM measures, we will create energy efficiency TRM measures to define savings for infrastructure projects



POLICY ISSUES

The goal is to grant CIP credit for projects that achieve energy efficiency, but wouldn't have been done without CIP considerations.

Projects or portions of projects done for the following reasons are ineligible:

- ❑ Compliance (except possibly CPP compliance; separate issue)
- ❑ Idle services
- ❑ Early replacement
- ❑ Routine maintenance
- ❑ Property tax exclusion considerations

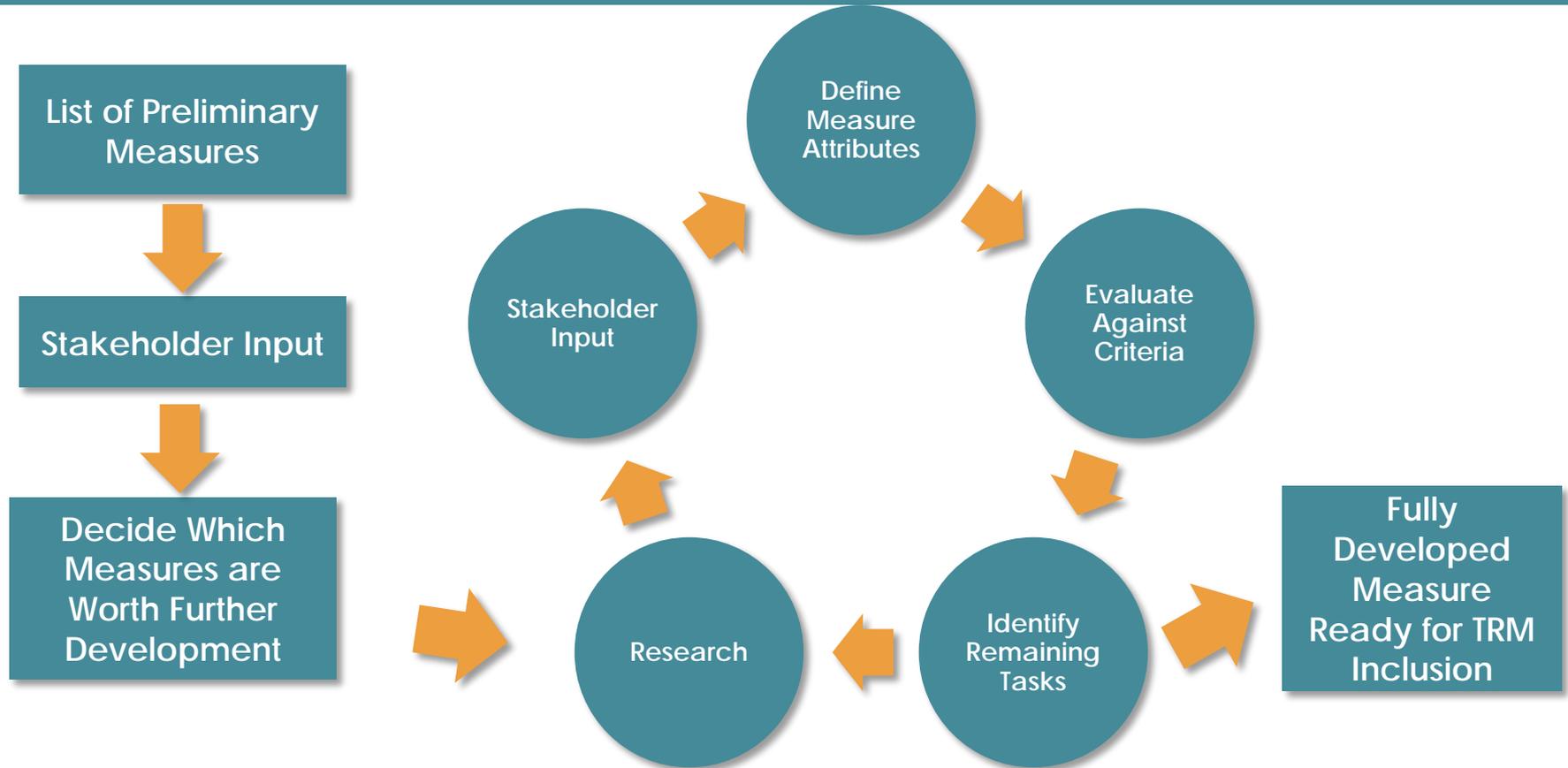


POLICY ISSUES (CONTINUED)

