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**RE: PG&E Comments on Draft Regulatory Language for Geographic Information Systems (GIS)**

Pacific Gas and Electric Company (PG&E) appreciates this opportunity to comment on the Underground Safety Board's (USB) draft language regarding proposed regulations for locational accuracy in GIS for subsurface installations (GIS Regulation). These comments are intended to improve clarity, feasibility, and alignment with industry practices and equipment/technology capability.

PG&E believes the GIS Regulation should focus on improving an operator's records related to subsurface asset location accuracy to prevent excavation damage. Several provisions are overly prescriptive and may hinder practical implementation across diverse utility sectors. PG&E's recommendations below aim to reduce ambiguity and enhance efficiency to promote safety.

## Section-by-Section Recommendations

### §4000 – Definitions

#### Geospatial Coordinates

- Reconsider the requirement for "two significant figures after the decimal point" to avoid ambiguity with accuracy requirements and for consistency. Two numerals after a decimal point for GPS coordinates provide a locational accuracy of several hundred feet while the language later indicates an intended accuracy of 100 millimeters (mm).

#### New Subsurface Installation

- Limit definition of a "new subsurface installation" to installations where none previously existed or replacements.
- Consider excluding terms like "rehabilitation" and "major/minor repair" to prevent subjective interpretation. The term "rehabilitation" may be widely interpreted by utility type and inconsistently applied. The same may be true of what defines a major or minor

repair (e.g. replacement of a cable inside an existing conduit/duct may be viewed as a major repair by one stakeholder due to the length or cost, but minor by another due to the lack of change to its position.)
    - The addition of these terms does not appear to establish clear and unambiguous expectations for compliance with the regulations.
- Consider an exception for cables installed in existing conduits due to practical limitations of collecting GPS locations on multiple subsurface installations that occupy the same space. Each of these are defined as "subsurface installations" in GC 4216(s), but may be installed at different times across several years.

**Accuracy of Geospatial Coordinates**

- Consider allowing flexibility in data collection methods, including referencing from surveyed control points.
    - If the desired outcome is that utility operators have accurate locational data for their newly installed subsurface installations that meet minimum requirements, there may be value in focusing on the outcomes rather than the method and means.
- While the 100mm accuracy requirement is achievable in some instances, we are concerned that setting such a high accuracy requirement without consideration of conditions, terrain, signal strength, equipment availability, etc. may be very difficult to meet in all scenarios. Additionally, the accuracy requirement could result in a significant increase in the need for certified/licensed surveying resources for oversight of this work across the utility industry. We recommend a target of 24" horizontal positional accuracy to align with GC 4216(u) tolerance zone.
- We suggest including something similar to, "If 24" accuracy is not feasible, consider documentation of 'best achievable accuracy' and rationale." This is intended to recognize the difficulty in obtaining an accurate signal on devices in various conditions.
    - Something like this would align to current utility operator obligations for locating and marking accuracy requirements established in GC 4216.3.

**Component and Attribute Records**

- For the requirement to capture information related to components, the requirements should focus on critical subsurface components like valves, switches, and endpoints. The language as drafted includes the collection of coordinates related to items that are not subsurface installations, but does not identify specific asset information to be collected or the frequency/distances at which it should be collected (i.e. every 50', at horizontal changes of direction greater than XX in distance or XX in degrees, at "T's" or intersections, subsurface termination points, etc.).
    - We request reconsideration of the components and attributes to exclude non-subsurface installation data and capture features of the installations themselves that might be damaged during excavation activities.
- Include a definition for "stubs" to ensure consistency across utility operators and installation types.

- Remove the requirement to include information on the presence of coating, wrap or insulation for pipelines as the purpose behind providing this information is not clear. The same is true for the presence of warning tape, which is not a component of a subsurface installation. It is unclear how identifying the presence of warning tape within a GIS system would enhance excavation safety when it is only known and available to the utility operator.

**Geospatial Metadata Records**

- Clarify standards for data collection and transfer from third-party installers, such as developers of residential and/or commercial developments to ensure accuracy and consistency.
    - The intent is that this would create consistency in the quality of data collected by non-utility owners as part of the installation and ownership transfer when projects are completed.

**Conclusion**

PG&E supports the goal of improving subsurface installation accuracy but recommends revisions to ensure clarity, feasibility, and alignment with industry practices. PG&E's proposed changes aim to maintain focus on damage prevention while reducing ambiguity and implementation inefficiencies. We look forward to ongoing collaboration with the USB and other stakeholders throughout the public rulemaking process for the GIS Regulation. If you have any questions on these comments, please do not hesitate to reach out.

Sincerely,

/s/

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