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Ratesetting**

TO PARTIES OF RECORD IN APPLICATION 19-07-019:

This is the proposed decision of Administrative Law Judge Regina DeAngelis. Until and unless the Commission hears the item and votes to approve it, the proposed decision has no legal effect. This item may be heard, at the earliest, at the Commission's October 8, 2020 Business Meeting. To confirm when the item will be heard, please see the Business Meeting agenda, which is posted on the Commission's website 10 days before each Business Meeting.

Parties of record may file comments on the proposed decision as provided in Rule 14.3 of the Commission's Rules of Practice and Procedure.

The Commission may hold a Ratesetting Deliberative Meeting to consider this item in closed session in advance of the Business Meeting at which the item will be heard. In such event, notice of the Ratesetting Deliberative Meeting will appear in the Daily Calendar, which is posted on the Commission's website. If a Ratesetting Deliberative Meeting is scheduled, *ex parte* communications are prohibited pursuant to Rule 8.2(c)(4)(B).

/s/ ANNE E. SIMON
Anne E. Simon
Chief Administrative Law Judge

AES:gp2
Attachment

Decision PROPOSED DECISION OF ALJ DEANGELIS (Mailed 9/3/2020)

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of Pacific Gas and Electric Company for Approval of its Mobile Application and Supporting Systems Pilot. (U39E).

Application 19-07-019

**DECISION APPROVING PACIFIC GAS AND ELECTRIC COMPANY'S
MOBILE APPLICATION AND SUPPORTING SYSTEMS PILOT**

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Attachment A - Safety Policy Division Initial Guidance for Evaluation of the Mobile App Pilot

DECISION APPROVING PACIFIC GAS AND ELECTRIC COMPANY'S MOBILE APPLICATION AND SUPPORTING SYSTEMS PILOT PROGRAM

Summary

This decision approves, with modifications, Pacific Gas and Electric Company's Application for a mobile application (mobile app) and supporting systems pilot. The mobile app pilot will be used by customers to report safety concerns regarding the utility's electric infrastructure. This decision also establishes a Phase 2 of this proceeding to provide for a permanent program, should the Commission find the mobile app reasonable and in the public interest after evaluating the pilot. This Application is submitted in compliance with *Order Instituting Investigation and Order to Show Cause 19-06-015*,¹ filed on June 27, 2019. This proceeding remains open.

1. Background

On July 29, 2019, Pacific Gas and Electric Company (PG&E) filed its *Application for Approval of its Mobile Application and Supporting Systems Pilot* (Application).² This Application was filed in conformity with a Commission directive in the *Order Instituting Investigation and Order to Show Cause (I.) 19-06-015*, which concerned the maintenance and operation of PG&E's electric facilities that "were involved in igniting fires in its service territory in 2017."³ As

¹ I.19-06-015, *Order Instituting Investigation on the Commission's Own Motion into the Maintenance, Operations and Practices of Pacific Gas and Electric Company (U39E) with Respect to its Electric Facilities; and Order to Show Cause Why the Commission Should not Impose Penalties and/or Other Remedies for the Role PG&E's Electrical Facilities had in Igniting Fires in its Service Territory in 2017* (June 27, 2019). I.19-06-015 can be found on the Commission's website at: https://apps.cpuc.ca.gov/apex/f?p=401:56:0::NO:RP,57,RIR:P5_PROCEEDING_SELECT:I1906015.

² PG&E's Application can be found at the proceeding's "Docket Card" on the Commission's website at: <https://apps.cpuc.ca.gov/apex/f?p=401:5:0::NO:RP,5,RIR,57,RIR>.

³ A.19-07-019 at 2 and 9.

part of I.19-06-015, the Commission directed PG&E to take certain corrective actions immediately, including filing this Application to seek Commission approval to develop a mobile application (mobile app) and supporting systems,⁴ at shareholder expense, to be used by the public to report compromised utility electric infrastructure.⁵ Specifically, the Commission addressed this matter in I.19-06-015 as follows:

PG&E is directed to file an application within 30 days⁶ of the issuance of this [Order Instituting Investigation] OII to develop an open source, publicly-available mobile app that allows a Geographic Information System-equipped phone⁷ to send pictures of utility infrastructure (*e.g.*, pole) to an asset management system/database maintained by PG&E. The asset management system/database would include at least the following detailed information - GIS coordinates, attachments, operations and maintenance records and [General Order] GO 95 requirements. The asset management database will also include any pictures received through the mobile app so that the photos of potential problems are accessible to the general public. PG&E shall also provide the following information for each photo received through the mobile app: 1) whether the photo identifies a problem; 2) whether the problem presents a safety concern or is a violation of safety regulations; 3) PG&E actions to remedy the matter; and 4) when the remedial action was or will be taken. This information shall be posted into the asset management

⁴ I.19-06-015 uses the phrase “asset management database.” In this decision, the phrase “support systems” is also used to refer to all interrelated technologies and processes, including any databases necessary to enable the required functionality of the mobile app.

⁵ I.19-06-015 at 18.

⁶ Commission’s Rules of Practice and Procedure at Rule 1.15 (Footnote not in original). The method for determining “30 days” is set forth in the Commission’s Rules of Practice and Procedure at Rule 1.15, *Computation of Time*, and is available on the Commission’s website at: <https://docs.cpuc.ca.gov/SearchRes.aspx?docformat=ALL&DocID=209618807>.

⁷ The references in I.19-06-015 to Geographic Information System (GIS) was intended to be to Global Position System (GPS). GPS provides the coordinates of a particular photo or asset. GIS, on the other hand, is a software program that captures and stores data that has been transmitted from systems, such as GPS.

database within 30 days of receipt of the photo through the mobile app. Development and continued operation of the asset management database and mobile app would be at shareholder expense.⁸

The Application, as filed by PG&E, includes a request to first establish a pilot program. Then, if the Commission determines the mobile app to be reasonable and in the public interest, the Commission could require PG&E to implement the pilot permanently. The Commission in I.19-06-015 provided few details about the framework of the proposed mobile app and did not address the appropriateness of a pilot phase as a program component. The issue of whether a pilot is an appropriate first step in the process of establishing a mobile app is addressed herein.

On August 28, 2019, the Public Advocates Office at the California Public Utilities Commission (Cal Advocates) filed the sole protest to the Application. Cal Advocates supported PG&E's intention to develop and deploy a pilot program for the mobile app prior to full deployment.⁹ However, Cal Advocates raised concerns in its protest regarding the service territory covered by the pilot program and suggested the pilot include Tier 2 High Fire Threat Districts (HFTDs)¹⁰ in addition to the Tier 3 HFTDs proposed by PG&E.

PG&E filed a reply to the Cal Advocates protest on September 9, 2019, arguing that expanding the pilot target area to include all of Tiers 2 and 3 HFTDs

⁸ I.19-06-015 at 18.

⁹ August 28, 2019 Cal Advocates Protest at 2. This protest and all other documents filed in this proceeding can be found on the Commission's website at: <https://apps.cpuc.ca.gov/apex/f?p=401:5:0::NO:RP,5,RIR,57,RIR>.

¹⁰ In Decision (D.) 17-12-024, the Commission approved HFTDs and related maps. This decision is available on the Commission's website at: <https://docs.cpuc.ca.gov/DecisionsSearchForm.aspx>.

would “increase the percentage to over 99 percent of PG&E’s total overhead assets in the HFTD locations,” and that such a request was “misguided” and “arguably defeats the purpose of a pilot program.” Nevertheless, PG&E indicated “there could be benefits to include some portions of Tier 2 HFTD” and agreed to expand the scope of the pilot to also include some customers in the Tier 2 HFTDs pending consultation with Cal Advocates.

The Administrative Law Judge (ALJ) held a prehearing conference on October 15, 2019 to discuss the issues of law and fact and to determine the need for hearing and schedule for resolving the matter. The Assigned Commissioner issued the Scoping Memo and Ruling (scoping memo) on November 14, 2019. The scope of the proceeding, as set forth in the scoping memo, is as follows:

1. Whether a pilot mobile app complies with the directives in I.19-06-015?
2. Whether the parameters of the pilot are reasonable?
3. Whether the results of the pilot indicate that a mobile app can specifically improve public safety?
4. Whether the metrics and process for evaluating the effectiveness of the mobile app are reasonable?
5. Are there any other relevant safety considerations associated with the pilot?¹¹

A public workshop was held at the Commission on December 3, 2019 at which PG&E presented its mock-up of the mobile app pilot. PG&E filed its draft pilot implementation plan on January 17, 2020, titled *Mobile Application Pilot*

¹¹ November 14, 2019 Scoping Memo at 4. The scoping memo is available on the Commission’s website at: <https://docs.cpuc.ca.gov/SearchRes.aspx?DocFormat=ALL&DocID=319752909>.

Implementation Report.¹² On February 12, 2020, the Commission held a second public workshop. During this second workshop, PG&E, the California Department of Technology, and Professor Catherine Sandoval on behalf of the Broadband Institute of California (BBIC) at Santa Clara University School of Law made presentations.

