From: ███████████████████████

To: ███████████████

CC: ███████████████

Sent: 1/11/2021 9:21:59 PM

Subject: RE: EVM -- Additional Layers of Defense regarding quality issues

Attachments: Public Safety LTIP Target Setting V48.pptx

███████

Here is the final version of what got sent in. Thank you for the quick turnaround.
I am attaching the full deck for your reference. ███████ has a copy via another e-mail.

We can explain more details about the advisory audit in a follow up meeting next week.
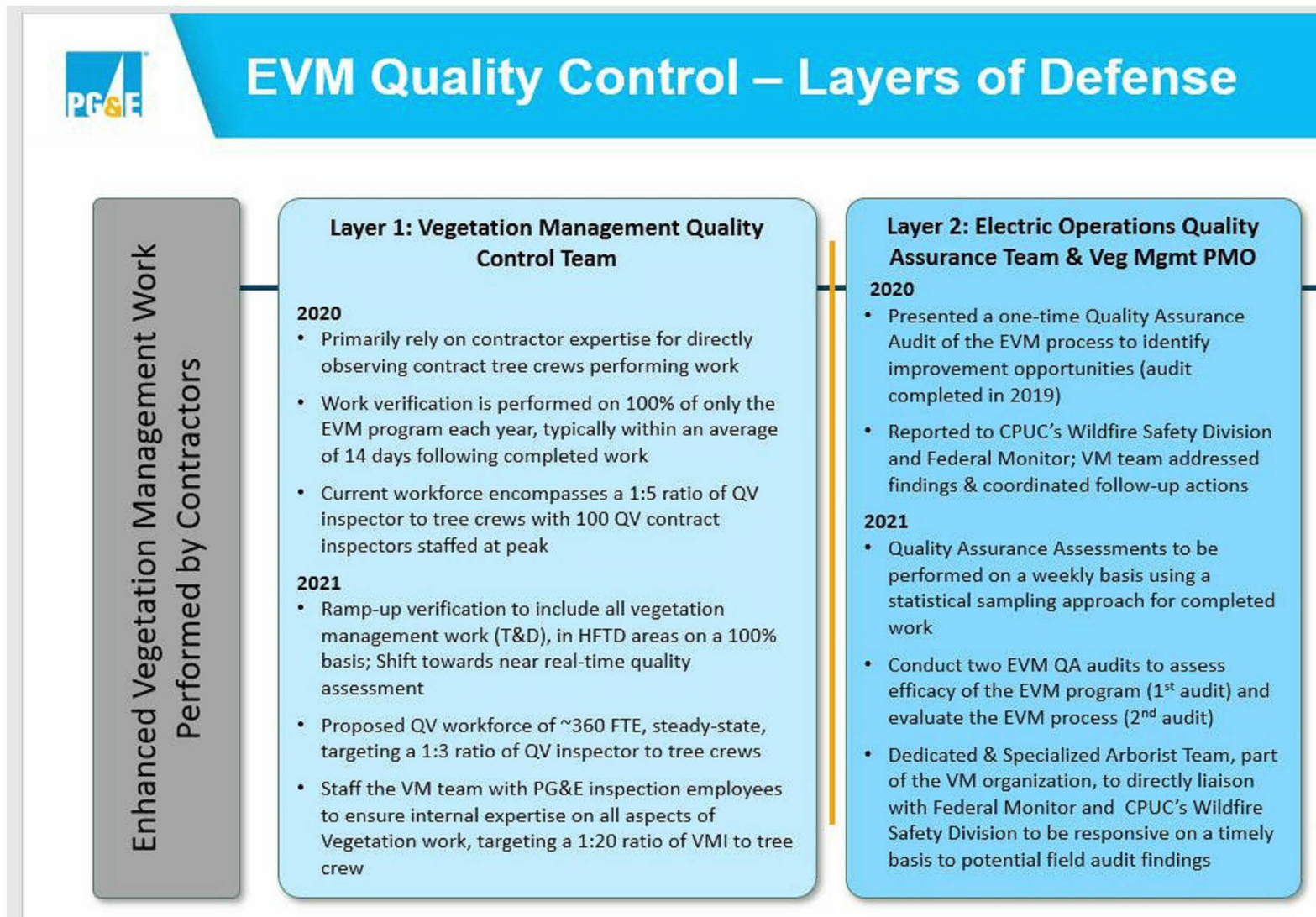
███████

PGE-DIXIE-NDCAL-000012992

There is no such thing as a small act of kindness; every act creates a ripple with no logical end.

