From:
To:
CC:

Sent: 1/28/2021 6:12:02 PM

Subject: RE: System Hardening Mitigation Decision Tree - Meeting Request

Attachments: SH Decision Tree Approvals\_02042021.pptx

\*\*\*\*\*CAUTION: This email was sent from an EXTERNAL source. Think before clicking links or opening attachments.\*\*\*\*

See attached for revised decision tree and an initial draft of the guiding principles. Please let me know if you all have any thoughts or revisions. Beyond that, these materials are set up as a starting point for our next meeting with the committee.

Best,



## kpmg

| KPMG LLP

Manager, Strategy

From:

Sent: Thursday, January 28, 2021 4:45 PM

To:

Cc:

Subject: [EXTERNAL] RE: System Hardening Mitigation Decision Tree - Meeting Request

I'd say, "If >25% of the structures within the zone have a condition warranting replacement, OH preferred."

Here is the process from the ECOP projects to determine structural impact (Rank 400 was used as a threshold for what projects were expected near term in SH, we were hoping to be through rank 400 within 5-10 years):

- 1. Hardening Review
  - a. REVIEW Circuit Protection Zone for potential hardening areas using the following searches/criteria:
    - (1) REVIEW EC Tags along Circuit Protection Zone for clustering of tags with the following Object Types:
      - Poles
      - Crossarms
      - Transformer
      - Insulators
    - (2) REVIEW Data for concentrations of EC Tags within the same Automatic Source Side Device (ASSD)

- b. COUNT the total number of poles within the potential hardening zone
- DETERMINE the probable structure impact factor using Table 2 below.

Table 2. Probable Structure Impact Factor

TAG TYPE	PROBABLE POLES TO BE REPLACED	NOTES
Pole Replacement	1 pole	
Oil Filled Equipment Replacement	1 pole	Count only if not associated with a structure above
Splice Count	1.5 poles	1.5 if not adjacent to pole/ transformer tags
Insulator / Cross Arm Replacement	0.4 poles	Count only if not associated with a structure above

- d. CALCULATE the percentage of structures impacted within the potential hardening area requiring probable replacement
  - (1) IF the Circuit Protection Zone falls between zone priorities less than 400 and has greater than 25% impacted structures

THEN consider designating the entire Circuit Protection Zone as a potential hardening area

(2) IF the Circuit Protection Zone priority is greater than 400 and has greater than 25% impacted structures

THEN entire Circuit Protection Zone hardening criteria may <u>not</u> apply

- (3) IF the entire Circuit Protection Zone does NOT meet a density of 25% PERFORM one of the following:
  - a. IF the Circuit Protection Zone priority is less than 400 (e.g., higher CPZ risk ranking)

THEN REVIEW mainlines and taps for potential hardening justifications that meet greater than 50% structure impact criteria AND CONSIDER recommending proposals to extend hardening projects beyond the aforementioned 50% structure impact criteria.

b. IF the Circuit Protection Zone priority is greater than 400

THEN REVIEW mainlines and taps for potential <2 miles hardening projects that affect greater than 50% structure impact criteria.

From:
Sent: Thursday, January 28, 2021 1:32 PM
To

Subject: RE: System Hardening Mitigation Decision Tree - Meeting Request

# opening attachments.\*\*\*\*

I'll update the decision tree and set up the templates for future project approvals / informs for the committee based on the feedback / actions today. To make sure I get it accurately, can you send me the thresholds for EC Tags, as discussed in the meeting? I didn't catch it too clearly.

After I make the changes, I'll loop in the remaining projects we have visibility to (1 remaining from today and your other two last minute ones) and send it back to you all.

Best,

kpmg | KPMG LLP Manager, Strategy

From:

Sent: Thursday, January 28, 2021 1:49 PM

To:

Cc:

Subject: [EXTERNAL] RE: System Hardening Mitigation Decision Tree - Meeting Request

Is it too late to add two more jobs?

From

Sent: Thursday, January 28, 2021 11:06 AM

To:

Cc:

Subject: RE: System Hardening Mitigation Decision Tree - Meeting Request

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Thanks If we want to go ahead and include the EC tag indicator for today, I've revised the slides to reflect the recommended language from (see attached). I made an assumption about whether the EC tag count influenced the recommendation based on the data available, so **please validate** (I only assumed the Clayton job).

