

Safety and Enforcement Division



Monthly Performance Report

March 2018

CONTENTS

COMPLIANCE WITH ORDERING PARAGRAPHS (COPS)	3
NATURAL GAS SAFETY PROGRAM	4
STAFF CITATION PROGRAM.....	4
INSPECTIONS.....	4
INCIDENT INVESTIGATIONS.....	4
UTILITY SELF-IDENTIFIED VIOLATION (SIV) INVESTIGATIONS.....	5
NATURAL GAS RELATED PROCEEDINGS	5
ELECTRIC SAFETY AND RELIABILITY PROGRAMS.....	6
ELECTRIC AND COMMUNICATIONS FACILITY PROGRAM.....	6
ELECTRIC AND COMMUNICATIONS FACILITY SAFETY: PROCEEDINGS	7
REPORTS AND OTHER ACTIVITIES	9
ELECTRIC GENERATION SAFETY AND RELIABILITY PROGRAM	9
UTILITY RISK ASSESSMENT AND SAFETY ADVISORY	10
REVIEWING SAFETY & RISK IN GENERAL RATE CASES	10
PROCEEDINGS	13
MONITORING THE WHISTLEBLOWER WEBSITE.....	15
OFFICE OF RAIL SAFETY.....	16
RAILROAD SAFETY – ROSB.....	16
<i>ROSB Inspection, Investigation & Field Activities</i>	16
OFFICE OF RAIL SAFETY	24
<i>Rail Crossings and Engineering Branch - RCEB</i>	24
<i>Rail Crossing Incident Investigations</i>	24
<i>Safety Assessments, Quiet Zones and Reviews</i>	25
<i>Proceedings, Resolutions and G.O. 88B Reviews</i>	28
<i>Operation LifeSaver Inc.</i>	30
RAIL TRANSIT - RTSB	31
<i>Corrective Actions Plans</i>	31
<i>Incident Investigations</i>	31
<i>Major Audits</i>	32

California Public Utilities Commission | Safety and Enforcement Division

<i>Administrative Accomplishments</i>	32
<i>Proceedings / Resolutions</i>	33
<i>Safety Certification and Oversight of Rail Transit Agency Projects</i>	33
<i>Statistics Summary</i>	39
<i>Ongoing Data / Trends</i>	40
CORT MONTHLY REPORT	41

Disclaimer

This Report was prepared by California Public Utilities Commission (CPUC) staff. It does not necessarily represent the views of the CPUC, its Commissioners, or the State of California.

The CPUC, the State of California, its employees, contractors, and subcontractors make no warrants, express or imply, and assume no legal liability for the information in this Report.

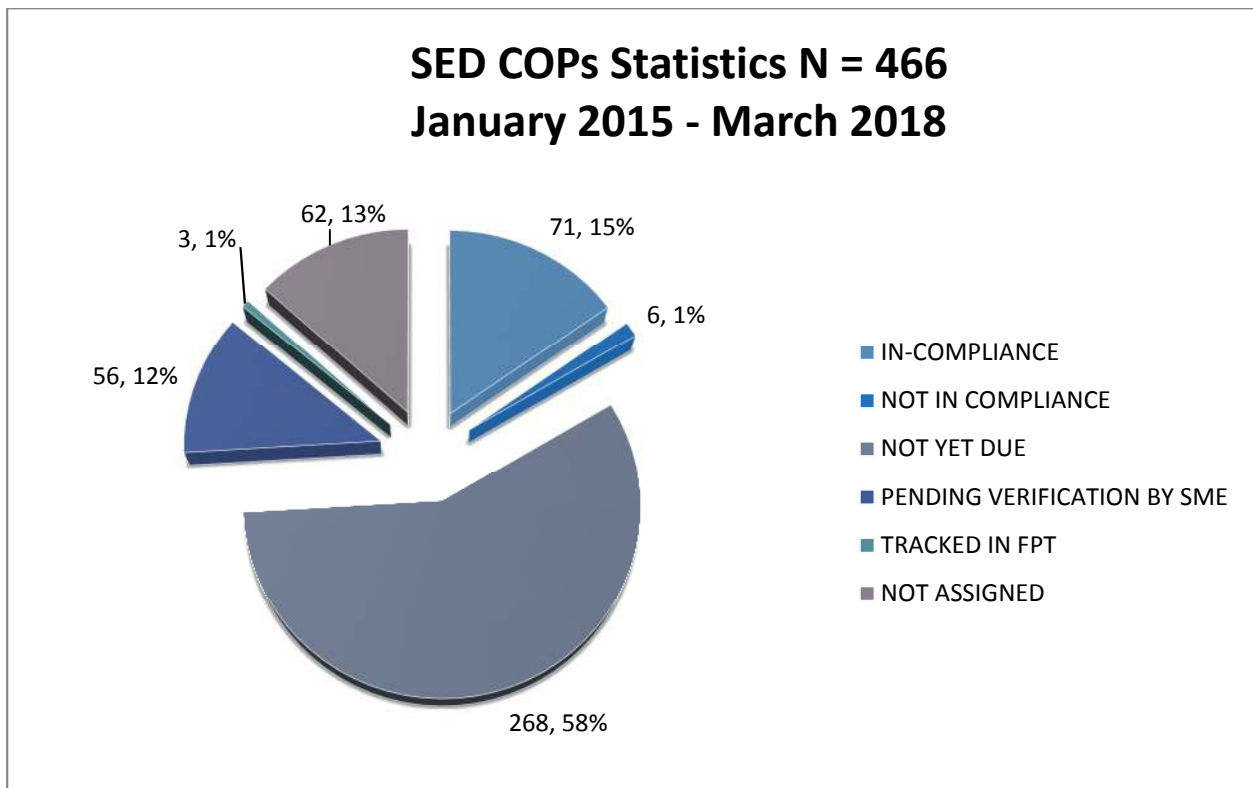
This Report has not been approved or disapproved by the CPUC.

COMPLIANCE WITH ORDERING PARAGRAPHS (COPS)

Through March 30, 2018, SED shows 466 total entries in the COPS system; with 71 reaching compliance (15%), 269 (58%) not yet due for compliance, and 6 (1%) currently remaining out of compliance. The remaining 121 (26%) are either pending verification or yet to be assigned.

During March 2018, there were 16 new OPs recorded to the COPS database for the Safety & Enforcement Division.

Note, the category of “tracked in financial payment tracker” (FPT) has been verified and has been deemed “in compliance” but is listed separately in the COPS tracker.



NATURAL GAS SAFETY PROGRAM

STAFF CITATION PROGRAM

Citation Number	Utility	Amount	Violations	Date Cited	Appealed	Status
D.16-09-055 G.17-05-001	Southwest Gas	\$ 200,000	192.1007 (c)	6/1/2017	Yes	SWG Appealed Citation, SED and SWG entered a settlement and has an executed Settlement Agreement with SWG to amend DIMP procedures. SED completed a corrective action audit in December 2017 and verified corrective actions. The CPUC approved this settlement on 3/1/2018. SWG paid \$175,000 on 3/26/2018 - case closed.
Total Cited 2017		\$ 200,000				

INSPECTIONS

	2017	2018
Conducted	78	4
Final Report Completed	75	1

INCIDENT INVESTIGATIONS

As of March 31, 2018, GSRB Staff received 48 incidents year to date.

Investigations in Month	March	YTD 2018
Reported	16	48
Closed	3	5
Open	15	43

The CY 2018 incidents¹ are categorized as follows:

- 25 – Level 1 incidents
- 21 – Level 2 Incidents
- 1 – Level 3 Incidents
- 1 – Level 4 Incidents

¹ Level 1: The incident did not result in injury, fatality, fire or explosion. Level 2: The incident did not result in injury, fatality, fire or explosion. The incident may have been reported due to Operator judgment. Level 3: The incident resulted in a release of gas but the incident did not result in injury, fatality, fire or explosion. Level 4: The incident resulted in injury, fatality, fire or explosion caused by release of natural gas from the Operator's facilities.

UTILITY SELF-IDENTIFIED VIOLATION (SIV) INVESTIGATIONS

At the end of each year, the SIV process owner will conduct an annual review, which includes a trend analysis of systemic issues, determination of investigation effectiveness, and possible revision of investigation criteria. There were no self-identified violations reported in March.