In addition, the Commission's Safety Policy Division (SPD) presented recommendations regarding PG&E's mobile app pilot at the second workshop. Those recommendations are set forth in SPD's *Workshop 2 Report* filed in this proceeding on May 8, 2020.¹³ The recommendations included, among other things, that the Commission direct PG&E to incorporate within the mobile app additional safety information-sharing capabilities to keep customers informed in an era of heightened wildfire threats and planned power shutoffs, such as Public Safety Power Shutoff (PSPS) alerts¹⁴ and a method to enable customers to report power outages. As discussed later in this decision, these topics are more appropriately addressed in Phase 2 of this proceeding.

Comments were filed on PG&E's January 17, 2020 *Mobile Application Pilot Implementation Report* on February 21, 2020 by Cal Advocates and BBIC. Reply comments were filed on March 6, 2020 by BBIC and PG&E. In response to these comments, PG&E made minor modifications to its pilot and filed a *Revised Mobile*

¹² PG&E's January 17, 2020 *Mobile Application Pilot Implementation Report* is available on the Commission's website at:

<https://docs.cpuc.ca.gov/SearchRes.aspx?DocFormat=ALL&DocID=328473978>.

¹³ The SPD report was provided to the service list of this proceeding by the May 8, 2020 ALJ ruling and is available at the "Docket Card" for this proceeding on the Commission's website at:

<https://docs.cpuc.ca.gov/SearchRes.aspx?DocFormat=ALL&DocID=336534046>.

¹⁴ The Commission considers rules and regulations pertaining to PSPS events in Rulemaking 18-12-005, which is available on the Commission's website at:

https://apps.cpuc.ca.gov/apex/f?p=401:56:0::NO:RP,57,RIR:P5_PROCEEDING_SELECT:R1812005.

Application Pilot Implementation Report on March 20, 2020.¹⁵ This revised implementation plan, similar to the initial January 17, 2020 plan, describes PG&E's suggested framework for the mobile app pilot.

In this decision, we summarize the parameters of PG&E's mobile app pilot and determine whether the pilot, as proposed by PG&E, conforms with the directives in I.19-06-015. This decision also addresses numerous operational elements of the mobile app that the Commission did not contemplate in I.19-06-015 but which are needed to establish an appropriate platform to perform the various required functions of the mobile app. In addition, this decision provides for a process to allow for permanent implementation of the mobile app, should the Commission find it advisable to so, within a Phase 2 of this proceeding.

This phase of the proceeding addresses all the issues set forth in the scoping memo, except Issue 3. Issue 3 presents the overarching issue of whether the results of the pilot indicate that a mobile app can improve public safety. Issue 3 will be addressed in Phase 2 of the proceeding as part of the Commission's consideration of whether to permanently adopt PG&E's mobile app. Further issues to be addressed in Phase 2 are identified below.

2. Conformity with I.19-06-015

The Commission in I.19-06-015 ordered PG&E to "file an application within 30 days after the issuance of this Order to develop an open source,

¹⁵ PG&E's *Revised Mobile Application Pilot Implementation Report* file on March 20, 2020 is available on the Commission's website at the "Docket Card" for this proceeding at: <https://docs.cpuc.ca.gov/SearchRes.aspx?DocFormat=ALL&DocID=335710543>.

publicly-available asset management database and mobile app as described in this Order.”¹⁶

I.19-06-015 included certain requirements for the mobile app. The Commission indicated in I.19-06-015 that PG&E should design an “open source, publicly-available mobile app that allows a Geographic Information System¹⁷ equipped phone to send pictures of utility infrastructure (*e.g.*, poles) to an asset management system/database maintained by PG&E.”¹⁸ Additionally, for each photo received, the Commission stated in I.19-06-015 that PG&E must provide the following information in the database within 30 days of receipt of the photo through the mobile app: (1) whether the photo identifies a problem; (2) whether the problem presents a safety concern or is a violation of safety regulation; (3) actions to remedy the matter; and (4) when the remedial action was or will be taken.¹⁹ The Commission in I.19-06-015 did not address any other details of the mobile app.

PG&E’s compliance with the Commission’s directives in I.19-06-015 is addressed below.

2.1. Pilot Approach and Scope

The Commission in I.19-06-015 does not directly address the scope of the mobile app but does suggest that the mobile app be designed to track “safety

¹⁶ I.19-06-015, Ordering Paragraph 13.

¹⁷ The references in I.19-06-015 to Geographic Information System (GIS) was intended to be to Global Position System (GPS). GPS provides the coordinates of a particular photo or asset. GIS, on the other hand, is a software program that captures and stores data that has been transmitted from systems, such as GPS.

¹⁸ I.19-06-015 at 18.

¹⁹ I.19-06-015 at 18.

concerns.”²⁰ The overall subject matter of I.19-06-015, however, was more narrow and consisted of a review of PG&E’s electrical assets involved in igniting fires in its service territory in 2017.²¹

Within this context, PG&E proposes to develop and pilot a mobile app to assess whether and how such a mobile app can improve public safety by, specifically, reducing the risk of catastrophic wildfire attributed to its electrical infrastructure.²² In other words, PG&E proposes that the mobile app should focus on wildfire prevention.

Cal Advocates generally supports the scope of PG&E’s pilot as proposed.²³ BBIC, however, claims that PG&E’s limited focus on the “risk of catastrophic wildfires” is misplaced and overly narrow.²⁴ BBIC argues that the mobile app should have a broader purpose consistent with PG&E’s duty as an electrical corporation, as prescribed by Public Utilities Code § 451, § 399, and I.19-06-015 to address issues regarding safety and reliability, generally.²⁵ Consistent with this broader purpose, BBIC asks the Commission to direct PG&E to revise its mobile app pilot proposal to better address existing safety concerns with PG&E’s electric

²⁰ I.19-06-015 at 18.

²¹ I.19-06-015 at 1.

²² PG&E *Mobile Application Pilot Implementation Report* (January 17, 2020) at 1.

²³ August 28, 2019 Cal Advocates Protest at 2.

²⁴ February 21, 2020 BBIC Comments at 10. “PG&E’s undersized, invitation-only proposal for a one season web-enabled pilot exemplifies PG&E’s safety issues and the company’s safety culture problem.” February 21, 2020 Comments at 14; March 6, 2020 BBIC Reply Comments at 3-4.

²⁵ February 21, 2020 BBIC Comments at 10; March 6, 2020 BBIC Reply Comments at 5. “PG&E misunderstands BBIC’s position which is that the App must be considered within the broader context of PG&E’s responsibility to offer safe, reliable service with adequate facilities at just and reasonable rates, including its efforts to prevent catastrophic wildfire.”

operations, generally, and to improve service reliability.²⁶ BBIC asserts that it is all but predetermined that, owing to PG&E proffering a mobile app approach with limited functionality and no demonstrable linkages to the utility's operations, that the pilot by design will underperform and be found a failure.²⁷

We agree with BBIC that the scope of the mobile app pilot, while including wildfire mitigation, should broadly encompass safety concerns in general. This determination is supported by the Commission in I.19-06-015, when stating that for each submittal/safety report²⁸ received via the mobile app, PG&E should explain "whether the problem presents a safety concern or is a violation of safety regulations."²⁹

Therefore, we direct PG&E to expand the scope of the mobile app pilot to be consistent with I.19-06-015 and address electric infrastructure safety concerns, generally, rather than solely focus on wildfire-related safety issues. In connection with this directive, the entirety of the mobile app pilot shall be revised to conform with a broader purpose to encompass safety concerns generally. For example, PG&E's process and criteria for evaluating whether the pilot is successful currently includes a requirement that PG&E receive at least 384 "valid" safety reports during the pilot phase, and, PG&E goes on to state that for a safety report to be "valid" for purposes of measuring the success of the pilot, it

²⁶ February 21, 2020 BBIC Comments at 15; March 6, 2020 BBIC Reply Comments at 3-4.

²⁷ February 21, 2020 BBIC Comments at 11.

²⁸ The terms "safety report" and "submittal" are used interchangeably in this decision to refer to the information describing the safety concerns related to PG&E's electric infrastructure provided by the customer to PG&E via the mobile app.

²⁹ I.19-06-015 at 18.

must be related to an asset that presents a wildfire risk.³⁰ This requirement, among others, should be modified to encompass safety concerns generally.

2.2. Pilot Phase

We now address whether under I.19-06-015 it is appropriate for PG&E, in establishing the mobile app, to first put forth a pilot, rather than implement a permanent program at the onset. In I.19-06-015, the Commission simply directed PG&E to seek approval of a mobile app and did not specifically address the appropriateness of a pilot.³¹

In response, PG&E filed this Application seeking approval of a pilot, rather than a permanent program, for a mobile app. PG&E explains that a pilot, rather than a fully implemented permanent program, is an appropriate first step because it is not a foregone conclusion that a mobile app will achieve its intended purposes, which PG&E describes as “wildfire mitigation.”³² The pilot, PG&E explains, will provide the opportunity to test the effectiveness of a mobile app for wildfire mitigation (a focus we have already determined to be unduly narrow).