-

From: ██████████████████████@pg████████████████
Sent: Monday, January 11, 2021 6:23 PM
To: ██
Cc: ██
Subject: RE: EVM -- Additional Layers of Defense regarding quality issues

Thank you, ████

█████████

From: ██████████████████████████████
Sent: Monday, January 11, 2021 3:19 PM
To: ██
Cc: ██
Subject: RE: EVM -- Additional Layers of Defense regarding quality issues

Classification: Internal
Here is an updated list for inclusion.

2020 IA:

- Performed an advisory over program strategy and governance
- Performed a validation audit over the use of LiDAR within veg management
- Performing a facilitated audit of the holistic EVM program (in progress)

We did not perform an audit of routine veg management in 2020, so please remove that.

For the 2021 items you have listed:

The first audit is not on our 2021 plan and would need to be added. I would also need context on what exactly the requested audit is supposed to cover. Im fine if we commit to it, but I need more information.

The second audit is well underway now and may be completed for this quarter, which in our world is actually 2020. Please put (in progress) for this item.

The third project, which I would call advisory, I would also need more information over, but I am fine if we commit to it.

Thanks

████

██████████████████████

From: ██████████████████████
Sent: Monday, January 11, 2021 12:42 PM
To: ██
Cc: ██
Subject: RE: EVM -- Additional Layers of Defense regarding quality issues

Looping in ▓▓▓▓ he and I discussed the earlier version today.

From: ▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓
Sent: Monday, January 11, 2021 12:04 PM
To: ▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓
Cc: ▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓
Subject: RE: EVM -- Additional Layers of Defense regarding quality issues
Importance: High

▓▓▓▓▓▓,
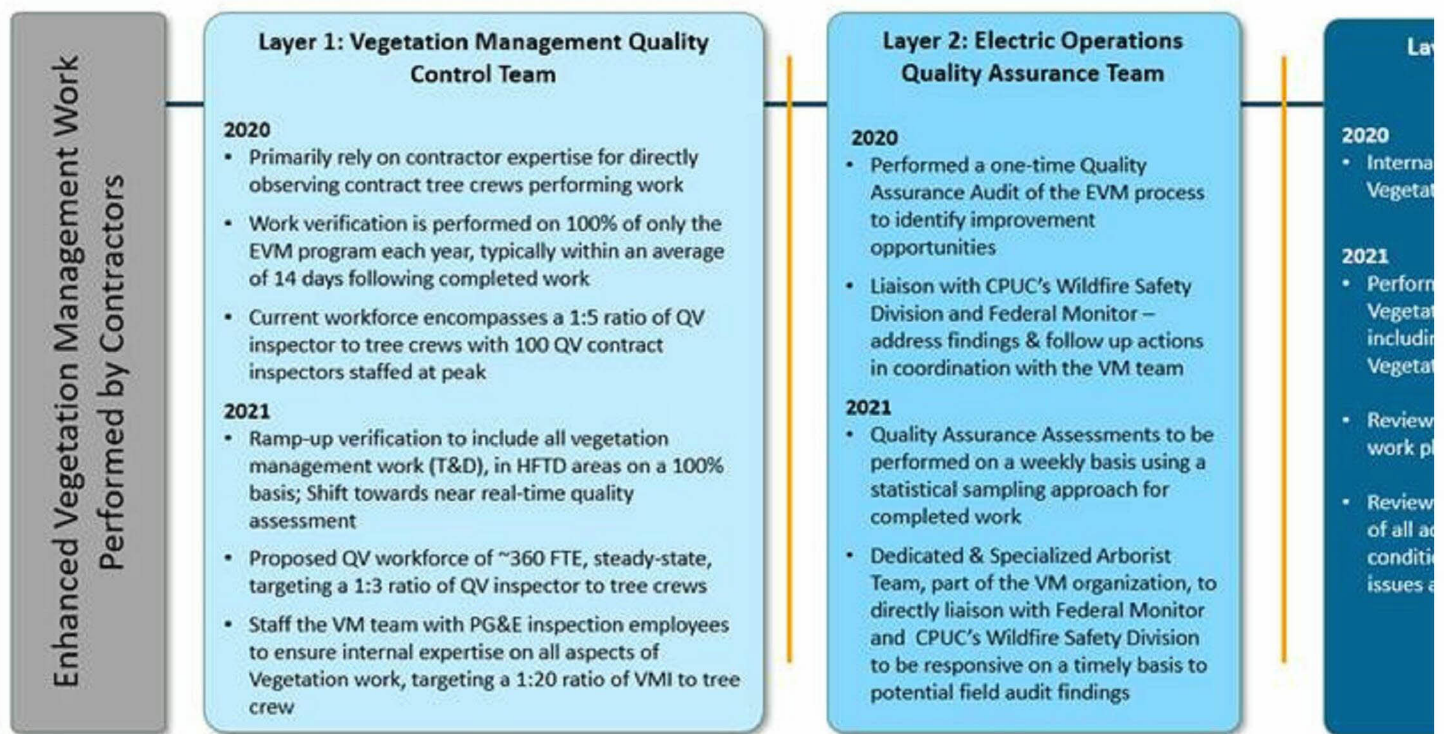
I'm helping ▓▓▓▓ complete this today. Below is the updated version of the slide – could you please confirm that Layer 3 accurately captures the IA's work?