NATURAL GAS RELATED PROCEEDINGS

- **Gas Safety OIR (R.11-02-019) (Commissioner Guzman Aceves/ALJ Kersten) (Advisory):** The proceeding amended General Order GO 112-F, made fully effective no later than January 1, 2017. R.11-02-019 was closed in June 2015, however, it was re-opened after various applications for rehearing were filed by intervenors including the Utility Workers Union of America, the Office of ratepayer Advocates and the City of San Carlos. In February 2017, D. 17-02-015 disposed of a joint rehearing request from the San Carlos and ORA. In addition, Pacific Gas and Electric Company filed a petition to modify Decision 15-06-044 on January 31, 2017, on issues related to cost recovery. Disposition of PG&E's petition and UWUA's application is pending. On August 11, 2017, SED filed a subsequent petition to modify D. 15-06-44, seeking to conform GO 112F to more stringent federal regulations. The matter is pending.
- **Mobile Home Parks Pilot Program (Implementing D.14-03-021) (ALJ Semcer/Commissioner Rechtschaffen):** This decision established a three-year pilot program authorizing each California investor-owned utility to convert 10 percent of master-metered gas and/or electric Mobile Home Park spaces within its operating territory to direct utility service. San Diego Gas & Electric Company (U902M) filed A.17-05-008/ A.17-05-007 for Approval to Extend the Mobile Home Park Utility Upgrade Program. The Commission on September 29, 2017, extended the program through the end of 2019 via Resolution E-4878.
- **Citation Program OIR (R.14-05-013) (President Picker/ALJ Burcham) (Advisory):** Decision 16-09-055 was issued on September 29, 2016. Some key points are listed below:
 - An administrative limit of no more than \$8 million for each citation.
 - Utility reporting of self-identified potential violations is voluntary.
 - Utilities need not notify city and county officials of a self-identified potential violation unless staff requires it.This proceeding was reopened on February 21, 2017, as Senator Jerry Hill issued a petition for modification requesting the Commission to modify the decision to keep in place, rather than weaken, the mandatory reporting requirements that were imposed under ALJ-274. In March, several parties filed comments to Senator Hill's request, and Hill filed reply comments in early April. The matter is pending.
- **Pipeline L-1600 Replacement (A.15-09-013) (Commissioner Randolph/ALJ Kersten) (Advisory):** The Pipeline Safety & Reliability Project involves replacing existing Line 1600 with a new and larger gas transmission pipeline (Line 3602). The goal is to address the pipeline safety requirements for the existing Line 1600 and expand the capacity of the

SDG&E's gas transmission system. On February 2, 2018, parties including San Diego Gas & Electric Company/Southern California Gas Company (Applicant), the Office of Ratepayer's Advocates (ORA), Protect Our Communities Foundation (POCF), and the Utility Consumer's Action Network (UCAN) submitted their supplemental reply briefs in response to SED advisory opinion on Supplemental Question A of Scoping Memo of the proceeding. On February 2, 2018, the Applicant filed a motion to reopen the record to enter SED's January 16, 2018, response to Protect Our Community's January 8, 2018, Data Request and take official notice of indisputable facts set forth therein. On February 12, 2018, ALJ ruled that all written and oral communications pertaining to this proceeding between SED Advisory Staff and parties are prohibited until further notice.

ELECTRIC SAFETY AND RELIABILITY PROGRAMS

ELECTRIC AND COMMUNICATIONS FACILITY PROGRAM

In March 2018, Electric Safety and Reliability Branch:

- Received 10 electric facilities incident reports and closed 11 previously reported electric facilities incident investigations;
- Investigated 19 customer safety and reliability complaints;
- Performed two Electric Distribution audits;
- Issued three Notice of Violation letters/reports.

Metrics for Facility Incident Investigations as of March 31, 2018

Electric and Communication Facilities	Level 1	Level 2	Level 3	Level 4	Total ²
Total open incidents	6	7	55	47	115
Total incidents reported in 2018	2	0	4	13	19
Total incidents closed in 2018	3	4	15	5	27
Total open 2018 incidents	2	0	4	13	19
Incidents reported in March 2018	2	0	1	7	10
Incidents closed in March 2018	2	2	6	1	11

² Level 1: A safety incident that doesn't meet Level 2, 3, or 4 criteria. Level 2: Incident involved a power interruption not due solely to outside forces. Level 3: Incident involved damage estimated to exceed \$50,000 and caused, at least in part, by the utility or its facilities. Level 4: Incident resulted in a fatality or injury requiring hospitalization and that was caused, at least in part, by the utility or its facilities.

ELECTRIC AND COMMUNICATIONS FACILITY SAFETY: PROCEEDINGS

- **Investigation into Long Beach Incident (I.16-07-007) (President Picker/ALJ Cooke) (Advocacy):** Decision 17-09-024 adopted a Settlement Agreement between Southern California Edison and the SED on September 28, 2017. Under the settlement, SCE will pay a \$4 million penalty and spend \$11 million on various system enhancement projects intended to reduce the chance of public injury, reduce the risk of future system failures, and to improve the utility's operational awareness and network maintenance. ESRB is currently monitoring SCE's work to ensure compliance with the settlement agreement.
- **Creation of a Shared Database or Statewide Census of Utility Poles and Conduit (R.17-06-028); Communications Provider Access to Poles (I.17-06-027); Competitive Local Exchange Carrier Wireless Facilities on Poles (R.17-03-009) (Commissioner Picker/ALJ Mason/ALJ Kenney) (Advocacy):** On June 29, 2017, the CPUC voted to consolidate R.17-03-009 with the new R.17-06-028 and I.17-06-027. ESRB staff filed a prehearing conference statement addressing issues relevant to R.17-06-028 and I.17-06-027. On January 11, 2018, the ALJ issued a ruling allowing Parties to provide comments related to "data fields" that might be useful to industry participants and the Commission, from safety, competition, and access perspectives. On March 22, 2018, the Commission issued a Proposed Decision (PD) amending the Right-of-Way Rules (ROW Rules) set forth in Decision 16-01-046 to provide competitive local exchange carriers (CLECs) with expanded nondiscriminatory access to public utility infrastructure for the purpose of installing antennas and other wireless telecommunications facilities. The PD addresses the issues raised in R.17-03-009 only and it may be heard, at the earliest, at the Commission's April 26, 2018 Business Meeting.
- **Fire Safety Rulemaking (R.15-05-006) (President Picker/ALJ Kenney/ALJ Kao) (Advocacy):** D.16-05-036 adopted Fire Map 1, which depicts areas of California with an elevated hazard for the ignition and rapid spread of fires. In January 2017, D.17-01-009 adopted a work plan for completing Fire Map 2 and developing potential new fire safety rules. In June, the Commission adopted D. 17-06-024 deleting Shape C and setting a new due date for completing Fire Map 2 by November 27, 2017. In December 2017, the Commission issued Decision (D.) 17-12-024 which adopted certain fire safety regulations within the High Fire-Threat District. Also, in January 2018, the final CPUC Fire-Threat Map was filed via Tier 1 Advice Letter and approved by a disposition letter from SED. As such, the CPUC Fire-Threat Map became effective on January 19, 2018. In March 2018, ESRB posted the final mapping products, in accordance with the instructions in D.17-01-009, on the Commission's website at: www.cpuc.ca.gov/FireThreatMaps. In the March Commission voting meeting, the Commission approved and issued D.18-03-020, effectively closing this rulemaking proceeding, pending the filing of an accounting ledger that details map development expenditures.
- **Proceeding to Consider Amendments to GO 95 (R.17-10-010) (Commissioner Picker/ALJ Mason/ALJ Goldberg) (Advocacy):** As directed in D.16-01-046, SED filed P.17-03-004 to adopt, amend, or repeal rules in GO 95. In response to SED's petition, the Commission opened R.17-10-010 in October 2017, to consider the amendments discussed in SED's

petition. Pursuant to the ALJ ruling, on November 15, SED and all interested parties met and developed a proposed schedule for the proceeding. On November 29, SED submitted combined comments and prehearing conference statements. Pending.

- **Repealing/amendments to Rule 18 OF GO 95 (R.16-12-001) (President Picker/ALJ Kenney) (Advocacy):** In response to an SED petition for rulemaking, the Commission opened this proceeding to consider amendments to, and possible repeal of, Rule 18 of GO 95. On October 6, 2017, SED and a majority of parties filed a joint motion requesting that the Commission adopt the Settlement Agreement. Replies to the joint motion were filed on October 30, 2017. Pending.
- **Physical Security of the Electric System and Disaster and Emergency Preparedness (R.15-06-009) (Commissioner Rechtschaffen/ALJ Kelly) (Advocacy):** Phase I addresses physical security for electric supply systems, and Phase II addresses disaster and emergency preparedness plans for electrical corporations and regulated water companies. In March, SED filed an opening statement and on March 15, 2018, SED attended the PHC for Phase II regarding emergency and disaster planning. The first Workshop for Phase II is scheduled for May 23, 2018.
- **Distributed Energy Resources (R.14-08-013) (President Picker/ALJ Mason/ALJ Allen) (Advisory):** On September 28, 2017, the Commission adopted a Decision that addressed Track 1 Demonstration Projects A (Integration Capacity Analysis) and B (Locational Net Benefits Analysis). A Joint Amended Scoping Memo and Amended Ruling was issued on January 24, 2018, which sets out the preliminary scope of the issues, invites party comments, determines the categorization and need for hearing, and designates the Presiding Officer in the rulemaking. A Proposed Decision (PD) was issued on February 20, 2018, which addresses the issues identified in Track 3, Sub-track 2, and provides a framework for Grid Modernization Guidance for future General Rate Cases. ESRB will continue to review the issues and provide advisory support.
- **SB 1028 (Hill) “Electrical corporations: wildfire mitigation plans”:** In September 2016, the Governor signed SB 1028, which requires each electrical corporation and each publicly owned electrical utility or electrical cooperative to annually file a wildfire mitigation plan. ESRB established a team consisting of two Senior Utilities Engineer (Specialists) and one Utilities Engineer to establish a new program dedicated to wildfire mitigation practices. In March 2018, SED created a unique PCA code for future Wildfire related work. In addition, SED and CAL FIRE continued working on the preparation and signing of legal documents to allow broader communication and sharing of information for the purposes of conducting investigations. SED scheduled a working group meeting with CAL FIRE in April 2018 to collaborate and develop protocols and procedures for submittal and review of an annual Wildfire Mitigation Plan from an electrical corporation, as required by Senate Bill 1028.
- **Twentynine Palms Investigation and Citation:** ESRB completed its investigation of the Twentynine Palms incident which occurred on August 1, 2015, involving an overhead conductor clearance and the failure of a cross arm. The incident caused injury to 3 individuals. On February 12, 2018, SED issued a \$300,000 citation to SCE for violations related to failure of the cross arm and the above ground clearance of the overhead