PG&E further states that the mobile app could have unintended negative consequences, such as diverting limited resources from other wildfire mitigation efforts and introducing new public safety risks, such as encouraging members of the public to seek close contact with PG&E’s electrical assets, to trespass on private property, or to create unsafe conditions while driving and taking photographs.³³ PG&E explains that for these reasons a pilot is an appropriate vehicle to test whether a mobile app is indeed in the public interest, stating, at

³⁰ June 17, 2020 PG&E Response at 3.

³¹ I.19-06-015 at 18.

³² Application 19-07-019 at 3.

³³ Application 19-07-019 at 8.

the outset “we believe it is better to build a flexible pilot and gather information from users.”³⁴

BBIC disagrees and argues that a pilot is not needed and the program should immediately be fully implemented.³⁵ BBIC states that “PG&E’s proposal ...[to] run [a pilot] for one fire season, misses the opportunity to integrate public input....”³⁶ Cal Advocates does not contest PG&E’s proposal to use a pilot.

We find that advantages exist to relying on a pilot to test the mobile app’s effectiveness, as proposed, and to determine whether any of the potential public safety risks related to mobile app users’ behavior, as described by PG&E, have merit. We further find that a pilot program will allow the Commission to determine areas where the mobile app could benefit from modifications and quantify the extent that PG&E finds it necessary to reallocate limited resources from other safety programs. Therefore, we approve of a pilot as the first step. However, in approving of this pilot, we do not envision the pilot to be a static offering. Instead, we expect PG&E to update the mobile app as needed during the term of the pilot to promote ease of use, improve the functions, and resolve any software problems. We are particularly concerned about the ease of use or “friendliness” of the mobile app pilot, which we view as a quality critical to increasing the likelihood of adoption and repeated use by customers.

Furthermore, to better facilitate the tracking of the pilot’s development and evolution, we direct PG&E to file and serve in this proceeding quarterly status reports on the utility’s pilot activities and progress, with the first report due three months after the effective date of this decision. This reporting requirement

³⁴ March 6, 2020 PG&E Reply Comments at 4.

³⁵ February 21, 2020 BBIC Comments at 2.

³⁶ March 6, 2020 BBIC Reply Comments at 3.

expires at the end of the pilot. These reports should specifically address all PG&E's updates to the mobile app pilot to improve the mobile app while available to customers.

2.3. Publicly-Available Mobile App

The Commission in I.19-06-015 directed PG&E to develop a "publicly-available mobile app."³⁷

PG&E explains that it interpreted the directive in I.19-06-015 to allow the utility the discretion in designing the mobile app platform to choose either: (1) a web-based application that can be used from any PC, Mac, or mobile smartphone or (2) a phone-specific mobile app, for use on smartphones. In this decision, we also refer to option 2, the smartphone-specific mobile app, as a "native" app.

PG&E supports a web-based mobile app. A web-based mobile app, according to PG&E, would consist of adding web pages to its existing website and offering customers a shortcut icon or "tile" for placement on the screens of their smartphones. Customers could access the web pages from their phones or through their computers. PG&E claims that the web-based mobile app offers greater ease of use and fits, with relative ease, into PG&E's existing website operations.

In citing the benefits of a web-based application, PG&E explains that it: (1) allows the customer to report potential issues from any web browser (phone, tablet, or laptop/desktop); (2) does not require an extra step to download an app; (3) does not require repeated app downloads due to updates; (4) does not require large amounts of storage space on the mobile phone; (5) can have a shortcut tile placed on the phone home screen as a reminder (just like a native

³⁷ I.19-06-015 at 18.

app but without the higher storage space); (6) can be built on a standard HTML framework; and (7) can be easily found in search engines and at pge.com navigation. Furthermore, PG&E asserts that, based on its research, a web-based mobile app will reach more customers than a native app.³⁸

BBIC disagrees. BBIC claims that the web-based application is inadequate because it is only accessible to customers with internet access.³⁹ In contrast, BBIC explains, a native app would allow customers to take photographs and draft a safety report with pertinent information without internet availability, and then later allow for the information to be transmitted via their smartphones to PG&E once internet service is restored. BBIC further states that the web-based application is not consistent with the Commission's directive in I.19-06-015, which directed PG&E to develop a "mobile app."⁴⁰ This term means specifically, according to BBIC, a native app, or one which is downloaded to a customer's smartphone from an App store.

We find that a web-based application has some of the necessary functionality and seamlessly integrates with PG&E's existing website operations, while a native app offers the necessary functionality and more closely conforms to the Commission's directive in I.19-06-015. The Commission in I.19-06-015 specified that PG&E shall establish a "mobile app that allows a... phone to send pictures of utility infrastructure," a directive we interpret as placing special emphasis on smartphones as the basis for PG&E's mobile app.⁴¹ In turn, because

³⁸ March 6, 2020 PG&E Reply Comments at 7.

³⁹ February 21, 2020 BBIC Comments at 8, citing to the Commission's GIS Data and Broadband Maps, Data (as of December 31, 2019) at: https://www.cpuc.ca.gov/Broadband_Availability/

⁴⁰ I.19-06-015 at 18.

⁴¹ I.19-06-015 at 18.

a native app by nature has smartphones as the center of operation, we conclude that the native app approach most closely aligns with the Commission's intent.

Accordingly, we direct PG&E to develop a native app within its pilot program. PG&E shall develop two separate apps for its pilot program, one for iPhones and one for smartphones with Android operating systems. If, in addition, PG&E would like to develop a web-based application within its pilot program to offer customers more choice, the utility may do so as long as the web-based application conforms to all the requirements herein for the native app. Any web-based application would also be at shareholder expense, consistent with the Commission's directive in I.19-06-015 regarding costs related to the mobile app. Cost allocation is further addressed below.

2.4. Cost Allocation

In I.19-06-015, the Commission stated that "Development and continued operation of the asset management database and mobile app would be at shareholder expense."⁴² We reiterate this directive today. The costs associated with the development and continued operation of the mobile app pilot are at shareholder expense.

PG&E acknowledges this directive in its Application but also suggests that this directive has limits, stating that it "understands the cost of development and continued operation as referring to expenditures limited to developing the actual mobile application and support systems (*e.g.*, the cost to build the mobile application) and not the cost to respond to submittals (*e.g.*, sending a worker to

⁴² I.19-06-015 at 18 and Ordering Paragraph 13 at 21.

inspect an asset), which would be covered through PG&E's normal operations budget."⁴³

Other than to acknowledge that the pilot is at shareholder expense, no parties commented on this topic.

We agree with PG&E that costs to respond to submittals are a ratepayer expense. Costs associated with development and continued operation of the mobile app and the supporting systems remain at shareholder expense. We clarify in this decision that "costs associated with development and continued operation" include costs related to the evaluation of the pilot, which was proposed by PG&E as part of the development of the mobile app. Moreover, as discussed below, in Phase 2 of this proceeding we will revisit this directive and consider whether continued operation of this mobile app and supporting systems, if permanently implemented, would be more appropriately categorized as a ratepayer expense.

2.5. Open Source

We continue our review of PG&E's compliance with I.19-06-015 by evaluating PG&E's compliance with the Commission's directive to develop an "open source" mobile app. The Commission stated in I.19-06-015 that the mobile app's source code should be "open source."⁴⁴

PG&E explains that having an open and publicly-available source code would introduce new cybersecurity risks to PG&E's Information Technology Infrastructure. To address these risks while complying with the spirit of I.19-06-015, PG&E proposes to develop a mobile app that has an open application

⁴³ Application 19-07-019 at 9, fn. 15.

⁴⁴ I.19-06-015 at 18.

programming interface. This means that there would be a publicly-available interface, but PG&E would maintain property ownership over the original source code for the mobile app.

BBIC submits that such an approach does not deliver a truly open source code and argues that, because the mobile app within PG&E's pilot would not rely on open source code, the mobile app, as proposed, fails to comply with I.19-06-015.⁴⁵

We find that having a publicly-available interface but with PG&E preserving ownership over the original source code to be an acceptable interpretation of the Commission's directive in I.19-06-015, while also addressing cybersecurity risk concerns, provided that PG&E shares the design of the mobile app and relevant non-confidential materials with others upon request.

2.6. Within 30 Days - Posting of Information

The Commission in I.19-06-015 included certain actions that PG&E must take when PG&E receives photos from customers using the mobile app to report safety concerns. The Commission stated in I.19-06-015 that "PG&E shall also provide the following information for each photo received through the mobile app: 1) whether the photo identifies a problem; 2) whether the problem presents a safety concern or is a violation of safety regulations; 3) PG&E actions to remedy the matter; and 4) when the remedial action was or will be taken. This information shall be posted into the asset management database **within 30 days** of receipt of the photo through the mobile app."⁴⁶

⁴⁵ February 21, 2020 BBIC Comments at 6.

⁴⁶ I.19-06-015 at 18. (Emphasis added.)