- ❑ Definition of “Normal Maintenance Activity” (§216B.241 1c (d))
Key to many EUI measures. Define during measure development
- ❑ Rate recovery considerations (§216B.1635 ¶2)
- ❑ Coal efficiency to be claimed by translating to kWh-equivalent savings
Actual method to be determined measure-by-measure
- ❑ Gas savings to be reported in Therms
Keep gas utilities in the loop to develop incentive plan
- ❑ Clean Power Plan overlap and effects
- ❑ Sliding scale property tax exemption (§272.0211)



PROJECT METHODOLOGY



PRELIMINARY MEASURES

- ❑ Load leveling
- ❑ Upgrade transmission line conductors
- ❑ Amorphous Metal Transformers
- ❑ Install Switched Capacitors
- ❑ Install Extra High Voltage Lines
- ❑ Install storage
- ❑ Advanced steam temperature controls
- ❑ Turbine - blade replacement
- ❑ VFD on boiler feedwater pump

These are quick examples; many more possibilities

Full list on separate handout



PRELIMINARY EVALUATION CRITERIA

- ❑ Utility interest
- ❑ kWh Savings Potential
- ❑ kW reduction Potential
- ❑ Cost Effectiveness
- ❑ Lifetime
- ❑ Market potential
- ❑ Availability/Reliability of references
- ❑ Possible to define algorithm
- ❑ Possible to define baseline(s)
- ❑ Difficulty of defining maintenance component
- ❑ Possible to create Smart Measure