conductor. SCE appealed the Citation. In March 2018, SED filed a Compliance Filings regarding the appeal of SCE pursuant to Resolution ALJ-299. Pending.

REPORTS AND OTHER ACTIVITIES

- **Transmission Maintenance Coordination Committee (TMCC):** TMCC is an advisory committee to help the CAISO develop, review and revise Transmission Maintenance Standards. ESRB is a member of TMCC and attends quarterly meetings.

ELECTRIC GENERATION SAFETY AND RELIABILITY PROGRAM

ESRB performed the following generation-related activities in March 2018:

- Investigated a turbine generator fire at High Winds that occurred on March 2, 2018.
- Completed the investigation report of Metcalf Energy Center’s January 9, 2018, intruder fatality incident.
- Completed the investigation report of Redondo Beach Generating Station incident.
- Completed a draft revision of the Electric Generation Facility audit procedure.
- Issued the Topaz Audit Report and requested corrective action plans.
- Continued to work on both the facility audit and an investigation of a fatality incident that occurred on March 6, 2017, at Sentinel Energy Project in North Palm Springs.
- Continued to work on the investigation of an injury incident that occurred on April 8, 2017, at La Paloma Generating Station in McKittrick.
- Monitored 14 planned outages reported by natural gas and renewable power plants.
- Submitted a data request to PG&E regarding its GO 166 filing. Submitted additional data requests to Liberty Utilities, Bear Valley Electric, and PacifiCorp regarding their GO 166 filings and requested supplemental information about their fire response plans.

Metrics for Generation Incident Investigations as of March 31, 2018

Electric Generation Incidents	Level 1	Level 2	Level 3	Level 4	Total ³
Total open incidents	0	0	1	2	3
Total incidents reported in 2018	0	0	1	2	3
Total incidents closed in 2018	0	0	1	2	3
Total open 2018 incidents	0	0	1	0	1
Incidents reported in March 2018	0	0	1	0	1
Incidents closed in March 2018	0	0	0	2	2

³ Level 1: A safety incident that doesn’t meet Level 2, 3, or 4 criteria. Level 2: Incident that occurred during an Electric Alert, Warning or Emergency (AWE). Level 3: Incident resulted in a significant outage that was due, at least in part, to plant equipment and/or operations. Level 4: Incident resulted in a fatality or injury requiring hospitalization and was caused, at least in part, by plant equipment and/or operations.

UTILITY RISK ASSESSMENT AND SAFETY ADVISORY

REVIEWING SAFETY & RISK IN GENERAL RATE CASES

Climate Resilience in PG&E RAMP

On November 30, 2018, Pacific Gas & Electric filed its first RAMP case, in advance of its 2020 GRC (I.17-11-003). In the filing, PG&E identified 22 of its top risks for electric and natural gas operations, and several “cross-cutting” risks, including climate resilience, cyber security and workplace violence.

PG&E defines Climate Resilience as “actions to be taken related to PG&E’s assets, infrastructure, operations, employees and customers to mitigate against the potential consequences of and adapt to a changing climate and associated weather patterns.” Basically, the risk event is a failure to take adequate actions.

In this RAMP, PG&E’s risk assessment approach is distinguished from what SED has seen from other utilities by the inclusion of both mitigation and adaptation efforts, and because PG&E draws on related analysis of 11 other RAMP risks (covering both electric and gas operations) for assessing how to address potential climate risks. PG&E also identified six individual “drivers” of climate impacts:

- Major Storm Events
- Sea Level Rise
- Subsidence
- Heat waves
- Wildfires
- Drought

Additionally, PG&E has chosen to analyze Climate risks in two differing time periods, 2022 and 2050 and somewhat differing scenarios to reflect the two dates. These climate change multipliers are meant to capture the expected increase in frequency of risk events, and are independent of each other in PG&E’s model. PG&E also posits two “scenarios” for each time frame to reflect greater or lesser impact expectations.

The differences apparent in PG&E’s model appear to be in the extremes, that is the range from minimum to possible maximums is the same in 2022 and 2050, but outer years show more extreme outcomes (for example significant increases in sea-level rise – measured in inches of rise), and sometimes stark differences in the A & B scenarios (i.e., a 25 percent to 40 percent increase in expected numbers of five-day heat waves).

Of the six identified drivers, sea-level rise appears to pose a far greater potential likelihood in the analysis, approximately an order of magnitude greater than each of the other drivers.

PG&E correctly cautions about the great uncertainty of current forecasting climate change impacts. An even greater uncertainty is noted for potential geohazards, including extreme winds, ice storms, earthquakes and tsunamis.

Still, the utility's attempt to better quantify all of its RAMP risks does provide some sense of the safety consequences, even in the near term: "[I]n 2022, PG&E could experience safety consequences for PG&E workforce and the public of an additional 25 – 129 injuries and 1 -3 fatalities per year due to climate change impacts, and in 2050, an additional 66 – 173 injuries and 2 – 5 fatalities..." What causes these injuries is uncertain, as they are statistical artifacts.

In terms of translating expected outcomes in the several risk attributes that PG&E uses to compute a MARS "tail end" consequence score of 665.3 (for the 2020 Scenario B) and 845.1 for the 2050 B scenario), the utility sees even greater impacts from environment, reliability and financial outcomes of its model.

However, in the near-term, PG&E admits that its proposed mitigation strategy must still be considered "foundational" focused on improving its analytical capabilities rather than altering operations or increasing capital expenditures in this GRC cycle. Its current set of controls and mitigations (in the 2016 – 2019 period) are characterized as prioritizing emergency preparedness and response, and information gathering by developing decision-making tools and metrics to measure progress.

The proposed mitigation plan for 2020-2022 continues this work plan, not directly proposing risk mitigations, but instead "to create knowledge, tools, and a platform through which to mitigate risk when applied by PG&E's lines of business in the future." As a result, there is no expected quantifiable risk reduction and no attempt to calculate a Risk Spend Efficiency (RSE) measure for this cycle.

Proposed incremental expenditures are modest, rising from \$518,000 in 2017 (est) to \$844,000 in 2022, with the emphasis on training, implementing screening tools and developing plans for asset prioritization. PG&E also projects what it calls "deep dives" into three of the risk drivers: Major Storm Events, Drought and Subsidence. PG&E says the deep dives are "essential" to help better understand how climate change impacts assets, infrastructure, operations, employees and customers.

STRENGTHS

In a sense, PG&E's admission of grappling with great uncertainty has pushed the utility into relatively uncharted territory for its analysis of climate change impacts, and it appears to be responding with flexibility in determining new strategies as more information is available and

actual climate impacts become more clear. That is possibly the best approach for the time being.

The utility appears to have taken seriously SED's prior recommendations that utility planners re-set their horizons from a too distant 50 – 75 year window a more foreseeable timeframe. The analysis of projected safety consequences, in and of itself showing higher injuries and fatalities in the short-term, should be taken as a cautionary for planners, regulators and lawmakers.

AREAS FOR IMPROVEMENT

Although PG&E has made a purposeful decision to try to segregate its risks and proposed mitigation spending to minimize duplication and overlapping projections, there could be a better understanding provided of PG&E's assessment of the inputs related to the 11 stand alone risks that it says contribute to the overall climate risk. It is apparent that the climate analysis is unique, in that the other risks are employed to define the risk exposure, but because this is a very different approach than used for other Risks, the reader is left to merely accept PG&E's use of percentages or weightings of contribution and how that impacts the analysis.

The relatively greater percentage attributed to Hydro/Dam risk, is clearly a factor in the estimation of Sea-Level Rise risk driver frequency, but again, the reader must take that on faith. Perhaps the "deep dive" analysis will, over time, resolve these unanswered questions.