PG&E commits to, within 30 days of the safety issue being reported, uploading information received through the mobile app to a secure database (discussed below at Section. 1.7) including photos and location details of the compromised utility electric infrastructure, as well as status, e.g., whether the reported safety issue identified a problem and how PG&E has or will resolve the problem.

No parties contest this aspect of PG&E's proposal.

Accordingly, we find this element of PG&E's proposal to be in compliance with I.19-06-015 provided that PG&E uploads the information to the asset management database and makes this information publicly-available on its website and mobile app, as further addressed in Section 1.7, below.

2.7. Asset Management Database and Publicly-Available Information

The Commission stated in I.19-06-015 that PG&E should create an "asset management database" and make submittals "accessible to the general public."⁴⁷

PG&E responds that it will store the following information within a proposed asset management database associated with each valid report or photo received from the public:

- (1) Whether the photo identifies a problem;
- (2) Whether the problem presents a safety concern or is a violation of a safety regulation;
- (3) PG&E's actions to remedy the matter; and
- (4) When the remedial action was or will be taken.⁴⁸

⁴⁷ I.19-06-015 at 18.

⁴⁸ PG&E *Mobile Application Pilot Implementation Report* (January 17, 2020) at 26.

We find PG&E's description of its proposed asset management database generally adequate, and approve it with the provision that any and all data deemed invalid and/or rejected (including submittals deemed emergencies) shall be preserved for a period of four years from the launch date⁴⁹ of the pilot program for potential Commission evaluation purposes. We also require that PG&E include the GPS coordinates of any reported asset in its asset management database.⁵⁰ PG&E may add additional information to its asset management database fields without prior Commission approval.

We now turn to the important element of public access to the data generated in the course of PG&E's mobile app pilot operations. PG&E's proposed protocols will make available information generated as a result of its mobile app pilot to the submitter only, and not the general public. As discussed above, PG&E indicates that all information generated as a result of its mobile app will be safeguarded in an asset management database. PG&E specifies that it does not intend, within the pilot phase, to provide for public access to submitted safety reports. PG&E seeks to justify this position by noting that deferring this requirement during the pilot phase might lessen the complexity of the task at hand. Instead, PG&E pledges to offer public access to submitted safety reports and photos later, should the Commission adopt the pilot as a permanent program.

PG&E further explains that the report submitter will be kept well informed on the progress of PG&E response to the safety report. PG&E proposes to send

⁴⁹ The launch date is further discussed in Section 2.5, herein. The launch date is the date that PG&E provides customers with access to the mobile app and mobile app is fully functional.

⁵⁰ GIS or geographic information system is a computer system for capturing, storing, checking, and displaying data related to geographic positions on earth's surface.

the submitter one or more notifications of the safety report's status as it moves through the internal work process. With the mobile app, PG&E explains, the report submitter will be able to see their submitted safety report and photo and track the safety report's status and resolution.⁵¹

BBIC urges the Commission to direct PG&E to publicly post the submitted photos, its analysis of the safety issue reported, and proposed corrective action during the pilot phase, and states, "Public communication about the photos received and public explanation of PG&E's analysis will foster transparent decision-making that enables deliberative contestation, accountability, enforcement of [Commission] CPUC rules, and safety."⁵² BBIC further states, "Systems that transform publicly submitted photos into action reflect our system of democratic governance and harness an engaged citizenry."⁵³

We are not persuaded by PG&E's arguments that merit exists in postponing the public's access to submittals obtained via the mobile app until after a permanent program is adopted; nor do we see any need to keep from public's view PG&E's analysis, determination, and decided course of action to mitigate problems as they are reported. Rather, we agree with BBIC that by publicly posting the photos and related information, the mobile app will promote transparency, enforcement of the Commission's rules, and safety generally.

⁵¹ March 6, 2020 PG&E Reply Comments at 5.

⁵² February 21, 2020 BBIC Comments at 3-4.

⁵³ February 21, 2020 BBIC Comments at 13. As Professor Sandoval stated at the February 12, 2020 workshop, "Californians are smart, capable, and engaged in preventing utility fire and infrastructure risk issues." February 21, 2020 BBIC Comments at 13.

Therefore, we direct PG&E to make publicly available all photos submitted (to the extent relevant and appropriate), within 30 days of receipt. Furthermore, we direct PG&E to make available to the public all submitted safety reports and the resulting PG&E determination, analysis, GPS coordinates, and corrective action, also within 30 days of receipt of the safety report. In all other respects, we find that PG&E has adequately complied with the asset management database and public access provisions of I.19-06-015.

3. Additional Components of Mobile App Pilot

3.2. Customer Base and Geographic Reach

We now turn to other components of the pilot not specifically addressed by the Commission in I.19-06-015. The first issue we address is the geographic reach of the pilot and the customer base covered by the pilot.

As described above, PG&E, at the urging of Cal Advocates, agreed to expand the geographic reach of its pilot beyond Tier 3 HFTDs to also include some customers located in Tier 2 HFTDs. PG&E indicated that it would confer with Cal Advocates before it proposed the exact number of Tier 2 HFTD customers to include in the pilot. PG&E's draft implementation plan provides additional details on PG&E's Tier 2 inclusion to the extent that it mentioned including a "sampling" of PG&E customers in Tier 2 and Tier 3 HFTDs.⁵⁴

PG&E explains that approximately 300,000 customers are located in Tier 2 and Tier 3 HFTDs whose email addresses are known to the utility. To reach a statistically significant number of customers for the pilot, PG&E proposes to engage this subset of customers by emailing all 300,000 Tiers 2 and 3 customers with an invitation to participate in the pilot. PG&E states that it will supplement

⁵⁴ PG&E *Mobile Application Pilot Implementation Report* (January 17, 2020) at 27.

this pilot invitation with direct mail to all Tier 2 and Tier 3 customers, as necessary, based on the volume of responses the utility receives from the emailed invitations. PG&E estimates that sending out 300,000 invitations via email should yield roughly 186 pilot participants. PG&E expects that participating customers will represent a mix of urban, suburban, and rural locations.

BBIC claims that the limited geographic scope and the invitation-only design of PG&E's pilot fails to adequately harness the public's ability to identify hazards and convert public information to action across PG&E's territory.⁵⁵ BBIC further claims that the "small, invitation-only pilot" will discourage participation by customers and is inconsistent with I.19-06-015.⁵⁶ In sum, BBIC argues that the Commission should direct PG&E to "make the App accessible to everyone" in its service territory.⁵⁷

We, generally, find reasonable the customer base and geographic area targeted by PG&E for the pilot. However, to ensure that PG&E's pilot attracts a sufficient number of customers, PG&E, in addition to its proposal to email a subset of customers in Tier 2 and Tier 3 HFTDs, is also directed to send text message invitations to all customers in Tier 2 and Tier 3 HFTDs (to the extent PG&E has access to cellphone numbers), and to include an invitation as part of a direct mail bill insert or postcard to all customers in Tier 2 and Tier 3 HFTDs. To be clear, we modify PG&E's proposal, which would be limited to a subset of customer in Tier 2 and Tier 3, to require PG&E to invite for pilot participation all customers located in Tier 2 and Tier 3 HFTDs, with a pilot recruitment effort to include direct mail insert for those customers who receive their electricity bills by

⁵⁵ February 21, 2020 BBIC Comments at 9.

⁵⁶ February 21, 2020 BBIC Comments at 11.

⁵⁷ February 21, 2020 BBIC Comments at 9.

U.S. mail, and for a postcard to be sent via U.S. mail to those customers who have paperless billing.

In addition, to promote broader participation for the pilot, PG&E shall conduct outreach to target and make the mobile app pilot available to all PG&E contractors performing vegetation management in the field, applicable staff at the California Department of Forestry and Fire Protection (CAL FIRE), and relevant staff at cable companies and telecommunication providers with whom PG&E operates under joint pole agreements.⁵⁸

3.3. Duration of Pilot

In its initial *Mobile Application Pilot Implementation Report*, PG&E's proposed timeline could foreseeably result in the launch of the pilot during the wildfire season; at the same time PG&E commits to running the pilot for a full wildfire season to learn how it may be used in crisis situations. PG&E initially proposed that the pilot duration be a minimum of six months or until 384 unique submittal have been received.⁵⁹ PG&E suggested that, if after six months 384 submittals have been received, PG&E would stop the pilot and share its findings with SPD. However, PG&E proposed to halt the pilot after 12 months whether or not 384 submittals were received, indicating that PG&E found it best at this point to share findings with SPD to determine whether moving forward toward full implementation is warranted.

Cal Advocates suggests that the duration of the pilot be limited to six months.⁶⁰ It explains that six months is an adequate amount of time to evaluate

⁵⁸ Scoping Memo at 7, "Pacific Gas and Electric Company shall seek input on its development of the mobile app pilot from the California Department of Forestry and Fire Protection, vegetation management consultants and other investor-owned and municipal utilities."

⁵⁹ PG&E *Mobile Application Pilot Implementation Report* (January 17, 2020) at 29.

