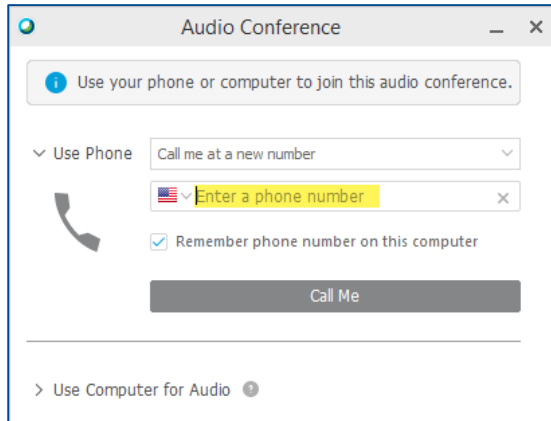


# Welcome to Webex Training!

## First choice:

Use **Call Me** to have the system call you. Enter your phone number and click the Call Me button.



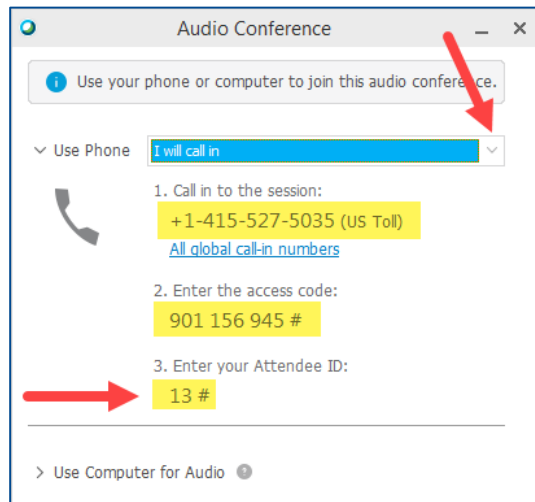
The screenshot shows the 'Audio Conference' window with the following elements:

- Header: Audio Conference
- Instruction: Use your phone or computer to join this audio conference.
- Section: Use Phone
- Dropdown: Call me at a new number
- Phone icon and field: Enter a phone number
- Checkbox: Remember phone number on this computer
- Button: Call Me
- Footer: > Use Computer for Audio

**Note:** Some mobile phones see the Webex call as spam and send it to voice mail. If that happens, try the second choice.

## Second choice:

Click the dropdown arrow to select **I will call in**. Call the number on your screen and connect using your access code and Attendee ID.



The screenshot shows the 'Audio Conference' window with the following elements:

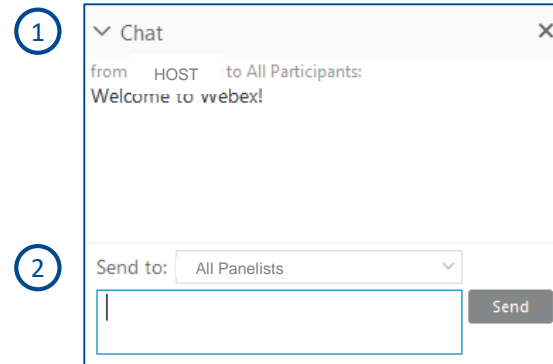
- Header: Audio Conference
- Instruction: Use your phone or computer to join this audio conference.
- Section: Use Phone
- Dropdown: I will call in
- Phone icon and instructions:
- 1. Call in to the session: +1-415-527-5035 (US Toll) All global call-in numbers
- 2. Enter the access code: 901 156 945 #
- 3. Enter your Attendee ID: 13 #
- Footer: > Use Computer for Audio

**Last choice:**  
**Use Computer for Audio.** Connect a headset to your computer for best results.

**Note: Your audio is muted on entry.**

## Communication Tools Chat panel

Find the chat panel on the right side of your screen below the feedback bar.



The screenshot shows the Chat panel with the following elements:

- 1. Chat title bar
- 2. Send to: All Panelists
- Send button

1. If you only see the Chat title, expand the chat panel by clicking the > to the left of Chat
2. Use the pull down to choose who will see your chat. **Note:** "All Panelists" recommended.