Also, because we know of PG&E's involvement in national climate risk assessment efforts (eg. the U.S. Department of Energy's Partnership for Energy Sector Climate Resilience), there remain unanswered questions about how fully PG&E is using asset-based analysis for this risk area.

RSE for Mitigations

As noted above, G&E did not provide provided a risk-spend efficiency calculation for Climate Change Adaptation mitigations.

Alternative Mitigations

The alternative approaches to PG&E proposed package of mitigations for 2020-2022 are essentially two flavors of additional activity "accelerated pace" and increased resources (ranging from 50% greater to a doubling of expenditures for the deep dives. The range of expected costs in the three-year GRC cycle goes from \$2.5 million for the recommended mitigation plan to a little over \$3.1 million for the more assertive mitigation alternative.

The "accelerate pace" alternate is also about \$2.5 million, with some expenditures moved up to 2002, and less spent in later years.

In other words, at this stage, there really is little difference among the plans. Because there is no expectation of actual risk reduction from planned activities, little basis for deciding whether one approach is truly preferable to the others.

CONCLUSION

The expectations for RAMP analysis are, of course, a moving target, and PG&E faced numerous challenges in compiling its first discrete RAMP. As with all of its other identified risks in this cycle, there are modes of analysis that have not been employed in the past, and PG&E should be commended for pushing the envelope to better employ probabilistic analysis. In the absence of quantifiable data about both the likelihood and consequences of climate change impacts, PG&E correctly continues to put its emphasis on developing better tools and metrics that will in future GRCs better inform investment choices.

Continued development of the PG&E analysis (independent of the specific multi-attribute model approach eventually determined by the Commission) will benefit from PG&E's further analysis of both the interaction of its other related RAMP risks and the "deep dive" into analysis of the identified risk drivers.

PROCEEDINGS

- **Investigation into Safety Culture of Pacific Gas and Electric Company and PG&E Corp. (I.15-08-019) (President Picker/ALJ Allen) (Advisory):** ALJ Peter Allen has been assigned to this proceeding. Parties have requested that the previously announced hearings schedule be suspended pending a potential settlement of issues. In early March, Joint Parties (PG&E, the Office of Ratepayer Advocates and TURN) filed a statement of "material issues in dispute" which might be litigated in hearings: The Joint Parties have met and conferred and identified three factual issues that could require evidentiary hearings:
 - Are safety culture metrics being addressed in the Safety Model Assessment Proceeding (SMAP), and if not, what items may need to be addressed?
 - How is PG&E using cost-effectiveness measures to prioritize its safety programs, both within and outside of the Risk Assessment and Mitigation Phase (RAMP) process? And
 - Is PG&E's use of a 10% safety weighting in its Long-Term Incentive Plan (LTIP) consistent with PG&E's claim that safety is its top priority?The Office of Safety Advocate (OSA) called for workshops to develop appropriate safety culture metrics. OSA also listed issues it felt could be addressed in hearings: PG&E's position on accountability, safety incentives, deferred compensation, and corrective action reporting, and what the best forum is to address those issues. Hearings in the OII are scheduled for the week of April 10, 2018.
- **Gas Leak Abatement OIR (R.15-01-008) (Commissioner Rechtschaffen/ALJ Kersten) (Advisory):** With the approval in June 15, 2016, of new policies for methane leak reporting and reduction activities, the proceeding moves into a compliance phase with

the filing in March 2018 of plans by the gas companies to implement 26 Best Practices for planning, training and detection/quantification and elimination of methane leaks on the natural gas systems in California. RASA and CARB scheduled a workshop on April 19 to provide a preliminary review of compliance plans. On March 30, Staff issued new templates for the annual leak survey covering 2017 leaks, emissions and mitigation activities.

- **SCE 2017 General Rate Case (A.16-09-001) (President Picker/ALJs Roscow & Wildgrube) (Advisory):** Evidentiary hearings wrapped up during the first week of August 2017. No additional issues related to risk or safety were raised during cross-examination of witnesses. A Proposed Decision is currently being drafted pending testimony on issues raised by the federal tax reform act.
- **Sempra Utilities 2019 General Rate Case (A.17-10-007/008 consolidated) (President Picker/ALJ Lirag)** The test year 2019 GRC applications were filed October 6, 2017. SED will be reviewing the testimony to evaluate how the utilities have incorporated elements of the Risk Assessment Mitigation Phase (RAMP) evaluation, and provide ongoing support regarding safety issues. In early March, SDG&E made an informational filing detailing how its previous RAMP process has been integrated into the GRC, but couched it in the form of a motion to close the RAMP OII. A decision is pending.
- **Physical Security of Electric Infrastructure (R.15-06-009) (Commissioner Rechtschaffen/ALJ Kelly) (Advisory)** In January, RASA staff published a whitepaper updating the status of physical security issues at the state and federal level, to be released in January. Also, staff has evaluated the Joint Utility Proposal and submitted recommendations for Commission consideration. Parties submitted comments on the recommendations in February. A proposed decision for Phase 1 is pending. A PHC for Phase 2, involving community engagement in utility emergency plans, was held March 15, and while a scoping memo is pending, Staff is proceedings with parties to develop a plan for workshops for Phase 2 beginning in May.
- **Safety Model Assessment Proceeding (A.15-05-002, et al) (Commissioner Rechtschaffen/ALJs Kersten & Fogel) (Advisory):** Parties have signaled that they have reached a settlement agreement on issues related to risk assessment models. A joint motion for consideration of the settlement is promised by May 2. RASA, in cooperation with the Energy Division, held a workshop on February 22 to discuss guidance for smaller utilities to include risk assessment in their rate cases, and to develop guidance for accountability reporting going forward. Based on comments at the workshop Energy Division will revise its draft proposal, which is expected to be circulated for comment.
- **Undergrounding Rule 20A (R.17-05-010) (Commissioner Picker/ALJs Hecht & Wildgrube) (Advisory)** This rulemaking was launched May 11 to review policies and funding mechanisms for the overhead to underground conversion program administered by electric utilities for cities and other jurisdictions. A PHC was held September 11, 2017, and a scoping memo is pending. SED will monitor the proceeding with an interest in adding safety as one of the program eligibility criteria. On January 18, ALJ Eric Wildgrube was co-assigned to the proceeding.

- Utility Poles (I.17-06-027/R.17-06-028) (Commissioner Picker/ALJs Mason and Kenney) (Advisory)** The Investigation and Rulemaking into possible creation of a shared database or statewide census of utility poles and conduit was initiated on June 29, 2017. This proceeding is to consider strategies for increased and non-discriminatory access to poles and conduit by competitive communications providers, the impact of such increased access on safety, and how best to ensure the integrity of the affected communications and electric supply infrastructure going forward. This proceeding is consolidated with R.17-03-009 that considers whether and how our existing Rights-of-Way Rules should be applied to wireless support facilities (lines and antennas). A PHC was held December 5, 2017, and a scoping memo will follow. On February 8, 2018, Parties filed comments on the structure of a form for possible database of utility poles and facilities, and access to information contained in a data base.

MONITORING THE WHISTLEBLOWER WEBSITE

The Risk Section has been overseeing intake for complaints that arrive via a “whistleblower” application on the Commission’s web site. Whistleblower protections are afforded to utility employees and contractors who report potentially unsafe or illegal practices.

STATISTICS - 1/01/18 - 03/30/2017

Note: This is for complaints filed using the on-line Whistleblower Application ONLY.

Confirmed or Possible Whistleblower Complaints						
	CAB	Transportation	Electric Safety	Gas Safety	Telco Fraud	Rail
January	0	0	0	0	0	0
February	0	1	0	0	0	1
March	0	1	1	1	0	0
Total 2018	0	2	1	1	0	1

Invalid Whistleblower Complaints Converted to Standard Complaints							
	CAB	Transportation	Electric Safety	Gas Safety	Telco/Utility Fraud	Rail	Referred to Outside Agency
January	0	0	1	0	0	0	0
February	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0
YTD	0	0	1	0	0	0	0

Test, Incomplete or Duplicate Whistleblower Complaints	
January	3
February	8
March	3
YTD	14

OFFICE OF RAIL SAFETY

RAILROAD SAFETY – ROSB

In the month of March 2018, SED Staff’s Railroad Operations group completed the following:

Railroad Operations Safety Branch	Mar-18	YTD 2018
New Incidents Investigated	5	21
Informal Complaints Investigated	1	5
Safety Assessments/Reviews	15	31
Compliance Actions	859	2763
Major Inspections Completed	2	11
Operation Lifesaver Presentations	5	18

ROSB INSPECTION, INVESTIGATION & FIELD ACTIVITIES

March 5, 2018: On March 5, 2018, a CPUC MP&E Inspector from ROSB-South arrived unannounced at the BNSF Classification Yard located in Barstow, California, for the purpose of inspecting outbound locomotives for compliance to safety standards. The CPUC Inspector met with the General Foreman, and requested to be directed to outbound locomotives already tested, inspected and declared ready for departure in revenue service. The BNSF Foreman directed the CPUC Inspector to 3 locomotives on the outbound track. The CPUC Inspector found that while 2 of the locomotives were in compliance, the 3rd unit was unsafe to operate due to various egregious issues such as:

- 1) Evidence of Diesel engine 'souping', which is a term used to indicate that the engine is pumping atomized oil out of the exhaust stack. The oil in the exhaust then falls as droplets collecting on the locomotive carbody, handholds and walkways making passages slippery and hazardous. Oil out of the exhaust stack could be due to worn piston rings or defective seals in the turbocharger, compounded by pro-longed engine idling.
- 2) The one way check valve was installed upside down. Due to its internal design, installing the one way check valve upside down could be detrimental to the locomotive air brake system.
- 3) The floor in the main generator compartment had been left unsecured and therefore loose and unsafe to walk on. Also the securement bolts were strewn about on the floor area creating another slip and fall hazard, exacerbating the situation.

