To:
Sent: 1/20/2021 9:39:31 AM
Subject: RE: PLEASE READ: EVM QC/QA
Attachments: Public Safety LTIP Target Setting V49.pptx

ΑII,

Attached is the final version - please see slide 17.

Thanks,

From:
Sent: Wednesday, January 20, 2021 9:34 AM
To

Cc: Subject: RE: PLEASE READ: EVM QC/QA

If you could send it over I still see some issues with the document that are beyond just who is doing the work.

Director Vegetation Management

Some of the measures included in this email are contemplated as additional precautionary measures intended to further reduce the risk of future wildfires.

From:
Sent: Wednesday, January 20, 2021 9:33 AM
To:

Cc:

Subject: RE: PLEASE READ: EVM QC/QA

We made the changes to be clear regarding which team is doing the work.

can you send the final view that went to Compensation.

| PG&E | Sr. Director, Risk – Special Projects

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

From: Sent: Wednesday, January 20, 2021 8:55 AM
To:
Subject: RE: PLEASE READ: EVM QC/QA
wanted to add you to this conversation I looked at the PowerPoint document at the bottom of the email chain and I see errors on it.
Director Vegetation Management
Some of the measures included in this email are contemplated as additional precautionary measures intended to further reduce the risk of future wildfires.
From Sent: Wednesday, January 20, 2021 8:52 AM To: Cc: Subject: RE: PLEASE READ: EVM QC/QA
think you are confusing what the Veg team is doing vs what your team is doing. Are you free to chat?  Director  Vegetation Management
Some of the measures included in this email are contemplated as additional precautionary measures intended to further reduce the risk of future wildfires.
From: Sent: Wednesday, January 20, 2021 8:50 AM To: Cc: Subject: PLEASE READ: EVM QC/QA mportance: High
was talking with this morning and realized I should have included you in this conversation.
As you can see below, was looking for verification on statements on our QV/QA programs for EVM and even though we presented the plan based on a monthly cadence to in November, we realized through this email chain that he is expecting weekly for QV. We are not sure how this misalignment happened, but we wanted to get on the same page ASAP.
Essentially, I was going to talk about two hurdles to us performing an audit on the previous week's work verified miles versus the previous month.

• Additional CFVM resources, especially now that veg ops is growing, we believe we are competing for the

PGE-DIXIE-NDCAL-000013220

 Receiving work verified miles weekly at a volume that lends itself to statistically valid sampling. In the past, we have had challenges in this area. On the second point above, as I discussed with we realized that this may put pressure on your team to provide us weekly results at a certain volume. I certainly do not want to add more pressure to your teams, so I wanted to check in with you and get your perspective. I have asked to add you to our meeting at 4:30 Apologies for the last minute notice. I hope you can join, but if not, can you send me your today with thoughts? Or, I can ask to postpone a bit if you would like. Some of the measures included in this email are contemplated as additional precautionary measures intended to further reduce the risk of future ignitions following the 2017 and 2018 wildfires. From: Sent: Tuesday, January 12, 2021 11:49 AM To: Cc Subject: RE: EVM QC/QA Ok, I will set up time to discuss with him. Some of the measures included in this email are contemplated as additional precautionary measures intended to further reduce the risk of future ignitions following the 2017 and 2018 wildfires. From Sent: Tuesday, January 12, 2021 11:43 AM To Subject: RE: EVM QC/QA See if we can get that specific bullet changed with Quality Verification Reviews will be performed using a statistically valid sampling of the previous month's completed work and reported weekly. For context specifically changed it from monthly to weekly, I did indicate it would probably require staffing to match that cadence. We should have a quick touch base with him. PG&E | Sr. Director, Risk – Special Projects | There is no such thing as a small act of kindness; every act creates a ripple with no logical end. From Sent: Tuesday, January 12, 2021 11:36 AM To: Cc: Subject: RE: EVM QC/QA

same resources so it may take longer to hire, plus there is an additional cost.

Team-

The way it was set up, based on our current CFVM workforce and other audits, we are going to pull samples
from the previous month, and then perform reviews of that previous month's sample, and then we can send
weekly updates of those results, but they would be on work performed in the previous month. That weekly
reporting would require an increased workload for my quality support team under

If wanted results only a week in the rear, we would need to increase our CFVM workforce by approximately 15 more people, not to mention the increased need for analysts work under and on veg ops hiring 100 internal from the same pool of people, we believe that would be challenging.

Note: my team and I talked with on the plan we provided to the board of directors and he was on board, so not sure if we had a misunderstanding, or if things have changed since then.

So I would change the first bullet under 2021 to:

Quality Verification Reviews will be performed using a statistically valid sampling of the previous month's completed work and reported weekly.

We are going to start performing reviews in March that will cover the January and February completed work, then we will be on the monthly cadence.

Below is what we reported to the Board of Directors on November 30.

All reviews will be dependent on EVM WV completing EVM miles in the previous month(s). To meet this EVM WV monthly plan in addition to changes to the 2021 plan for defined scope, CFVM will need to increase their headcount up to 7 Field Techs and 1 Sr. Field Tech.

- Jan-Feb EVM WV Review 1
  - Sample Size determined by EVM WV 'passed' miles from January and February 2021. These miles
    will be entered into the sample calculator to determine sample size. Then the associated EVM WV
    Passed segments for that timeframe (Jan-Feb 2021) will be randomized and pulled till the minimum
    sample mileage is met (small segments less than .02 miles will be excluded from the sample
    population prior to randomizing). This VegQV review will take place in March 2021.
- March November EVM WV Monthly Review 9
  - Sample size determined by EVM WV 'passed' miles for each individual month, entered into the sample calculator to determine the sample size. Sampling methodology will be the same, randomized segments declared as EVM WV 'passed' for that timeframe (ex. March 1 – March 31) and pulling the segments until the minimum mileage is met. This VegQV review will take place in April 2021.
  - There will be no EVM WV review of December EVM WV passed locations.
    - Unsure if EVM will continue through end of year in 2021 2020 EVM work ended in November.

If December EVM WV continues it can be added to the 2022 plan.

Some of the measures included in this email are contemplated as additional precautionary measures intended to further reduce the risk of future ignitions following the 2017 and 2018 wildfires.

From:	
Sent: Monday, January 11, 2021 9:19 PM	
To:	
Cc:	
Subject: EVM QC/QA	



# **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 & Veg Mgmt PMO

### 2020

- Presented a one-time Quality Assurance Audit of the EVM process to identify improvement opportunities (audit completed in 2019)
- Reported to CPUC's Wildfire Safety Division and Federal Monitor; VM team addressed findings & coordinated follow-up actions

### 2021

- Quality Assurance Assessments to be performed on a weekly basis using a statistical sampling approach for completed work
- Conduct two EVM QA audits to assess efficacy of the EVM program (1st audit) and evaluate the EVM process (2nd audit)
- 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

PG&E | Sr. Director, Risk – Special Projects

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