# 2020-2021 Custom Industrial Impact Evaluation Research Plan

November 2020



Bonneville  
POWER ADMINISTRATION



# Option 1 Sample Utilities

Benton PUD
Benton REA
Central Lincoln PUD
Centralia
Clark PUD
Columbia REA
Columbia River PUD
Coos-Curry
Cowlitz
Ellensburg
Flathead
Forest Grove
Franklin PUD
Glacier

Grays Harbor PUD
Heyburn
Hood River
Jefferson PUD
Lakeview
Lewis PUD
Mason PUD3
No Wasco PUD
Northern Lights
Richland
Tillamook PUD
Umatilla
US Navy

# Agenda

Why Evaluation?

Background and Objectives

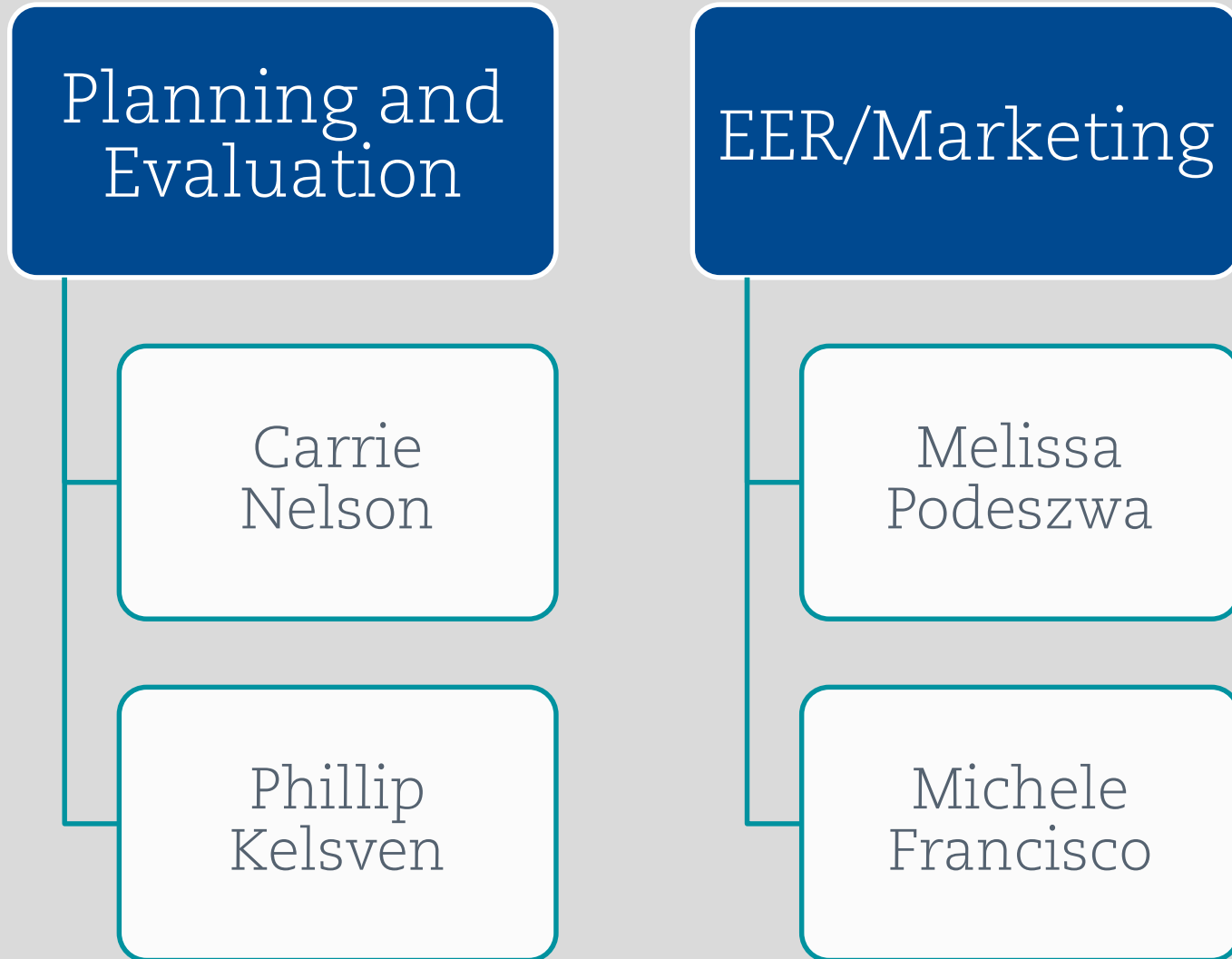
Sample Design

Data Collection and Analysis

Contact Protocols and Schedules

Next Steps and Q&A

# BPA Core Team



# Contractor Team



# Why Evaluation?



What do  
we all  
want?