Due to these defects considered egregious and unsafe, the CPUC Inspector recommended a Civil Penalty. No one disputed the CPUC Inspector's findings, or his recommendation for Civil Penalty.

March 5, 2018: CPUC Railroad Safety Investigators conducted a routine inspection of UPRR Kaiser yard, in the city of Fontana, CA. Subsequent to arriving at the location, they observed an end of train device (EOT) improperly placed in the ballast, north of track one and near the west end of the track. This is not in compliance with the standards set forth in General Order 118A. This condition creates an especially hazardous working environment for railroad personnel, as this rail facility operates 24 hours per day. CPUC Investigators made contact with the Manager of Yard Operations, who was currently on site. Once advised of the non-compliant condition, CPUC Investigators observed the railroad manager remove the device and store it in an appropriate location. A State General Order report was created and a defect warning was issued.

March 6, 2018 & February 13, 2018: CPUC railroad safety investigator conducted routine inspections at the Union Pacific railroad (UPRR) Yard located in Tracy and the Burlington Northern Santa Fe (BNSF) Calwa Yard located in Fresno.

The inspections revealed broken freight car roller bearing adapters, one at each location. The broken bearing adapters are not in compliance with Title 49 CFR part 215.117(a), which states, a railroad may not place or continue in service a car if the car has a roller bearing adapter that is, (a) cracked or broken. The purpose of the adapter is to distribute the weight of the freight car evenly on the surface of the bearing. Focused pressure in one spot could lead to bearing damage and overheating. If left undetected it could result in complete bearing failure. Bearing failure is commonly referred to as a burned off bearing. When bearings burn off, the internal components reach molten temperatures and essentially melt off. When bearing failure occurs a derailment is imminent, which could lead to injuries or fatalities to railroad employees or the public.

In both cases the CPUC railroad safety investigator notified the perspective management of each railroad of the unsafe condition and the cars were placed in bad order status, and prevent further movement until they could be repaired. This is a rare defect to find, and in both cases it occurred on the same style of adapter. It was recommended to both railroads, that it may be an opportune time to brief their railroad equipment inspectors that this style of bearing adapter could potentially be trending with failure issues.

March 7, 2018: CPUC Railroad Safety Investigators conducted a routine inspection of train speed compliance (General Code of Operating Rules 6.31) on the North County Transit San Diego Subdivision between milepost 245.5 and 245.7. This location is south of Del Mar and North of La Jolla. This area was selected to observe trains entering a curve that has a permanent speed restriction of 55 mph. Trains that travel from San Diego to Los Angeles approach this curve from a max speed of 80 mph and are required to slow down to 55 mph. Trains traveling from Los Angeles to San Diego approach this curve at a max speed of 90 mph. Staff used a hand held radar device to capture the speed of the train as it passed. Staff observed four Amtrak trains and all trains were in compliance with the speed restriction. Additionally, staff observed four North County Transit Coaster trains and all trains were in compliance with the speed restriction as well.

March 13, 2018: On March 13, 2018, for the purpose of inspecting outbound trains for compliance to safety standards, a CPUC MP&E Inspector from ROSB-South, arrived unannounced at the UPRR property located in the border town of Calexico, California.

The CPUC Inspector met with the local UP Manager of Yard Operations, then proceeded to an outbound train which had already been tested, inspected by the Carrier and had been declared ready for departure in revenue service as train LOE34-12.

From a train consist of 33 freight cars; the CPUC Inspector identified 6 different cars with non-complying issues resulting in an 18% defect ratio which is significant. Defects included insufficient brake piston travel, a missing coupler knuckle pin, and safety appliances such as ladder treads or handholds that were bent and unsafe or with insufficient clearance, and a brake shoe that was entirely worn allowing its metal back plate to run in contact with the tread of the wheel. The most egregious defect which could cause injury from falling was a sill step that was missing a securement bolt and therefore was not mechanically fastened to support body weight. The CPUC Inspector recommended Civil Penalty for the unsecured sill step. No one disputed the CPUC Inspector's findings or recommendation for Civil Penalty. The railroad quickly responded by dispatching Carmen to the train and repairing the non-compliant cars prior to its departure.

March 13, 2018: A CPUC Railroad Safety Inspector specializing in Motive Power and Equipment conducted a routine inspection of Pacific Harbor Line Nissan car loading facility in Wilmington. This facility is mechanically operated by Harbor Rail Services. The inspection included an outbound train that had been previously inspected and cleared for departure by Harbor Rail Services employees.

One car was found with a non-compliant condition (Car Number TTGX 853063) at the A-End location the End of Car Cushioning Unit was found leaking clearly formed droplets and the Unit Condition Indicator (UCI) stays in when pushed indicating an unacceptable unit condition. The End of Car Cushioning unit prevents the freight car from cushioning the draft and pulling forces and now creating aggressive train handling with a potential for a derailment or personal injury to crew members. This defective condition is a Code of Federal Regulation(CFR) PART 215

defect which reads—RAILROAD FREIGHT CAR SAFETY STANDARDS Subpart B—Freight Car Components §215.129 Defective cushioning device. A railroad may not place or continue in service a car if it has a cushioning device that is—(a) Broken ;(b) Inoperative. The defective car was removed from the loading plan and set out to be repaired before it departed the terminal. The railroad was also cited with a federal defect.

March 14, 2018: A CPUC investigator attended an interoperability status meeting at North County Transit District (NCTD), in Oceanside, CA. Interoperability with tenants is the next phase of Positive Train Control (PTC) implementation. NCTD is the host railroad; with Metrolink, Amtrak, BNSF, and Pacific Sun Railroad as tenants requiring interoperability in order to operate on NCTD territory. This meeting was attended by NCTD, Metrolink, Amtrak, and Pacific Sun Railroad. BNSF was not present at the meeting. NCTD reported that Revenue Service Demonstration (RSD) was ongoing and their Positive Train Control Safety Plan (PTCSP) was submitted to the FRA and was anticipated to be reviewed by the FRA in late May 2018 followed by a decision in June 2018. Testing of Field Integration and Function Testing (FI&FT) along with lab federation with Metrolink and BNSF was ongoing, with Key Exchange Server (KES) testing planned later in March of 2018.

Metrolink reported that RSD was ongoing, and interoperability with BNSF and UP is underway and plans for interoperability with NCTD and Amtrak are in development. Amtrak reported that their Back Office Server (BOS) may be in production by the end of March which would allow them to plan for interoperability with BNSF and UP afterwards.

March 15, 2018: CPUC railroad safety inspectors performed a routine inspection of Kaiser Yard, San Bernardino Sub-Division of the BNSF Railway. Inspection was conducted to check for compliance of the General Code of Operating Rules and The Code of Federal Regulations. The two inspectors identified a non-compliant condition. The inspection revealed that switch # 2122 was not in use & the switch was not locked, hooked or latched. During the inspection there were no crews in the area working. Not In Compliance With 49 CFR 218.103(b)(8) Regulation States: Hand Operated Switches Including Crossover Switches, After operating a switch, ensure that when not in use, each switch is locked, hooked, or latched if so equipped.

Railroad Operating Rule GCOR 8.8 Switches Equipped with Locks, Hooks, or Latches States: When not in use, switches must be locked, hooked, or latched is so equipped.