Thank you,

▓▓▓▓▓▓

EVM Quality Control – Layers of Defense

Enhanced Vegetation Management Work Performed by Contractors

Layer 1: Vegetation Management Quality Control Team

2020
- Primarily rely on contractor expertise for directly observing contract tree crews performing work
- Work verification is performed on 100% of only the EVM program each year, typically within an average of 14 days following completed work
- Current workforce encompasses a 1:5 ratio of QV inspector to tree crews with 100 QV contract inspectors staffed at peak

2021
- Ramp-up verification to include all vegetation management work (T&D), in HFTD areas on a 100% basis; Shift towards near real-time quality assessment
- Proposed QV workforce of ~360 FTE, steady-state, targeting a 1:3 ratio of QV inspector to tree crews
- Staff the VM team with PG&E inspection employees to ensure internal expertise on all aspects of Vegetation work, targeting a 1:20 ratio of VMI to tree crew

Layer 2: Electric Operations Quality Assurance Team

2020
- Performed a one-time Quality Assurance Audit of the EVM process to identify improvement opportunities
- Liaison with CPUC's Wildfire Safety Division and Federal Monitor – address findings & follow up actions in coordination with the VM team

2021
- Quality Assurance Assessments to be performed on a weekly basis using a statistical sampling approach for completed work
- Dedicated & Specialized Arborist Team, part of the VM organization, to directly liaison with Federal Monitor and CPUC's Wildfire Safety Division to be responsive on a timely basis to potential field audit findings

La[yer 3...]

2020
- Interna[l] Vegeta[tion...]

2021
- Perfor[m] Vegeta[tion] includi[ng] Vegeta[tion...]
- Review[...] work p[...]
- Review[...] of all a[...] conditi[...] issues [...]

From: ▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓
Sent: Sunday, January 10, 2021 5:32 PM

▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓

Subject: EVM -- Additional Layers of Defense regarding quality issues
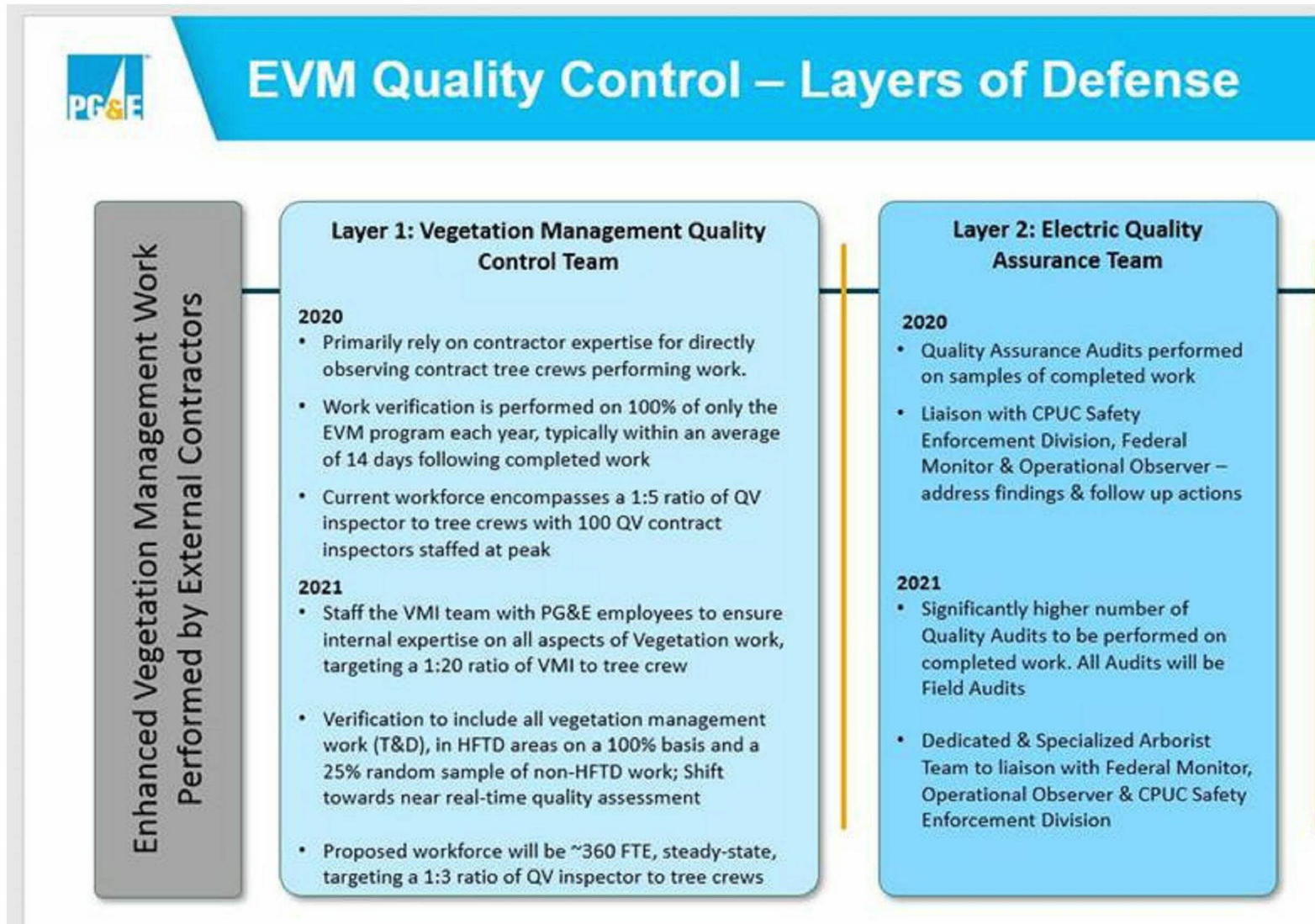**Importance:** High

▓▓▓▓▓▓▓▓▓▓

As part of the LTIP Discussions on EVM, ▮▮▮▮ asked me to develop a slide that highlight the three layers of defense, showing what additional items we are doing in 2021 vs what was done in 2020.

▮▮▮ – I am not sure I accurately captured what your team has done and plans to change
▮▮▮▮ – Same for Internal Audit.

Would you mind sending some concrete bullets my way. I need to get this to Compensation by end of day tomorrow.

▮▮▮▮

EVM Quality Control – Layers of Defense

Enhanced Vegetation Management Work Performed by External Contractors

Layer 1: Vegetation Management Quality Control Team

2020
- Primarily rely on contractor expertise for directly observing contract tree crews performing work.
- Work verification is performed on 100% of only the EVM program each year, typically within an average of 14 days following completed work
- Current workforce encompasses a 1:5 ratio of QV inspector to tree crews with 100 QV contract inspectors staffed at peak

2021
- Staff the VMI team with PG&E employees to ensure internal expertise on all aspects of Vegetation work, targeting a 1:20 ratio of VMI to tree crew
- Verification to include all vegetation management work (T&D), in HFTD areas on a 100% basis and a 25% random sample of non-HFTD work; Shift towards near real-time quality assessment
- Proposed workforce will be ~360 FTE, steady-state, targeting a 1:3 ratio of QV inspector to tree crews

Layer 2: Electric Quality Assurance Team

2020
- Quality Assurance Audits performed on samples of completed work
- Liaison with CPUC Safety Enforcement Division, Federal Monitor & Operational Observer – address findings & follow up actions

2021
- Significantly higher number of Quality Audits to be performed on completed work. All Audits will be Field Audits
- Dedicated & Specialized Arborist Team to liaison with Federal Monitor, Operational Observer & CPUC Safety Enforcement Division

▮▮▮▮▮▮▮▮▮▮

There is no such thing as a small act of kindness; every act creates a ripple with no logical end.
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