Energy  
efficiency  
programs that  
save customers  
money and  
energy.

To be  
trustworthy  
stewards of  
their money.



# Evaluation

What did we achieve?

How do we improve?



# Impact Evaluation



Savings reliability  
with independent  
verification

+

Program  
improvement  
opportunities

# Relevant Evaluation Policies

## Implementation Manual

- Identifies implementation requirements and includes requirement to provide access to project, documentation and billing data for evaluation and oversight purposes.
- Oversight and evaluation are separate functions.

## BPA Internal Policies

- Defines BPA's impact evaluation activities as minimum of 80% of portfolio every 4 years. Consistent with 2018 RTF Guidelines and national standards.
- BPA M&V Protocols.

# Background and Objectives

# Overview of FY21 Evaluation Areas



## Custom and C/I/Ag Lighting

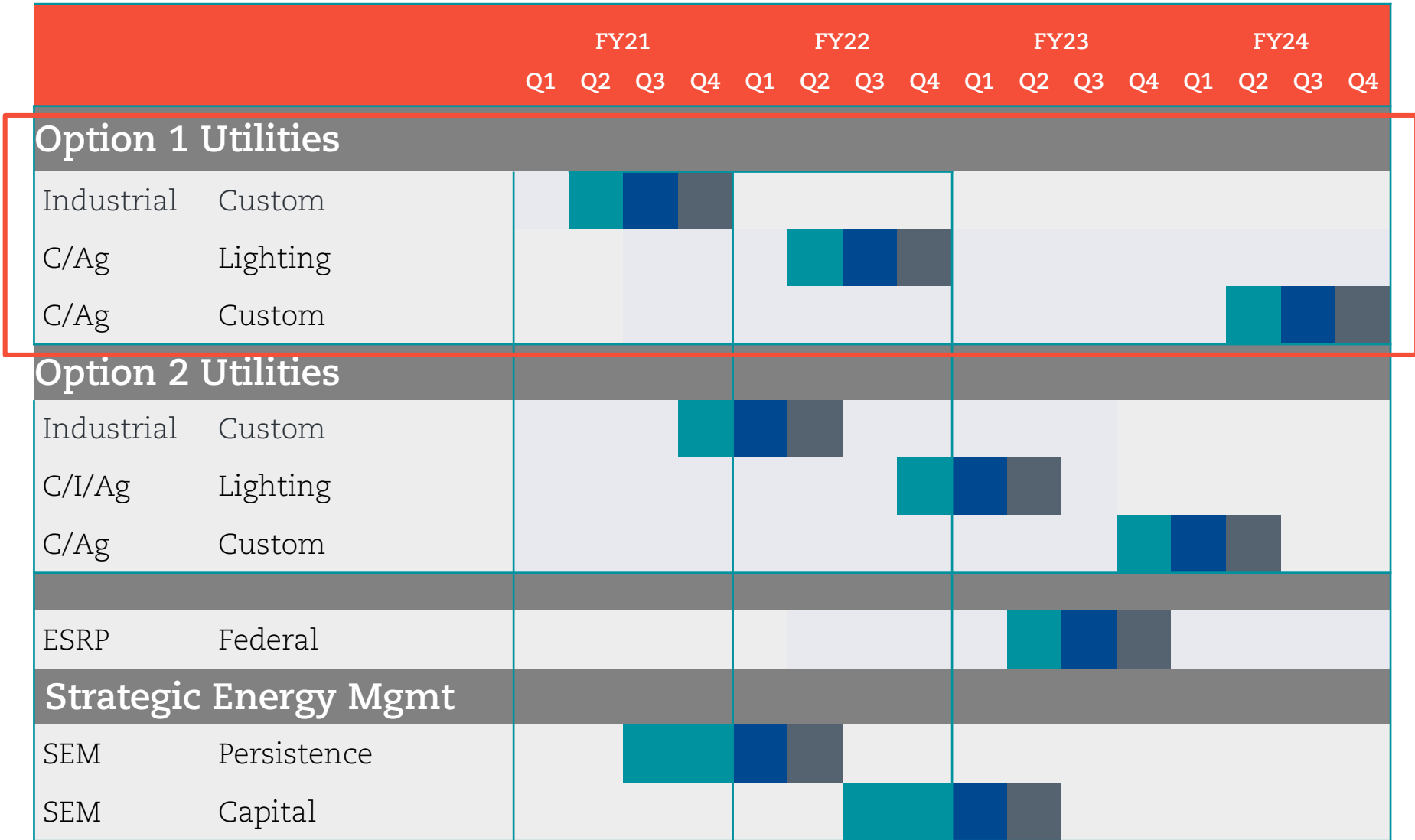
Engineering-based  
evaluation of projects