⁶⁰ February 21 Cal Advocates Comments at 3.

the pilot in light of the potential for the diversion of limited resources from other wildfire safety programs.

BBIC disagrees with Cal Advocates and suggests that the pilot be permanently adopted now, consistent with the broad directive in I.19-06-015, which has no time limit on the duration of the mobile app.⁶¹ BBIC again points out that I.19-06-015 did not specifically allow for a pilot but instead simply directed PG&E to establish a mobile app program. BBIC further suggests that limiting the pilot to six months will set up the pilot for failure, stating that “Reevaluating an ill-designed App and pilot design after six months foretells the conclusion of the evaluation.”⁶²

In response to concerns raised by BBIC, PG&E changed its initial recommendation and proposes in its *Revised Mobile Application Pilot Implementation Report* that the pilot last a minimum of 12 months.⁶³

We find a reasonable duration for the pilot to be at least 24 months or until Phase 2 of this proceeding is completed, whichever is longer. The pilot will be initiated on the pilot’s launch date, the date when PG&E provides customers with access to the mobile app pilot and the mobile app pilot is fully functional. We realize this is longer than the duration recommended by PG&E. However, we find that a longer period of time is needed to incorporate an evaluation process into the pilot term.

During the first 12 months of the pilot, PG&E shall test the mobile app in all seasons, including one full wildfire season. During the second 12 months, the pilot will be evaluated and recommendations made for improving it, as the pilot

⁶¹ February 21, 2020 BBIC Comments at 9; March 6, 2020 BBIC Reply Comments at 6.

⁶² March 6, 2020 BBIC Reply Comments at 6.

⁶³ March 20, 2020 PG&E Revision to Mobile Application Pilot Plan at 1.

continues to operate. These recommendations will be reviewed by the Commission in Phase 2 of this proceeding and provide a basis for the Commission to establish a permanent program, if warranted. This process is further addressed below. To be clear, PG&E should not halt the pilot in the absence of Commission authorization.

3.4. Number of Safety Report/Submittals

For the pilot, PG&E proposes to collect a minimum of 384 unique submittals,⁶⁴ with the number of unique submittals meaning separate safety reports. PG&E explains that this goal of 384 separate safety reports will provide a relevant and statistically significant sample needed to properly determine the value of the mobile app.⁶⁵

BBIC argues, generally, that any lack of participation, for example, PG&E not reaching its proposed goal of 384 submittals, would point to PG&E “sabotaging” the pilot.⁶⁶ BBIC finds no value in establishing a goal of 384 unique submittals. BBIC also points out that PG&E should count all submittals regarding safety concerns toward its goal of 384 and not just limit its count to those submittals regarding wildfire mitigation.

We find reasonable PG&E’s goal of attaining 384 unique submittals or safety reports to properly evaluate the pilot but note that any failure to reach this quantity shall not halt the program. In response to BBIC’s concerns, we direct PG&E to coordinate with SPD, to the extent necessary, to ensure this number of submittals is obtained. We have no reason to believe that PG&E would

⁶⁴ The total of 384 unique submittals assumes that at least some of the 186 pilot participants, referred to in Section 2.1, will submit multiple submittals.

⁶⁵ PG&E *Mobile Application Pilot Implementation Report* (January 17, 2020) at 30.

⁶⁶ February 21, 2020 BBIC Comments at 11.

deliberately compromise this effort, as suggested by BBIC. Ensuring this number of submittals is achieved may include contacting more customers, using different methods to contact customers, or repeatedly contacting customers. It may also include marketing, education, outreach, and training.

Furthermore, consistent with our discussion above and at the urging of BBIC, the pilot shall not be limited to issues related to reducing the risk of catastrophic wildfire. Rather, PG&E's pilot shall encompass all potential safety matters pertaining to the utility's electric infrastructure. In turn, such matters would qualify toward PG&E's evaluation goal of 384 unique submittals regardless of whether a submittal implicates wildfire safety.

3.5. Intake of Safety Reports and Existing Complaint Process

PG&E recommends an intake procedure for safety reports submitted by customers through the mobile app. After a customer submits a safety report via the mobile app, PG&E will complete the following intake procedures to screen submitted reports for photo clarity, identify immediate hazards, determine whether the photo (when included) identifies a problem, and whether the problem identified presents a safety concern or is a violation of any safety regulation.⁶⁷

PG&E describes future formation of a dedicated in-house "triage team" to receive the submittals. The triage team would conduct an initial review of submittals, which would consist of the following steps:

- Notify the submitter that the safety report has been received and the review process started and provide a safety report tracking number to the submitter;
- Validate by determining whether available photos are acceptable and useful in determining the condition,

⁶⁷ PG&E *Mobile Application Pilot Implementation Report* (January 17, 2020) at 22-25.

- location, and potential issue of the asset being reported as a safety concern;
- Confirm whether the equipment issue identified presents an emergency matter;
 - if an emergency exists, a trouble report will be generated to ensure an emergency process is initiated, the submitter receives an update and
 - PG&E contacts emergency first responders;⁶⁸
 - if an emergency matter does not exist and the photos are acceptable, the initial review teams will route the submittal to a centralized inspection team;⁶⁹
 - Assorted other quality assurance tasks addressing, among other items, whether the implicated asset is PG&E property, and the asset's geographic location.

After this intake procedure is complete, PG&E will store the information (as described in Section 1.7 herein) within the proposed asset management database for each valid report or photo received from the public.

⁶⁸ PG&E Response June 17, 2020 at 2. PG&E explains that the mobile app is not appropriate for use by customers to report emergency/911 matters, and PG&E will take steps to include warnings in the mobile app to advise customers to contact 911 in the event of an emergency. PG&E explains that reporting emergencies through the mobile app would merely result in a more circuitous pathway to reach local emergency dispatch. That is to say that rather than contacting the local emergency dispatch directly by calling 911, the customer would submit a safety report (with an emergency matter) to PG&E via the mobile app. PG&E would then in turn analyze that request and either contact the local emergency dispatch via 911, or request that the customer contact emergency dispatch. PG&E advises that the delay caused by relying on the mobile app in the reporting of an emergency increases the risk of injury or death.

⁶⁹ PG&E Response June 17, 2020 at 4. PG&E states that a non-emergency matter reported via the mobile app may include, among other things, a situation where an issue is identified with PG&E's infrastructure that requires an immediate response by PG&E personnel, aligned with General Order 95 Rule 18 (Level 1 priority).

BBIC argues that the mobile app should be integrated into PG&E's existing complaint intake platform,⁷⁰ which consists of a toll-free customer service line, and a 24-hour hotline for power outages and safety emergencies, along with a customer's ability to electronically message PG&E via its website and receive an emailed response.⁷¹ BBIC states that a "properly designed App could complement the phone-based complaint process and help PG&E quickly assess conditions reported in calls, document and analyze the issue, and improve public safety."⁷²

We find merit in BBIC's suggestion. We are supportive of PG&E creating its mobile app pilot, to the extent feasible, as a bridge to achieving greater integration and future synergies with its existing phone-predominant customer complaint platform. We, therefore, direct PG&E to assess feasibility, obstacles, and benefits that may exist in integrating the mobile app into the utility's existing complaint-intake system, which is predominately a phone-based reporting platform. PG&E's assessment should clearly identify the problem areas, the scope of review, methodology, and recommendations/conclusions. An independent consultant, which we further address below, should be responsible for conducting this assessment. In addition, after reviewing additional information that PG&E provided in the proceeding on how the mobile app pilot will address emergency matters, we find that PG&E should also take steps to

⁷⁰ The PG&E existing complaint intake platform can be found on PG&E's website at: https://www.pge.com/en_US/residential/customer-service/help/contact-pge-landing/contact-us.page.

⁷¹ March 6, 2020 BBIC Reply Comments at 7.

⁷² March 6, 2020 BBIC Reply Comments at 3.

include warnings in the mobile app to advise customers to contact 911 in the event of an emergency.

With the addition of the requirement for a complaint intake platform integration assessment and warnings about how to respond to emergencies, we find PG&E's proposed procedure for the intake of the mobile app submissions adequate.

3.6. Development Period and Pilot Launch Date

PG&E estimates that it will take four to six months from the date of Commission authorization of the pilot to prepare for the launch of the pilot.⁷³ This will allow PG&E time to develop the public-facing mobile application, define the back-end process integration needed to support the pilot, and identify a process for reporting status to the submitter.⁷⁴ PG&E also proposes that it be authorized to launch the pilot after the end of the upcoming wildfire season, approximately in the first quarter 2021.⁷⁵

No parties commented on this topic.

We find reasonable a timeline of up to six months from effective date of this decision to the date of the pilot's launch. The launch of the pilot will occur on the date that PG&E provides customers with access to the mobile app pilot and the mobile app pilot is fully functional.

We find no valid reason for PG&E to wait to launch this pilot until the 2021 wildfire season. Instead, PG&E should launch the pilot as soon as practicable, but no later than six months after the effective date of this decision, even if this means that PG&E launches in mid-wildfire season.