Best.

kpmg

| KPMG LLP

Manager, Strategy

From:

Sent: Thursday, January 28, 2021 12:45 PM

To:

Cc:

Subject: [EXTERNAL] RE: System Hardening Mitigation Decision Tree - Meeting Request

I don't think we need to change the purpose of the project to ECOP, but it is a good idea to see the number of EC tags that would be addressed by the project. Maybe something like "Does the volume of EC tags result in a recommendation of a more timely mitigation method?" Or something that says that if we go with a solution that takes years to implement, we would have to correct the EC tags first.

From

Sent: Thursday, January 28, 2021 9:31 AM

To:

Cc:

Subject: RE: System Hardening Mitigation Decision Tree - Meeting Request

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My understanding was not that you would reclassify any CWSP projects to ECOP. More so, to explicitly call out a step where a project is identified as "higher" risk due to the EC tag count. For the committee, this would help them understand if a recommendation was chosen for expediency. For example, the Hybrid recommendation on the fulton job last week was ultimately supported based on the argument you made on the increased risk due to EC tags (at least for some members).

Ultimately, this is just trying to reflect the concernation raised. If it's not something we want to add in, we may just have to justify that to the committee this afternoon as we review.

Best,

# kpmg

| KPMG LLP

Manager, Strategy

From:

Sent: Thursday, January 28, 2021 11:15 AM

To:

Cc:

Subject: [EXTERNAL] RE: System Hardening Mitigation Decision Tree - Meeting Request

We include EC tags within every hardening project. If the project is being considered as a risk driven project first (CWSP); is it necessary to change it to EC optimization driven and name in ECOP? This does not change the way we scope, design, or execute the project.

From

Sent: Thursday, January 28, 2021 8:00 AM

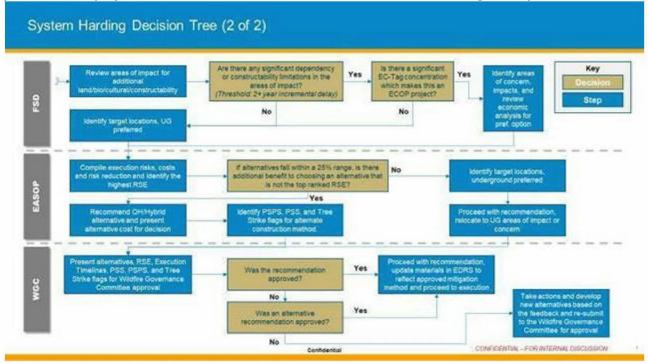
To:

Cc:

Subject: RE: System Hardening Mitigation Decision Tree - Meeting Request

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Andy provided some additional feedback on the decision tree, based on guidance from The request is to include a question around EC tags, with the threshold being whether the concentration make the job an ECOP project. With that in mind, see below for a draft of how that gets looped into the decision tree:



Please let me know if you guys have any additional feedback (e.g., would like to frame it differently, or in a different place on the decision tree). If you're good with it as is, I can integrate the change into the subsequent slides and send a revised copy of the full deck to you ahead of the noon meeting.

Thanks,

kpmg | KPMG LLP Manager, Strategy

From:

Sent: Wednesday, January 27, 2021 10:51 AM

To:

Cc:

Subject: RE: System Hardening Mitigation Decision Tree - Meeting Request

Attached is the updated decision tree (based on updates from last night), looped into the presentation materials for Thursday.

#### General flow is:

- What is the decision tree and how will it be used
- Individual project reviews:
  - Decision tree result (Please validate I took an initial pass based on the data available on the slide)
  - Would this come to the committee as an inform or decision (Please validate At first glance, only the Clayton job seems to be an edge / exception case)

- Mitigation comparison
- o Decision / vote on mitigation
- We'd close with a final decision / vote on whether to adopt the decision tree

Let me know if you guys have any additional thoughts,

kpmg

| KPMG LLP

Manager, Strategy

-----Original Appointment-----

From:

Sent: Tuesday, January 26, 2021 11:03 AM

To:

Subject: [EXTERNAL] System Hardening Mitigation Decision Tree - Meeting Request

When: Tuesday, January 26, 2021 5:30 PM-6:00 PM (UTC-08:00) Pacific Time (US & Canada).

Where: Microsoft Teams Meeting

Subject: System Hardening Mitigation Decision Tree - Meeting Request

## Objectives:

Review the System Hardening Mitigation Decision Tree (attached)
Align on any potential revisions to that framework or thresholds
Status check on materials for the Thursday night review with the WFRG Committee

### Attendees:

Microsoft Teams meeting

Join on your computer or mobile app

Click here to join the meeting

Or call in (audio only)

United States, San Francisco

Phone Conference ID:

Find a local number | Reset PIN

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