## Strategic Energy Management

Persistence assessment to inform  
measure life and (if feasible)  
assessment of how capital  
measures affect SEM savings

# Schedule



Data Collection/Analysis

Draft Report and Review

Final Report and Communicating Results

# Custom Industrial Impact Evaluation Objectives

1

Estimate first-year kWh savings and cost-effectiveness

- For Option 1 Custom Industrial and by end use (no utility-specific findings)
- Both as-operated conditions and expected conditions (had COVID-19 not occurred)

2

Develop recommendations to improve M&V savings estimates

(including Engineering Calculations with Verification)

# Sample Design



# Sampling Strategy

**BPA policies strive for relative error of 10% at the 90% confidence level (90/10), with a minimum of 80/20**

For Custom Industrial, our goal is to exceed 90/10 with 80 sample points (40 for Option 1 Utilities & 40 for Option 2 Utilities)

Sampling unit is a measure, (Technology/Activity/Practice) for a single project at a distinct site

**BPA Approval Dates:  
Sept 2019 – Aug 2020**

**Sample stratification by project size**

# Option 1 Custom Industrial Utilities

Serving Utility	Primary	Backup
Benton PUD	1	
Benton REA	1	1
Central Lincoln PUD	1	
Centralia	1	
Clark PUD	3	2
Columbia REA	1	
Columbia River PUD	1	
Coos-Curry	1	
Cowlitz	6	2
Ellensburg	1	
Flathead	1	
Forest Grove	1	
Franklin PUD	2	
Glacier	1	

Serving Utility	Primary	Backup
Grays Harbor PUD	2	
Heyburn		1
Hood River	1	
Jefferson PUD	1	
Lakeview		1
Lewis PUD	1	
Mason PUD3		1
No Wasco PUD	1	
Northern Lights	1	
Richland	1	1
Tillamook PUD	1	
Umatilla	5	
US Navy	1	
<b>TOTAL</b>	<b>37</b>	<b>9</b>

# Option 1

## Custom Projects Industrial

End Use	Sample Size
Compressed Air	8
HVAC	3
Motors/Drives	12
Process Loads	5
Refrigeration	12
<b>Total</b>	<b>40</b>