⁷³ PG&E *Mobile Application Pilot Implementation Report* (January 17, 2020) at 27.

⁷⁴ PG&E *Mobile Application Pilot Implementation Report* (January 17, 2020) at 27.

⁷⁵ March 20, 2020 PG&E Revision to Mobile Application Pilot Plan at 2.

3.7. Training and Artificial Intelligence

BBIC argues that the Commission should order PG&E to conduct outreach and training across California to promote optimal use of the mobile app.⁷⁶ BBIC further states that the Commission “should order PG&E to engage in public training as part of this Application to inform the public about how to recognize safety issues and Commission rule violations on PG&E’s facilities in a manner that is safe for the public and does not cause any damage or hazards to PG&E’s assets or other facilities.”⁷⁷ As part of the public training, BBIC states that the Commission should order PG&E to train the public about electric hazards, joint-use utility poles, Commission rules, and safe use of the mobile app, including downed pole line safety and traffic safety.⁷⁸ In addition to training the public, BBIC suggests that PG&E employ artificial intelligence and machine learning to ensure the efficiency of the mobile app.⁷⁹ Specifically, BBIC argues that photo analysis through artificial intelligence will significantly improve the proposed mobile app.⁸⁰

In response to the issue of artificial intelligence, PG&E explains that its existing artificial intelligence capacity is “emergent and not operational” and points out that I.19-06-015 does not require the use of artificial intelligence.⁸¹

⁷⁶ February 21, 2020 BBIC Comments at 12.

⁷⁷ February 21, 2020 BBIC Comments at 15.

⁷⁸ February 21, 2020 BBIC Comments at 16; March 6, 2020 BBIC Reply Comments at 5, stating “Training the public about how to identify hazards and lack of compliance with CPUC rules will facilitate public complaints whether by telephone or through a photo App, and increase transparency and accountability that improves public safety.”

⁷⁹ March 6, 2020 BBIC Reply Comments at 6.

⁸⁰ March 6, 2020 BBIC Reply Comments at 6.

⁸¹ March 6, 2020 PG&E Reply Comments at 5.

On the topic of training, PG&E argues that BBIC suggestions are misplaced.⁸² PG&E explains that to accommodate BBIC's suggestions on training it would need to "summarize every specification that PG&E has for construction, engineering and design of its system, and place those in the web-based safety application."⁸³ PG&E further protests that doing so would not only be a monumental level of effort but that many of the implicated specifications are confidential in nature, and broad disclosure would pose a security risk to its electrical system. PG&E explains that it is receptive to providing training opportunities for the public, and intends to use the pilot to gather information on what types of training the public might benefit from.⁸⁴ PG&E does not propose training during the pilot phase.

While BBIC may be correct that the use of artificial intelligence could offer advantages, we find that the technology is too new and the record here insufficient to order PG&E to implement artificial intelligence within this mobile app pilot. Regarding training, BBIC's suggestions are informative but overbroad. Taking into consideration that PG&E is going to use the pilot to gather more information about the need for training, we direct PG&E to offer and conduct any and all training of mobile app users to the extent necessary to promote the success of the mobile app pilot. PG&E shall report to SPD within 45 days from the effective date of this decision on the types of training, and public education specifics (including but not limited to the format, location, and frequency) it expects to offer. The evaluation of the pilot should address PG&E's training

⁸² March 6, 2020 PG&E Reply Comments at 6.

⁸³ March 6, 2020 PG&E Reply Comments at 6.

⁸⁴ March 6, 2020 PG&E Reply Comments at 6.

efforts, including at minimum, a description of subject matter covered, who participated, and any feedback received.

4. Evaluation of Pilot

1. PG&E's Proposal

In its initial *Mobile Application Pilot Implementation Report*, PG&E states that the mobile app should, at a minimum, be evaluated according to the mobile app's demonstrated benefit in reducing the risk of catastrophic wildfire measured against any resulting diversion of resources from other wildfire mitigation efforts. Appropriate evaluation metrics, PG&E explains, might include tracking costs associated with carrying out the various quality assurance elements of the mobile app that PG&E describes as necessary, including tracking the following:

- Submittals that do not report an ignition risk;
- Emergencies that instead require a 911 response;
- Issues outside of a HFTD;
- Issues pertaining to assets that do not belong to PG&E; and
- Issues that would have, even in the absence of the mobile app submittal, been identified by PG&E.

PG&E suggests that these criteria and others must be tracked because it anticipates that the pilot will divert limited resources from other priority safety efforts such as wildfire risk reduction. In making this point, PG&E states that,

“[F]or submittals where the priority of the issue would be unclear, PG&E likely would have to send a crew of qualified personnel out to investigate, ... potentially diverting limited and qualified personnel away from higher priority work.”⁸⁵

PG&E also states that,

⁸⁵ Application 19-07-019 at 8.

“... while the general public may provide a photo of an alleged issue, the photo may not be sufficiently clear or close enough to the alleged issue for PG&E to identify whether there is a genuine issue. In either case, PG&E personnel would be deployed to respond to potential false positives, which would divert skilled and limited personnel, both in the office and the field, from actual risk mitigation work. The impact of resource diversion is a significant concern for PG&E given the likelihood that users could submit misidentified issues.”⁸⁶

Additionally, as described above, PG&E raises concerns of resulting new potential public safety risks as customers seek close contact with PG&E’s electrical assets to obtain photographs, trespass on private property, or create unsafe conditions while driving and taking photographs with the mobile app. PG&E, in turn, suggests that such incidents, to the extent they occur, be tracked and evaluated to assess the pilot’s value.

In conclusion, PG&E states that, based on an evaluation of these incidents and metrics, the mobile app might very well be revealed to be an unnecessary diversion of limited safety-related resources.

2. Party Comments

BBIC disagrees with all PG&E-proposed evaluation metrics and continues to urge the Commission to direct PG&E to permanently implement a mobile app consistent with the directive in I.19-06-015 rather than a pilot. Regarding issues outside of a Tier 2 or Tier 3 HFTDs, BBIC argues that the scope of the pilot, limited to these two HFTDs, is too narrow.⁸⁷ Regarding problematic assets, such as pole attachments, that are not always the property of PG&E, BBIC argues that such assets should be more carefully reviewed by PG&E because pole

⁸⁶ Application 19-07-019 at 6-7.

⁸⁷ February 21, 2020 BBIC Comments at 9.

overloading can result in safety hazards.⁸⁸ Regarding issues that would have otherwise been identified by PG&E, BBIC criticizes PG&E's proposal to count as "failures" any submitted photo of compromised assets that PG&E is already aware of or duplicates.⁸⁹ BBIC states that issues that have not yet been addressed should not be counted as a "failure" because, until PG&E resolves the issue, the public does not yet know that the matter has been reported, and, therefore, the issue must still be considered a valid concern.

Cal Advocates, on the other hand, urges PG&E to evaluate the success of the mobile app pilot by tracking where safety mitigation resources would have otherwise been used, whether it caused delay in other important wildfire mitigation work, and whether the costs exceed the benefits.⁹⁰ Cal Advocates appears to agree with PG&E's assertion that, if the pilot is evaluated by the limited resources diverted to enable the mobile app, the mobile app may in the end prove to be misguided. BBIC responds to Cal Advocates by pointing out that, in evaluating the diversion of resources, the need for employee training linked to and the inherent inefficiency of PG&E's existing phone-predominant complaint intake platform, should be taken into account.⁹¹

In reply, PG&E modifies the method for counting valid submittals in its *Revised Mobile Application Pilot Implementation Report* toward reaching a relevant and statistically significant sample.⁹² As modified, PG&E proposes to count duplicates toward its statistically significant sample.

⁸⁸ February 21, 2020 BBIC Comments at 11.

⁸⁹ February 21, 2020 BBIC Comments at 17.

⁹⁰ February 21, 2020 Cal Advocates Comments at 2.

⁹¹ March 6, 2020 BBIC Reply Comments at 6-7.

⁹² March 20, 2020 PG&E Revision to Mobile Application Pilot Plan at 2.

3. Discussion

All the criteria suggested by PG&E should be tracked and analyzed. We are particularly interested in the tracking of diverted safety-related resources necessary to create, maintain, and resolve issues throughout the term of the pilot. We also agree with many of BBIC's observations. We agree with BBIC that, until PG&E addresses the safety issue identified by the submittal, a reported safety issue should be considered a valid concern even if it duplicates a prior submittal. Similarly, we agree with BBIC that submittals concerning pole attachments,⁹³ or other property not owned by PG&E, should be given prompt attention so that safety concerns are addressed in a timely fashion.