Full list and definitions on separate handout



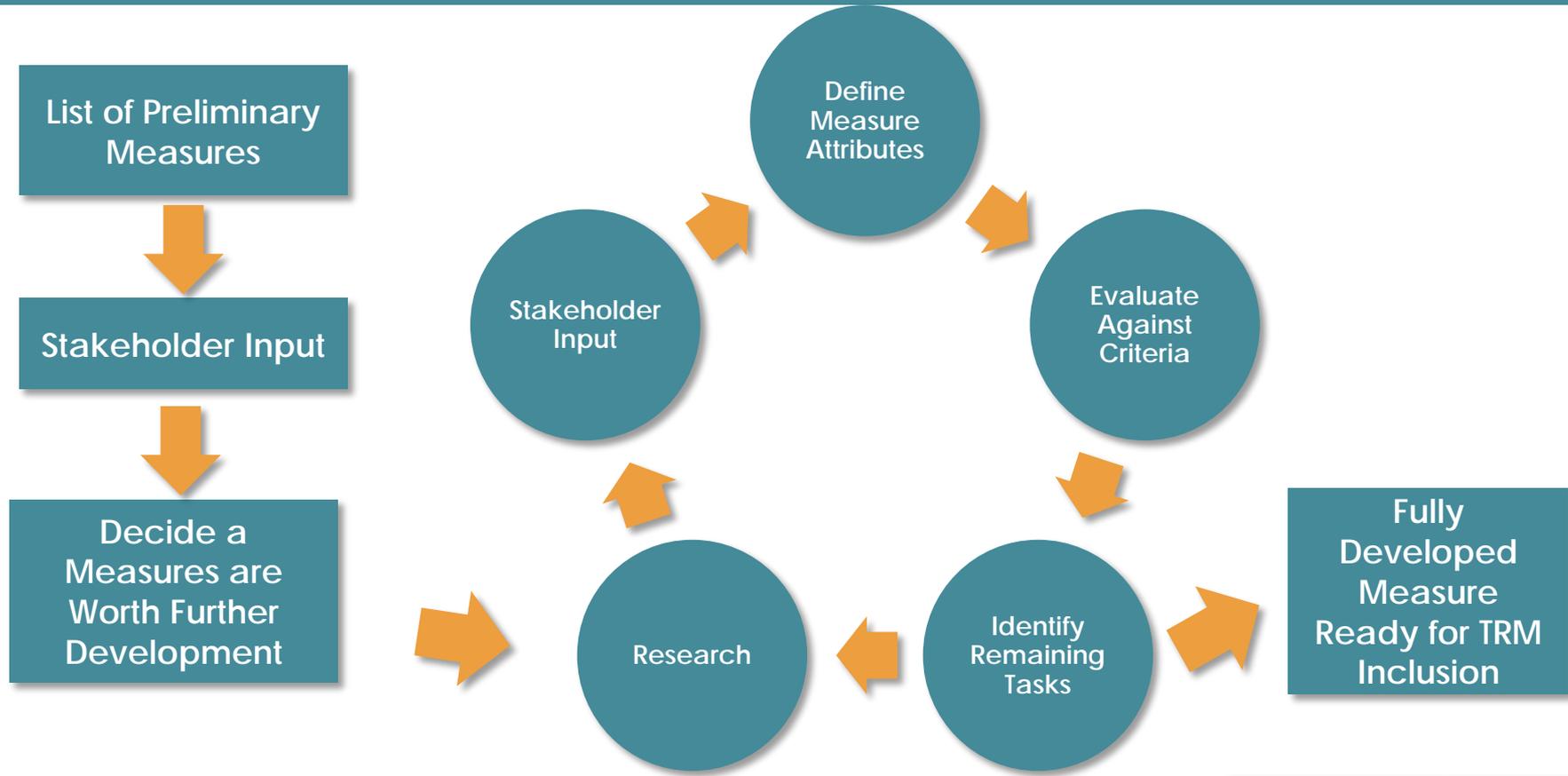
MEASURE ATTRIBUTES

- ❑ Concise measure description
 - ❑ Expected Lifetime
 - ❑ Eligibility Requirements
 - ❑ Incremental Cost
 - ❑ kWh/kW/Therms savings algorithms
 - ❑ Variable Definitions
 - ❑ List of Required Inputs
 - ❑ Example calculation
 - ❑ References
- Same basic attributes as C/I and RES measures