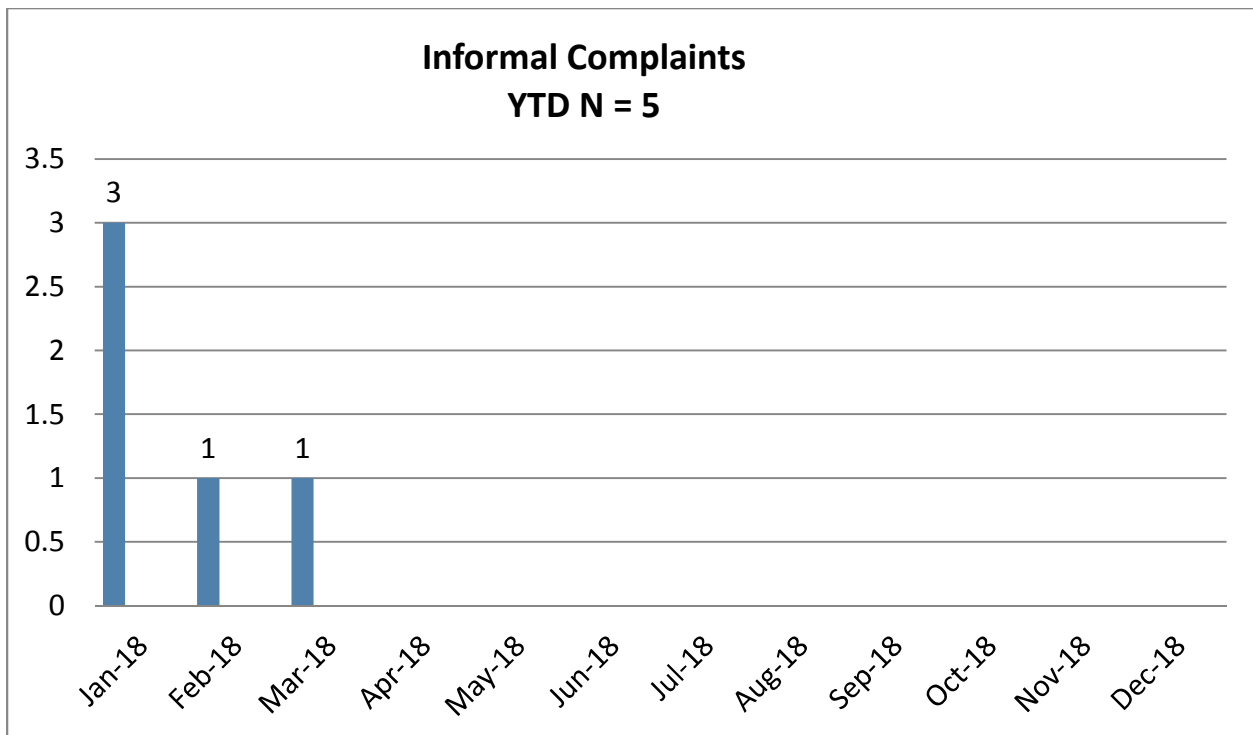
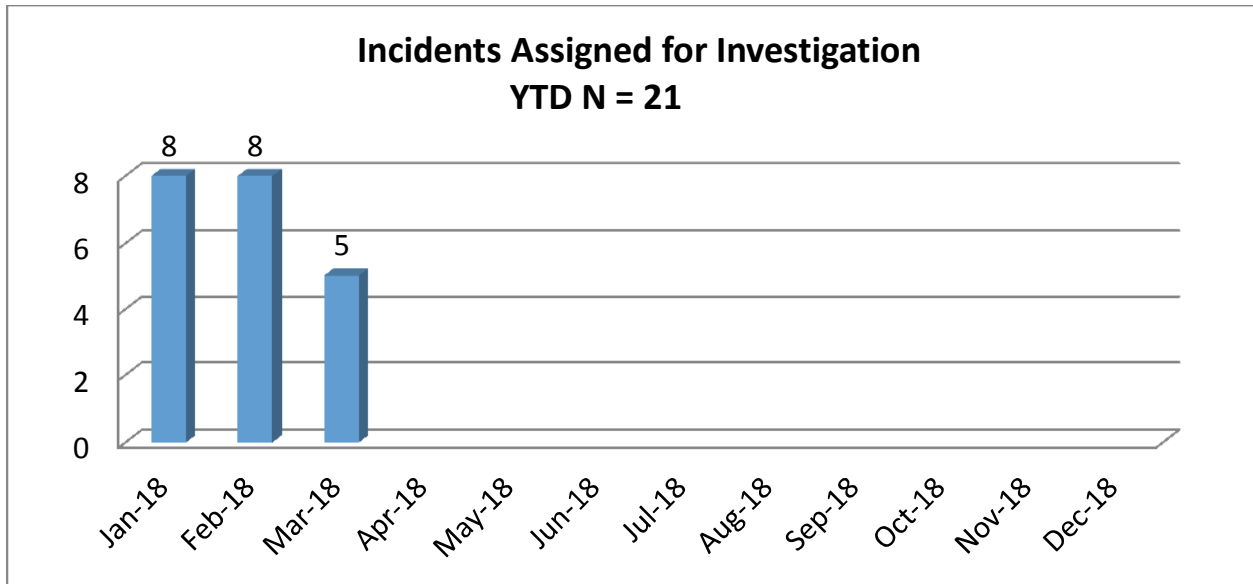
BNSF management was immediately notified and committed to correct the non-compliant condition. A final inspection was made by CPUC Inspectors on Switch # 2122 in Kaiser Yard later in the day and it was found that the switch was brought into compliance. No regulatory action was issued since the BNSF Railway took reasonable measures to resolve this issue.

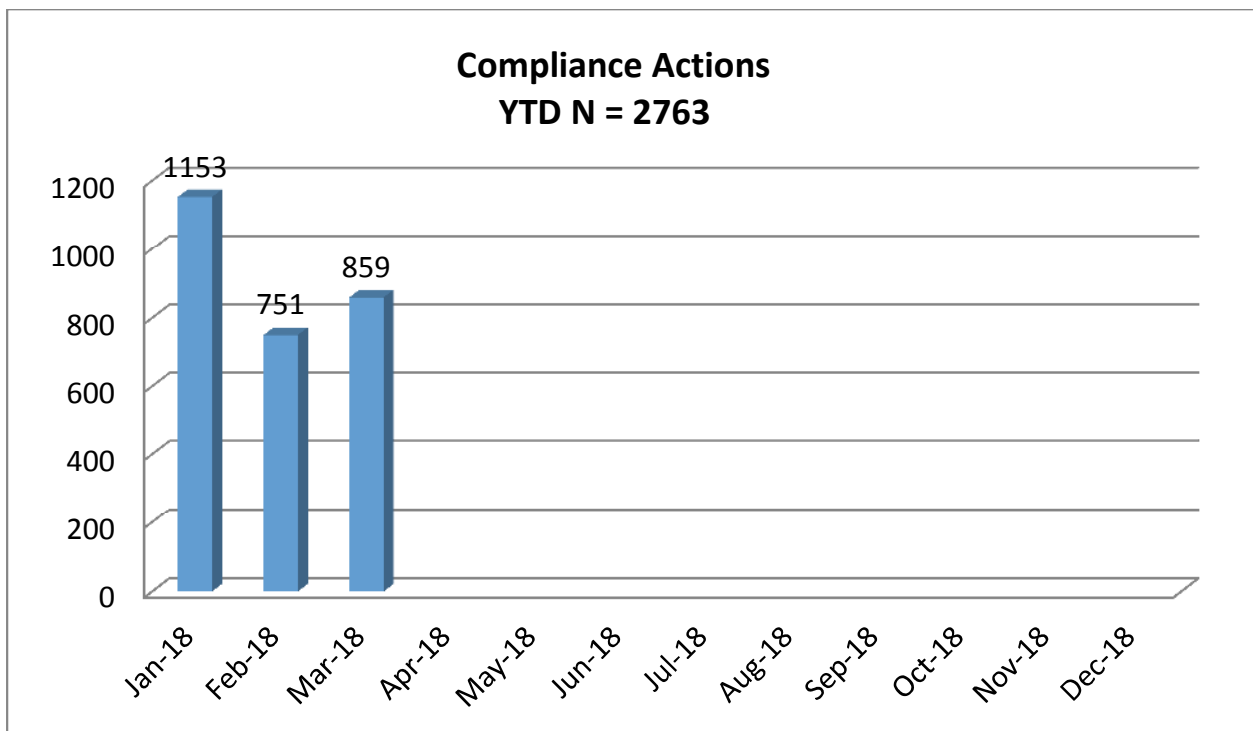
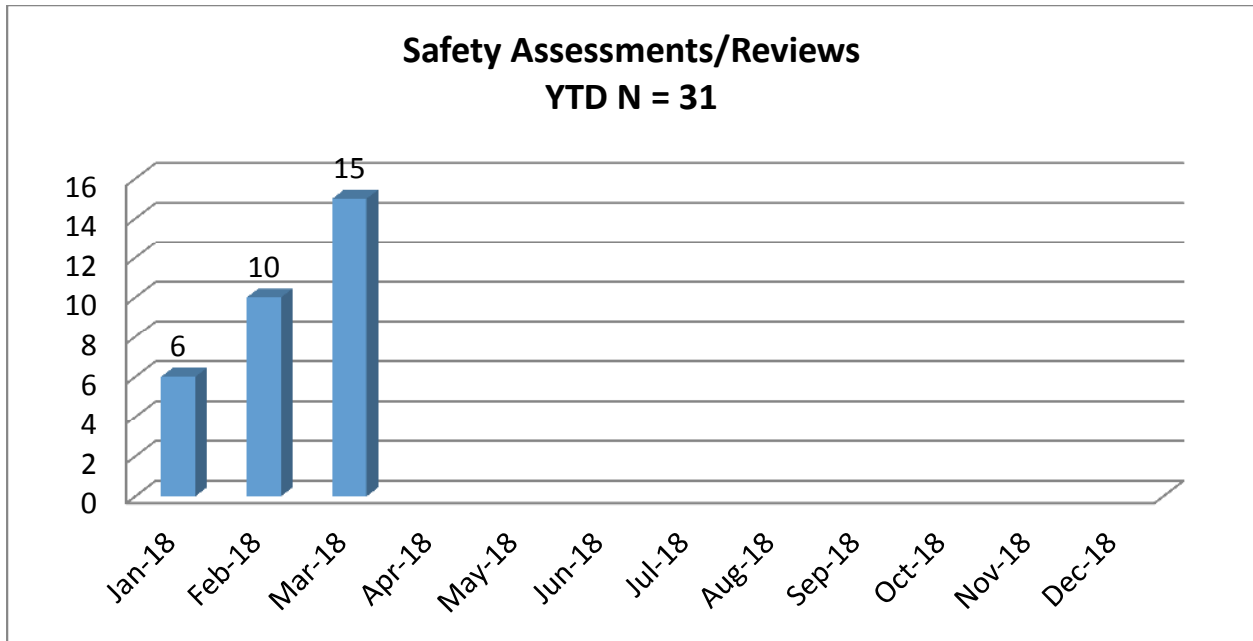
March 15, 2018: While performing a routine inspection on UP property in the Yermo area, an unsafe crossover platform was discovered on an inbound box car. The defective condition was brought to the attention of the outbound crew, who in turn set the car out of the train for repairs. This non-compliant condition could have resulted in a severe injury to a railroad employee attempting to climb through a train using the platform.