Moreover, we find that the appropriate framework for the pilot's evaluation include recognizing new opportunities for cost savings and efficiency through automating and improving PG&E's safety processes by relying on new technology, such as the mobile app, to identify safety-related issues. The appropriate questions to be asking in evaluating the pilot are not just *what will the pilot cost to operate* but also *how much will the pilot cost to operate in comparison to a call center, how many customers will participate in the pilot, has safety improved, and are there additional enhancements that can be made to the pilot to improve safety-related services?* We should also be asking *how much is spent to support similar programs and whether the addition of a mobile app appears reasonable in comparison?*

4. Independent Evaluation

To ensure appropriate evaluation of PG&E's pilot, we direct PG&E to retain a qualified independent consultant to perform an evaluation of the pilot

⁹³ A utility pole attachment may consist of various assorted electric and other public utility hardware, some of which may not directly facilitate delivery of service, but which allow for support capacity such as weather-information gathering equipment.

within Phase 1 of this proceeding and, in addition to the criteria we identified above, to consult with SPD, as part of this evaluation, on the merits of including the criteria suggested herein, at Attachment A.

The evaluation process shall commence no later than 12 months from the date of the pilot's launch. The independent consultant shall provide SPD with a proposed evaluation scope of work before the end of month 11 of the pilot to allow for SPD input and approval of a final evaluation scope of work prior to the end of the pilot's first year of operation.

The independent consultant shall prepare a draft evaluation report with conclusions and recommendations, to be submitted to SPD for review no later than the end of month 21 of the pilot.

In consultation with SPD, the independent consultant shall then produce a public draft version of its evaluation report no later than the end of month 22 of the pilot. This public draft version shall be filed and served on the service list of this proceeding and parties will have an opportunity to comment on the report no later than the end of month 23. At the discretion of SPD, the independent consultant shall host a public workshop and/or webinar to present its findings, conclusions, and recommendations, and receive feedback from stakeholders.

No later than the end of month 24 of the pilot, the independent consultant shall produce a final evaluation report to be filed and served on the service list of this proceeding.

The Commission authorizes SPD to modify the evaluation schedule as needed. The timetable establishing the evaluation schedule is set forth below:

Timetable Establishing Pilot Milestones

Milestone	Date All dates and durations commence from PG&E's Pilot Launch Date
Evaluation proposed <i>scope of work</i> submitted to SPD	No later than the end of Month 11
SPD review, comment, and approval of evaluation <i>scope of work</i>	No later than the end of Month 12
Evaluation process commences	No later than the end of Month 12
Draft version of <i>evaluation report</i> submitted to SPD	No later than the end of Month 21
Public draft version of <i>evaluation report</i> published	No later than the end of Month 22
Stakeholder comments; public workshop or webinar at discretion of SPD	No later than the end of Month 23
Final <i>evaluation report</i> published	No later than the end of Month 24

5. Phase 2 of this Proceeding

As part of Phase 1 of this proceeding, we direct SPD to monitor and assess the pilot's performance and the independent consultant's evaluation of the pilot by taking into consideration PG&E's quarterly progress reports, the independent consultant's evaluation report, stakeholder engagement, comments on the evaluation report, and staff's observations.

Phase 2 of this proceeding will be initiated when the Assigned Commissioner issues a second scoping memo. Phase 2 is expected to address, at minimum, the following issues:

Mobile App Evaluation. Whether the evaluation of the pilot indicates that a mobile app improves public safety, is reasonable, and in the public interest, and should be permanently adopted?

Should the Commission find that establishment of a permanent mobile app is justified, additional Phase 2 issues would also consist of:

Geographic Area. Whether the permanent mobile app program should cover all or some portion of PG&E's service territory?

Mobile App Scope and Functions. Whether to incorporate additional functions into the mobile app, such as bill pay, energy use and rebate tracking, appointment setting, Public Safety Power Shutoff (PSPS) alerts, a method for customers to report electrical outages, and issues that are non-safety related?

Cost Recovery. Whether the mobile app should continue to be at shareholder expense, as set forth in I.19-06-015, at ratepayer expense, or combination of both?

Gas Service. Whether sufficient opportunities exist for gas customers to report concerns and direct question to PG&E such that expanding the mobile app's scope to include gas service and assets is justified?

Improvements. Whether further changes should be made to PG&E's mobile app?

6. Comments on Proposed Decision

The proposed decision of ALJ DeAngelis in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were filed on _____, and reply comments were filed on _____ by _____.

7. Assignment of Proceeding

Clifford Rechtschaffen is the assigned Commissioner and Regina DeAngelis is the assigned Administrative Law Judge in this proceeding.

Findings of Fact

1. The Commission in I.19-06-015 ordered PG&E to "file an application within 30 days after the issuance of this Order to develop an open source,

publicly-available asset management database and mobile app as described in this Order.”

2. I.19-06-015 included certain requirements of the mobile app but did not address all details or components needed for the mobile app.

3. The Commission in I.19-06-015 does not directly address the scope of the mobile app but suggests that the mobile app be designed to track “safety concerns.”

4. The scope of the mobile app pilot, while including wildfire mitigation, should broadly encompass safety concerns in general.

5. In I.19-06-015, the Commission directed PG&E to seek approval of a mobile app and did not contemplate the appropriateness of a pilot.

6. Advantages exist to relying on a pilot to test the mobile app’s effectiveness and to determine whether any public safety risks related to the mobile app users’ behavior exist.

7. A pilot program will allow the Commission to determine areas where the mobile app could benefit from modifications and assess the reallocation of limited resources from other PG&E safety programs.

8. A native app offers the necessary functionality for PG&E’s mobile app.

9. The Commission in I.19-06-015 places special emphasis on smartphones as the basis for PG&E’s mobile app.

10. The costs associated with the development and continued operation, including evaluation, of the mobile app pilot are a shareholder expense.

11. The costs to respond to mobile app submittals/safety reports are a ratepayer expense.

12. A mobile app with a publicly-available interface but with PG&E preserving ownership over the original source code is an acceptable

interpretation of the Commission's directive in I.19-06-015 for an "open source" code, while also addressing cybersecurity concerns, provided that PG&E shares the design of the mobile app and relevant non-confidential materials with others upon request.

13. PG&E should upload information received through the mobile app to a secure database including photos and location details, as well as status, e.g., whether the reported safety issue identified a problem and how PG&E has or will resolve the issue. PG&E should also make this information publicly available on its website and mobile app within 30 days of the safety issue being reported.

14. PG&E's proposed asset management database is generally adequate with the following modifications: (1) PG&E shall preserve any and all data it deems invalid and/or rejects (including submittals deemed emergencies) for a period of four years from the launch date of the pilot for Commission evaluation purposes, (2) PG&E shall include the GPS coordinates of the reported asset in its asset management database, and (3) PG&E may add additional information fields without prior Commission approval.

15. Publicly posting the photos and related information regarding the safety report submitted via the mobile app will promote transparency, enforcement of the Commission's rules, and safety generally. This information should be publicly posted within 30 days of receipt of a safety report and include the safety report, any photos, PG&E's determinations, PG&E's analysis, GPS coordinates of the asset that is the subject of the safety report, and corrective action taken or that will be taken.

16. The customer base and geographic area to be targeted by PG&E's mobile app pilot should include all customers in Tier 2 and Tier 3 HFTDs, which

represent a large portion of PG&E's total service territory and a sufficient area to conduct the pilot.

17. The duration of the mobile app pilot will be until Phase 2 of this proceeding is completed. This period of time will be initiated on the pilot launch date.

18. The launch date of the pilot is when PG&E provides customers with access to the mobile app pilot and the mobile app pilot is fully functional. While this duration is longer than recommended by PG&E, a longer period of time is needed to incorporate an evaluation process into the pilot term.

19. During the first 12 months of the pilot, PG&E shall test the mobile app in all seasons, including one full wildfire season. During the second 12 months, the pilot will be evaluated and recommendations made for improving it.

20. The mobile app pilot should include the goal of attaining 384 unique submittals or safety reports to properly evaluate the pilot, but any failure to reach this quantity will not halt the program.

21. PG&E should coordinate with SPD, to the extent necessary, to ensure that 384 unique submittals are obtained, and, to achieve this goal, PG&E may need to contact more customers, use different methods to contact customers, repeatedly contact customers, and engage in marketing, education, outreach, and training.

22. PG&E's mobile app pilot, to the extent feasible, should be integrated with its existing phone-predominant customer complaint platform.

23. The launch date for the mobile app pilot will be within six months from the effective date of this decision.

24. PG&E should offer and conduct any and all training of mobile app users to the extent necessary to promote the success of the mobile app pilot and shall report to SPD within 45 days from the effective date of this decision on the types

of training and public education specifics (including but not limited to format, location, and frequency) it expects to offer.

25. There is value in tracking the diversion of PG&E's safety-related resources necessary to create, maintain, and resolve issues throughout the term of the mobile app pilot.

26. PG&E should include warnings as part of the mobile app to advise customers to contact 911 in the event of an emergency.

27. To ensure appropriate appraisal of PG&E's pilot, PG&E should engage a qualified independent consultant to perform an evaluation of the pilot within Phase 1 of this proceeding and include the criteria prescribed and recommended here and other criteria as appropriate and consult with SPD.

28. A Phase 2 of this proceeding will, among other things, evaluate the pilot and consider adopting a permanent mobile app program, if warranted.