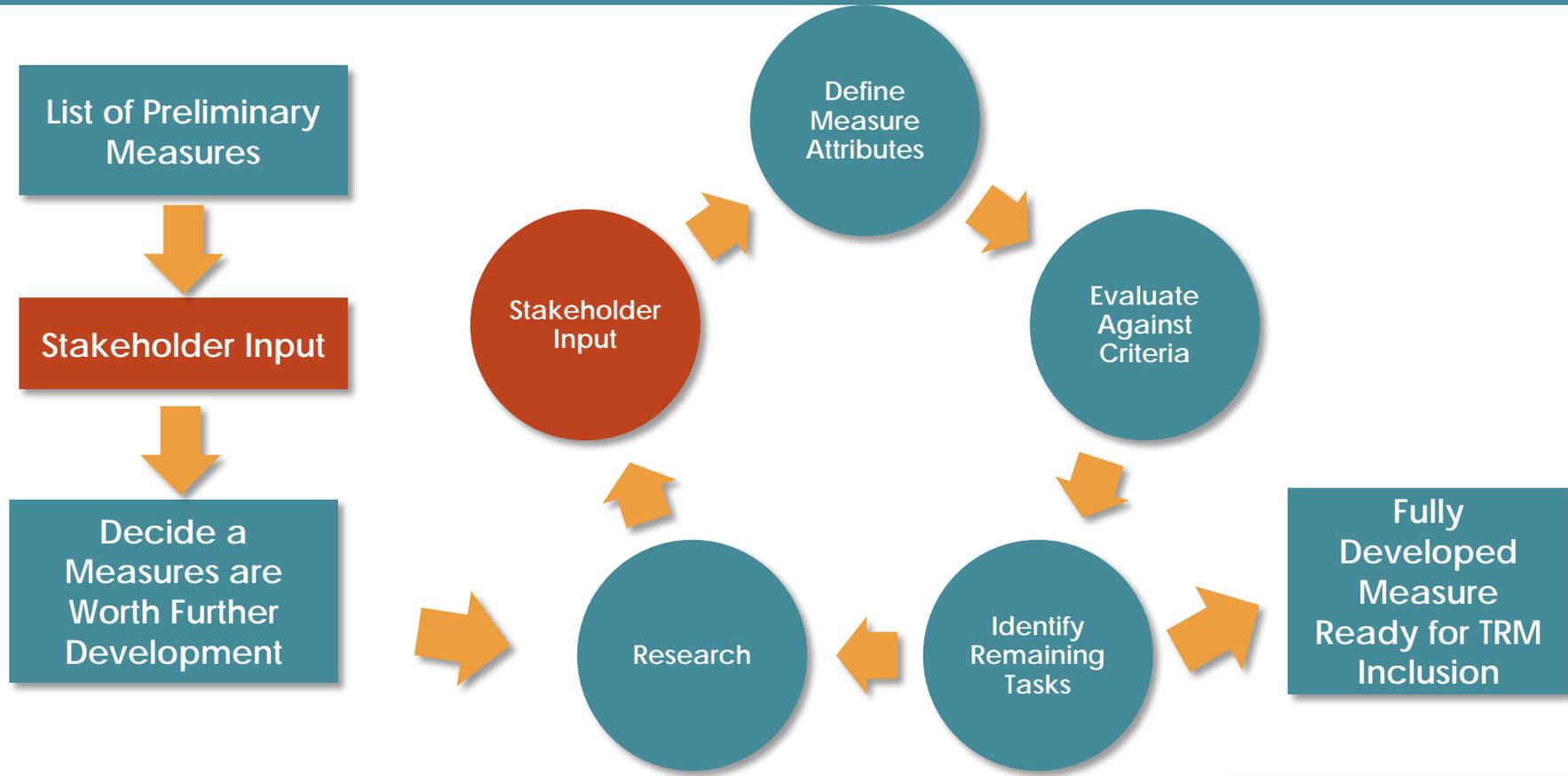
Full list on separate handout



PROJECT METHODOLOGY



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STAKEHOLDER INPUT

- ❑ TRMAC Meetings
- ❑ Direct Communication
- ❑ Stakeholder Survey
- ❑ Working Group Meetings



PROJECT ROADMAP

- ❑ Kick Off Meeting (10/20/2015)
- ❑ Create Expansive List of Potential Measures (with Stakeholder Input)
- ❑ Hold Technical Working Group Meeting(s)
- ❑ Solidify list of measures to actually develop **(12/11/2015)**
- ❑ Additional Technical Working Group Meeting(s)
- ❑ Iteratively build measure attributes and continually evaluate against criteria
- ❑ Produce complete draft of all measures for comment and review
- ❑ Produce final draft of measures
- ❑ Publish Smart Measures in ESP for utilities' use



HOMEWORK

The quality and usefulness of the final product will depend heavily on stakeholder involvement in the development process.

- 1 Designate a point-person to facilitate communication
- 2 Review measure list. Reply with comments or additional measures
- 3 Review measure evaluation criteria. Reply with comments
- 4 Talk with DER about policy ideas/concerns
- 5 Think about which measures are likely to be most important/valuable
- 6 Consider any resources or information you may be able to contribute
- 7 Think of anyone else that might be interested in participating

First Deadline: Define the list of measures to be developed by 12/11/2015

Stakeholders encouraged to raise concerns early (and often?)



CONTACT INFORMATION

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