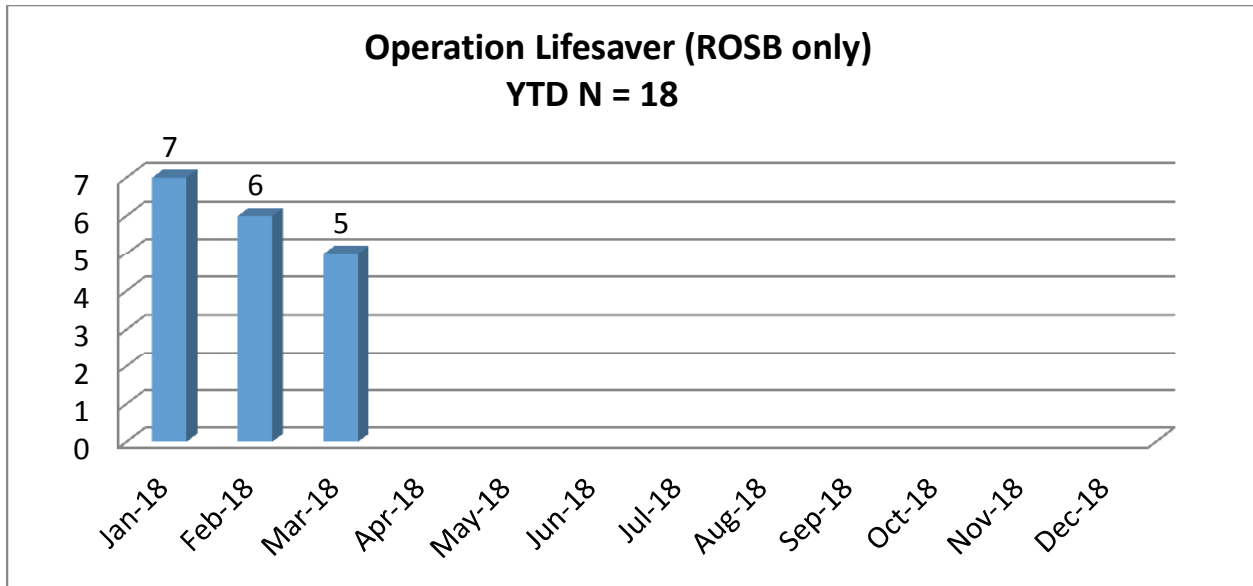
A call to the UP mechanical facility in Colton, CA resulted in a crew of mechanic's arriving to replace the bent platform. This defective condition is covered under CFR 49 part 231.24(b). The car was repaired the next day and placed back in service. The railroad was issued a report documenting the defective condition.

March 21, 2018: Two CPUC Hazmat inspectors conducted a compliance inspection of the Burlington Northern Santa FE El Segundo WYE Yard, El Segundo, California where a tank car was found to be in a non-compliant condition. Tank car CPDX 215002, UN 2672 loaded with Ammonium Hydroxide, Class 8, PG III was found with a loose liquid education line plug. According to the Code of Federal Regulations (CFR 49) all closures on tank cars containing hazardous materials are required to be in tool-tight condition. The waybill and electronic tracking information for the tank car was acquired from the Burlington Northern Santa Fe to identify the route the car traveled, the shipper, and load status of the car. This information was used to determine if the shipper has been a chronic offender of regulations, which aids the inspector to determine what type of corrective action to take. In this case the shipper had a positive inspection history and was issued a federal defect for the non-compliant condition. The shipper immediately made arrangements with the BNSF hazmat specialist to have the car

placed for repair before it was placed into transportation. The shipper also agreed to review the findings with the employees responsible for loading the car.







OFFICE OF RAIL SAFETY

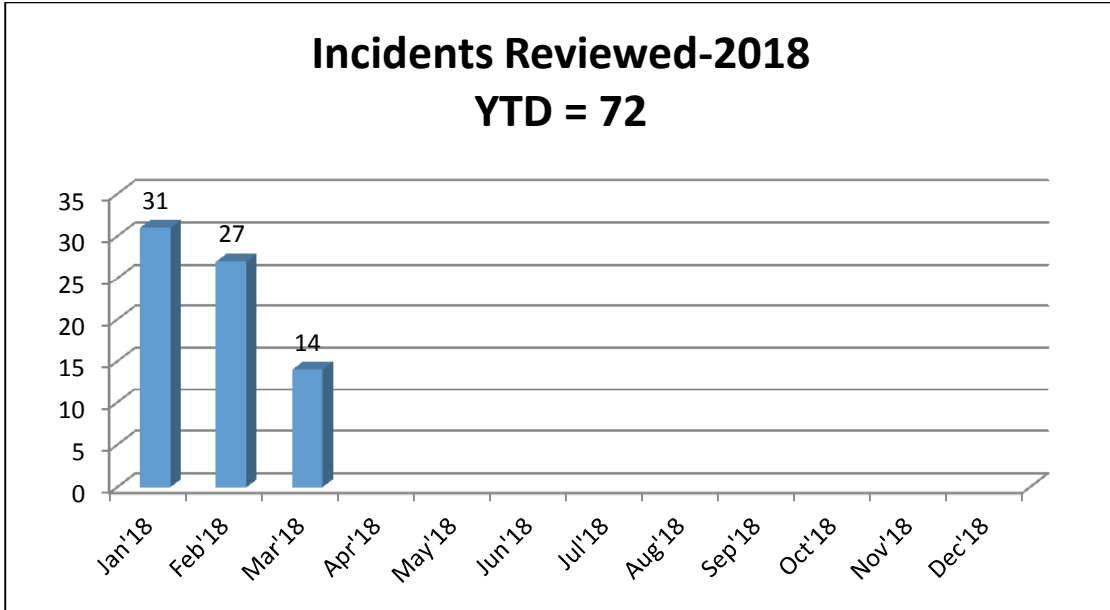
RAIL CROSSINGS AND ENGINEERING BRANCH - RCEB

In the month of March 2018, the RCEB team completed the following:

	New	New YTD	Closed	Closed YTD
Crossing Incident Reviews	18	56	14	72
Safety Assessments/Quiet Zones/Reviews	21	76	21	76
Proceedings, Resolutions and G.O. 88-B Reviews	16	24	14	24
Operation LifeSaver Presentations	3	24	3	24