# Data Collection and Analysis

# Data Collection Process

## **File Review**

leveraging ESI team and utility data BPA already has

## **Project engineer**

(BPA, utility and ESI) telephone / email discussions

## **End use customer**

telephone / email discussions and site visits

## **Additional Data**

Trend metering / billing data / weather data

**Site-specific data to support analysis**

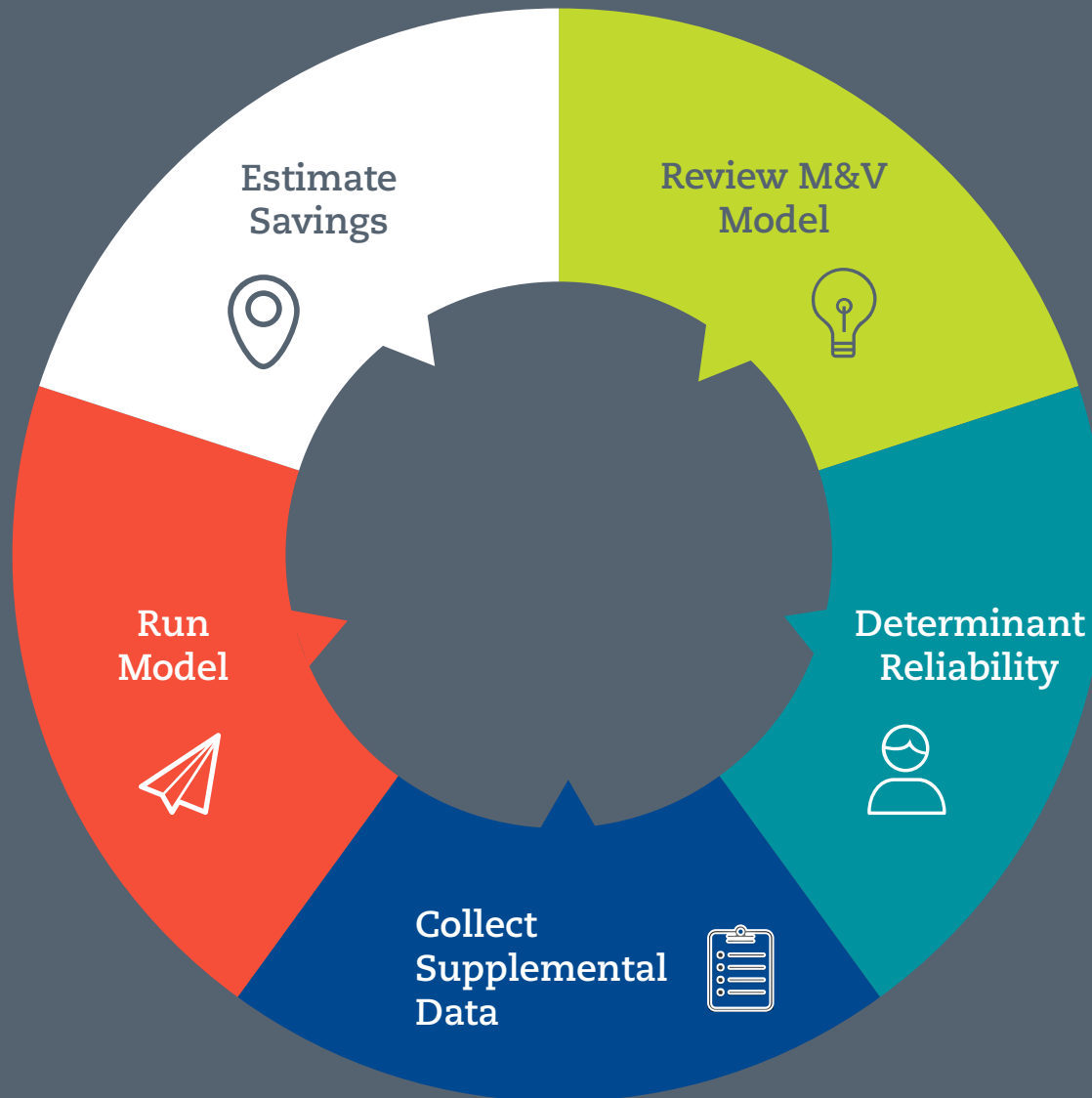
# Customer Data Collection



- Using telephone and email for discussions
- Asking customers to answer any outstanding questions
- Scheduling (in-person) site visits only if necessary

**Due to COVID-19,**  
we will focus more on file review and telephone and email surveys

# Site-level Analysis Process



# Data Collection and Analysis Topics

## Addressing COVID-19:



Savings  
calculated  
based on  
as-operated

&

Savings based  
on expected  
conditions  
**had COVID-19  
not occurred**

Rely on self-report of COVID-19  
impacts (file review, interviews, etc.)



# Data Collection and Analysis Topics



## Engineering Calculations with Verification (ECxV)

- Use an ECwV protocol to estimate savings for each measure
- Compare results to best practical evaluation results and BPA ECwV result (where available)