Conclusions of Law

1. The scope of a mobile app pilot to broadly encompass safety concerns, in general, is supported by the Commission in I.19-06-015, when stating that for each submittal/safety report received via the mobile app, PG&E should explain "whether the problem presents a safety concern or is a violation of safety regulations."

2. All aspects of PG&E's proposal for its mobile app pilot should be revised to conform with a broader scope to encompass safety concerns generally.

3. It is reasonable to approve a pilot as the first step in the development of a PG&E mobile app.

4. PG&E should file and serve in this proceeding quarterly status reports on its pilot activities and progress during the duration of the pilot to better facilitate

the Commission's tracking of the pilot's development, with the first report due three months after the effective date of this decision.

5. It is reasonable for PG&E to develop a native app within its pilot program.

6. It is reasonable for PG&E to develop two separate apps, one for iPhones and one for Android operating system-based smartphones.

7. PG&E may develop a web-based application that conforms to all the Commission's requirements for the native app and at shareholder expense.

8. It is reasonable for the costs associated with the development and continued operation, including the evaluation, of PG&E's mobile app pilot to be at shareholder expense, and for the costs to respond to a submittal/safety report to be at ratepayer expense.

9. It is reasonable for PG&E to upload information received through the mobile app to a secure database, including photos and location details, as well as status, e.g., whether the reported safety issue identified a problem and how PG&E has or will resolve the issue.

10. It is reasonable to find PG&E's proposed asset management database generally adequate with the following modifications: (1) PG&E shall preserve any and all data it deems invalid and/or rejects (including submittals deemed emergencies) for a period of four years from the launch date of the pilot for Commission evaluation purposes, (2) PG&E shall include the GPS coordinates of the reported asset in its asset management database, and (3) PG&E may add additional information fields without prior Commission approval.

11. It is reasonable for PG&E to publicly post within 30 days of receipt of a safety report via the mobile app information regarding the safety report to promote transparency, enforcement of the Commission's rules, and safety generally. This information should include the safety report, any photos,

PG&E's determinations, PG&E's analysis, GPS coordinates of the asset that is the subject of the safety report, and corrective action taken or that will be taken.

12. To ensure that PG&E's pilot attracts a sufficient number of customers, it is reasonable for PG&E, in addition to sending email invitations to a subset of customers, to send invitations to customers via text message (to the extent PG&E has access to cellphone numbers) and to include an invitation to all Tier 2 and Tier 3 HFTD customers as part of a direct mail bill insert or postcard.

13. It is reasonable for all customers located in Tier 2 and Tier 3 HFTDs to be included in the mobile app pilot.

14. To promote broader participation in the pilot, it is reasonable for PG&E to conduct outreach to target and make available the mobile app pilot to all PG&E contractors performing vegetation management in the field, relevant staff at CAL FIRE, and relevant staff at cable companies and telecommunication providers with whom PG&E operates under joint pole agreements.

15. The duration of the pilot will be until Phase 2 of this proceeding is completed so that PG&E has adequate time to test the mobile app in all seasons, including one full wildfire season, and sufficient time is allotted for the Commission to evaluate the pilot.

16. The goal of attaining 384 unique submittals or safety reports from the mobile app to properly evaluate the pilot is reasonable but not determinative of the success of the pilot.

17. It is reasonable for PG&E to assess the feasibility, obstacles, and benefits that exist in integrating the mobile app into the utility's existing complaint-intake system.

18. It is reasonable to set the launch date for the PG&E mobile app pilot within six months from effective date of this decision.

19. It is reasonable for PG&E to offer training to users of the mobile app pilot to promote the success of the pilot and report to SPD within 45 days from the effective date of this decision on the types of training and public education specifics (including but not limited to the format, location, and frequency) PG&E expects to offer.

20. It is reasonable to track the diversion of PG&E's safety-related resources necessary to create, maintain, and resolve issues reported via the mobile app throughout the term of the mobile app pilot.

21. It is reasonable for PG&E to include warnings in the mobile app to advise customers to contact 911 in the event of an emergency.

22. To ensure appropriate appraisal of PG&E's pilot, it is reasonable for PG&E to enlist a qualified independent consultant to perform an evaluation of the pilot within Phase 1 of this proceeding and to consider the required and recommended evaluation criteria and others as appropriate in consultation with SPD.

23. It is reasonable to consider a permanent PG&E mobile app in Phase 2 of this proceeding.

O R D E R

IT IS ORDERED that:

1. Pacific Gas and Electric Company's (PG&E's) Application for a proposed mobile application (mobile app) and supporting systems pilot is approved with the modifications set forth herein. PG&E shall, at a minimum, make the following modifications to the mobile app pilot:

- (a) expand the scope of the mobile app pilot to encompass all safety matters pertaining to PG&E's electric infrastructure.

- (b) implement a native application for its mobile app pilot and develop two separate apps, one for iPhones and one for Android operating system-based smartphones.
- (c) develop a publicly-available interface for the mobile app but preserve ownership over the original source code and share the design of the mobile app and relevant materials with others upon request.
- (d) within 30 days of a safety issue being reported to PG&E via the mobile app, upload information received to the asset management database and make this information publicly-available on its website and mobile app.
- (e) preserve all data submitted via the mobile app deemed invalid and/or rejected (including emergency matters) for a period of four years from the launch date of the mobile app pilot for Commission evaluation purposes.
- (f) within 30 days of receipt of a safety report via the mobile app, make available to the public the safety report, PG&E's determination, PG&E's analysis, GPS coordinates, corrective action, review status, and photos.
- (g) include all customers located in Tier 2 and Tier 3 High Fire Threat Districts.
- (h) conduct outreach to target and make the mobile app available to all contractors performing vegetation management in the field, relevant staff at CAL FIRE, and relevant staff at cable companies and telecommunication providers with whom PG&E operates under joint pole agreements.
- (i) offer the mobile app pilot until Phase 2 of this proceeding is completed.
- (j) launch the mobile app pilot as soon as practicable but within six months from the effective date of this decision.
- (k) coordinate with the Commission's Safety Policy Division, to the extent necessary, to ensure 384 unique submittals/safety reports are received.

- (l) modify, if necessary, the mobile app submittal process to clearly advise customers that the mobile app is not to be used in emergency situations when calling 911 would be more appropriate.
- (m) offer training to users to promote the success of the mobile app pilot and report on training and public education efforts and status to the Commission's Safety Policy Division within 45 days from the effective date of this decision.
- (n) categorize a submittal/safety report a valid concern even if it duplicates a prior submittal/safety report until it is addressed by PG&E.

2. Pacific Gas and Electric Company (PG&E) shall file and serve on the service list for this proceeding quarterly status reports on its activities and progress on the mobile application pilot. The first report shall be due three months after the effective date of this decision. This directive expires at the end of the pilot.

3. Pacific Gas and Electric Company shall, in consultation with the Commission's Safety Policy Division, undertake an evaluation of its mobile application (mobile app) pilot effort, and in so doing, shall retain a qualified independent consultant.

4. Pacific Gas and Electric Company's (PG&E) independent consultant shall, in consultation with the Commission's Safety Policy Division, undertake an evaluation to assess the feasibility, obstacles, benefits for integrating the mobile application (mobile app) into the PG&E's existing complaint-intake system. This evaluation shall be included as part of the independent consultant's evaluation of the mobile app pilot.

5. The Commission authorizes its Safety Policy Division to modify the evaluation schedule set forth herein of the Pacific Gas and Electric Company mobile application pilot as may be necessary and appropriate.

6. Pacific Gas and Electric Company's costs associated with the development, continued operation, and evaluation of the mobile application pilot shall be at shareholder expense.

7. Application 19-07-019 remains open.

This order is effective today.

Dated _____, at San Francisco, California

Attachment A – A.19-07-019**SAFETY POLICY DIVISION INITIAL GUIDANCE FOR
EVALUATION OF THE MOBILE APP PILOT**

The PG&E independent consultant, in consultation with the Commission's Safety Policy Division (SPD), should consider the following criteria, among others, in the independent consultant's evaluation of the mobile application (mobile app) pilot:

1. PG&E's mobile app outreach and training efforts.
2. Extent of use of mobile app by PG&E's customers.
3. Extent of use of mobile app by CAL FIRE, cable companies, telecommunication providers, and vegetation management consultants.
4. Effectiveness of the mobile app at identifying safety risks.
5. Evidence of unintended consequences, such as diverting safety resources from greater to lesser safety risks.
6. Lessons learned from pilot.
7. Avoided costs (e.g., avoided loss of PG&E assets, avoided service outages, avoided private property losses, avoided regulatory sanctions).
8. Estimated minutes of avoided service outage disruptions over an impacted area of service territory.
9. Estimated spillover benefits and positive externalities (e.g., improved PG&E public image and customer perception, favorable PG&E media coverage).
10. Number of safety reports (1) submitted and categorized by different types of customers, (2) with a "valid" link to a safety issue, (3) that are duplicative safety issues, (4) that result in a site visit, (5) assigned to PG&E's field-service responders, (6) that result in a site visit to address an issue apart from a safety issue, and (7) that would be more appropriately addressed by calling 911.