# Evaluation Report

Available in Winter 2021

## Evaluated savings (first-year kWh), realization rates, and cost effectiveness

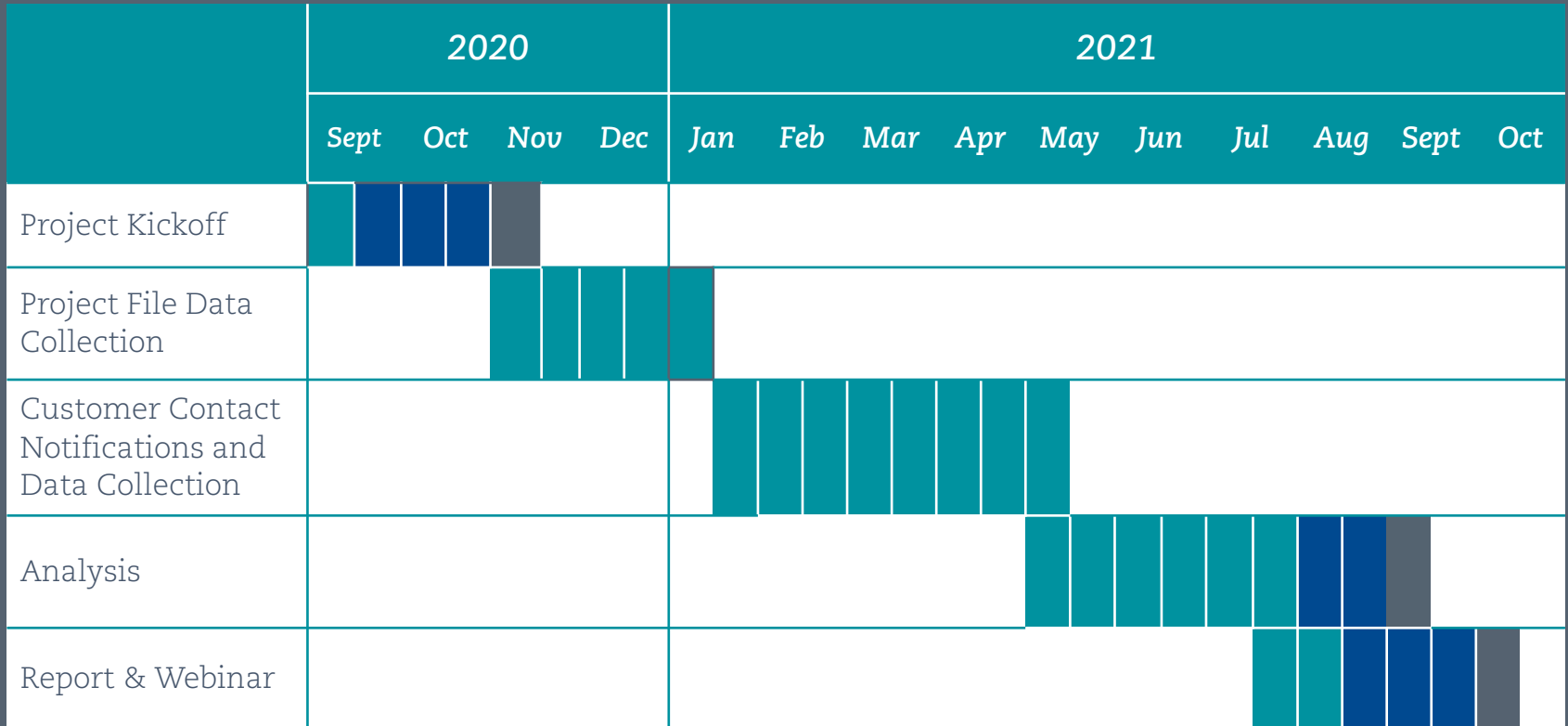
- First-year savings and realization rates (ratio of claimed to evaluated savings) by end use (no utility-specific findings)
- As operated and had COVID-19 not occurred
- Comparison of ECwV-evaluated results v. other results

## Possible recommendations

- Improve M&V savings estimates
- Any improvements to how ECwV protocols are applied
- For future research and data collection, if relevant

# Schedule and Contact Protocols

# Option 1 Custom Project Industrial Schedule



# Contact Principles



## Early notification

of projects, timelines, and requirements  
*(Utilities should notify customers of study soon)*



## Utility feedback

Share details of the  
evaluation plan and data request



## Reasonable timelines

for data collection;  
escalation protocol if timelines missed



**You will be notified at least 1 week**  
before the evaluation team contacts  
your customers

# Utility Notification



- ✓ Notification email
- ✓ Research plan webinar
- Sampled site list
- Please notify your customers at beginning of project

# Project Documentation



- We expect to collect nearly all project documentation from ESI/BPA
- You may be asked for additional project documentation or billing data
- If needed, we will use NDAs
- Evaluation team may interview your project engineer

# Customer Contact



*Please notify your customers at beginning of project*

- 1 week prior to contacting your customer, evaluation lead will notify utility with general description of information collected from site
- Evaluation team will follow safety and privacy requirements
- If needed, we will use NDAs with your customers



# Utility Communications



**Emails**



**Ad hoc meetings**



**Webinars**



**Announcements  
and Updates**

Next steps

Email notification from BPA

You receive customer-specific information

Evaluation team will gather data from BPA, utilities and your customers (notifying you at least one week beforehand)

Week of Nov 2

Today

Week of Nov 30

Early Dec

First half of 2021

Webinar

You notify selected customers in the evaluation sample that they may be contacted by the evaluation team

# Questions?

Thank you!

[www.bpa.gov/goto/evaluation](http://www.bpa.gov/goto/evaluation)

[evaluation@bpa.gov](mailto:evaluation@bpa.gov)

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