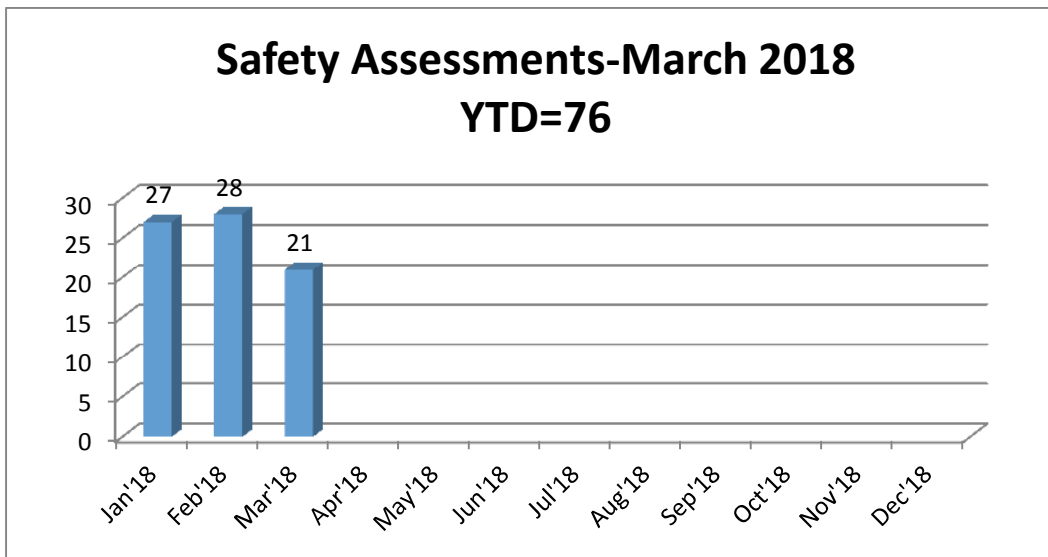
RAIL CROSSING INCIDENT INVESTIGATIONS

In March 2018, the Rail Crossings and Engineering Branch (RCEB) assigned 16 new incidents at highway-rail crossings, one incident at highway-LRT crossings and one incident along the rail right of way. These collisions resulted in three fatalities and two injuries. RCEB also completed 14 crossing incident reviews at highway-rail incidents that resulted in three fatalities and two injuries. RCEB will continue to monitor the crossings.



SAFETY ASSESSMENTS, QUIET ZONES AND REVIEWS

In March 2018, RCEB completed 21 rail-crossing safety assessments involving: communications, field inspections, and diagnostic reviews with railroads and local agencies. The RCEB stats for the February Safety Assessments/Quiet Zones/Reviews in the previous report were in error. The introduction table and the chart below show the correct number of “28” activities instead of the “20” previously reported by RCEB.



03/01/2018 and 03/02/2018 - Staff met with representatives of UPRR, City of Davis, County of Yolo, Davis Bike Coalition, others, and CPUC mediator to review the crossing at County Road 32A/105 in Yolo County. The mediation is in relation to application A.17-10-009 that considers a relocation of the existing crossing.

03/02/2018 - Staff inspected 14 crossings in Imperial County related to various crossing maintenance issues, a Section 130 project, and unauthorized installation of STOP signs at passive crossings. Staff took the opportunity and updated the crossing inventory data at all of the locations.

03/14/2018 - RCEB staff observed the start-up and testing of a new Caltrans traffic signal and new crossing warning devices along State Route 98 in Calexico, Imperial County. The preempted traffic signal is adjacent to a Union Pacific Railroad crossing. Many Caltrans and Union Pacific staff participated to ensure that the traffic signal and warning devices were functioning properly. Caltrans completed the design prior to recent Caltrans policy revisions that require a supervised circuit for railroad preemption. RCEB and Caltrans staffs continue to work towards finalizing the Caltrans preemption guidelines.

03/06/2018 - Staff attended a diagnostic meeting at the Auzerias Avenue and Sunol Street VTA at-grade highway-rail crossings. Two adjacent high-density housing development projects will influence the use conditions of the existing crossings. There are plans to add sidewalks and pedestrian treatments for the anticipated movements between the housing complex and newly developed park.

03/07/2018 - Staff attended a diagnostic meeting in Redwood City, in San Mateo County, to discuss modifications to multiple crossings to accommodate bike lane improvements. RCEB, UP, Caltrans, City of Redwood City, and AECOM attended the meeting. The current plan is to modify the at-grade crossings to include new Commission Standard 9-A and Standard 8 warning devices.

03/07/2018 - Staff met with representatives from City of Industry (JMD) and UPRR to discuss the safety and compliance requirements for widening San Jose Avenue crossing; review the

California Public Utilities Commission | Safety and Enforcement Division

Section 130 project for the Stimson Avenue crossing; and, a maintenance issue at the Bixby Drive crossing in the City of Industry, Los Angeles County.

03/07/2018 - RCEB inspected ongoing construction near Chesterfield Drive, Encinitas, in San Diego County. A second track and various crossing safety improvements are in process.

03/09/2018 - Staff joined RTSB and RTA staff to review the preliminary details and video of two crossing incidents that occurred in January 2018 in the City and County of San Diego.

03/12/2018 - Staff, City of Dixon, the railroad, and Caltrans met to discuss the upcoming Section 130 project at the North First Street at-grade crossing in Dixon, Solano County. Staff approved the GO 88-B application and the meeting was for minor scope changes.

03/14/2018 - Staff met with City of El Centro engineering staff regarding final design of a safety improvement project at Main Street in City of El Centro, Imperial County. The meeting discussed a few changes to complete the project.

03/15/2018 - Staff met with representatives from the City of Santa Clarita, Metrolink and RailPros to discuss the compliance requirement for the future pedestrian underpass crossing in the future Vista Canyon Station in the City of Santa Clarita, Los Angeles County.

03/15/2018 - Staff met at CalTrain HQ to discuss improvement strategies for mitigating the recent trend of accidents at the Broadway Avenue crossing in Burlingame, San Mateo County. RCEB, CalTrain, and the City of Burlingame attended the meeting. The City of Burlingame will be analyzing the traffic signal timing for any possible improvements.

03/16/2018 - Staff met with representatives of UPRR and the County of Yolo, for follow-up meeting related to application A.17-10-009 related to County Road 32A/105. The meeting determined the best path forward with mediation to finalize the project.

03/19/2018 - Staff observed the status of ongoing construction of the Mid-Coast Light Rail Transit extension near University City in San Diego, San Diego County. The contractor is working on many of the support columns for the aerial trackway.

California Public Utilities Commission | Safety and Enforcement Division

03/19/2018 - Staff participated in the all hands meeting held by SED Director Elizaveta Malashenko in relation to the 2018 Draft Annual Plan. Staff recommended that reference to the CPUC High Speed Rail Team on the Plan should include the RCEB utilities engineers presently working on CAHSR. The team described in the plan consists of a Senior Utility Engineer and a Public Utilities Regulatory Analyst V.

03/19/2018 - Staff performed routine inventory inspections in Alviso, CA in the Santa Clara County.

03/19/2018 - Staff completed a field visit to the Wickland Oil Company crossing in Contra Costa County in relation to a California Environmental Quality Act filing.

03/23/2018 - Staff met with RCEB, VTA, and CMG Architects to review preliminary plans for the St. James Platform Station reconfiguration.

03/28/2018 - Staff observed crossings in downtown San Diego including Friars Road, Washington Street, Beech Street, Ash Street and Broadway. RCEB also observed SDTI stations at Santa Fe Depot, Washington Street, Old Town Transit Center, and Linda Vista. The inspections are in relation to recent developments in the area. RCEB noted rapid growth of bike/scooter sharing services near transit stations and downtown.

PROCEEDINGS, RESOLUTIONS AND G.O. 88B REVIEWS

In March 2018, RCEB staff received one new major proceeding requiring Administrative Law Judge (ALJ) review; and, 15 new General Order 88-B applications for changes to existing crossings. This month, RCEB closed three formal proceedings with the ALJ, and 15 General Order 88-B applications.

PROC A1505012 - On March 23, 2018, staff updated information in RSSIMS for the Hallock Drive new at-grade crossing in the City of Santa Paula in Ventura County. Decision 15-12-006 authorized the construction of the new crossing allowing three years to complete the project.

PROC A1708022 - On March 1, 2018, the Commission issued Decision 18-03-006 authorizing the City of Victorville to construct an overhead grade-separation structure for Green Tree Boulevard, Victorville, in San Bernardino County. The authorization expires in four years.

California Public Utilities Commission | Safety and Enforcement Division

PROC A1706004 - On March 22, 2018, the Commission issued Decision 18-03-025 authorizing the San Francisco Bay Area Rapid Transit District (BART) authorization to construct a new grade separated crossing over UPRR tracks for the West Access Bridge and Plaza Project for pedestrian and bicycle access to the Warm Springs /South Fremont BART station. The authorization expires in three years.

GO 88B - XREQ 2015040003 - On March 19, 2018, staff issued a three-year extension authorizing Caltrans to construct a grade separation project at Valley View Avenue, Cities of Cerritos, La Mirada, and Santa Fe Springs, in Los Angeles County.

GO 88B - XREQ 2018030001 - On March 28, 2018, staff authorized the County of Fresno to alter the E. Adams Avenue crossing in unincorporated area of Fresno County. The California High Speed Rail Authority proposes to eliminate the at-grade crossing and construct a grade separated crossing over BNSF tracks. The authorization expires in six years.

GO 88B - XREQ 2018030003 - On March 12, 2018, staff authorized the City of Los Angeles to alter the Sheldon Street at-grade highway-rail crossing in the City and County of Los Angeles. The authorization expires in three years.

GO 88B - XREQ 2018030004 - On March 12, 2018, staff authorized the City of Los Angeles to alter the Penrose Street at-grade highway-rail crossing in the City and County of Los Angeles. The authorization expires in three years.

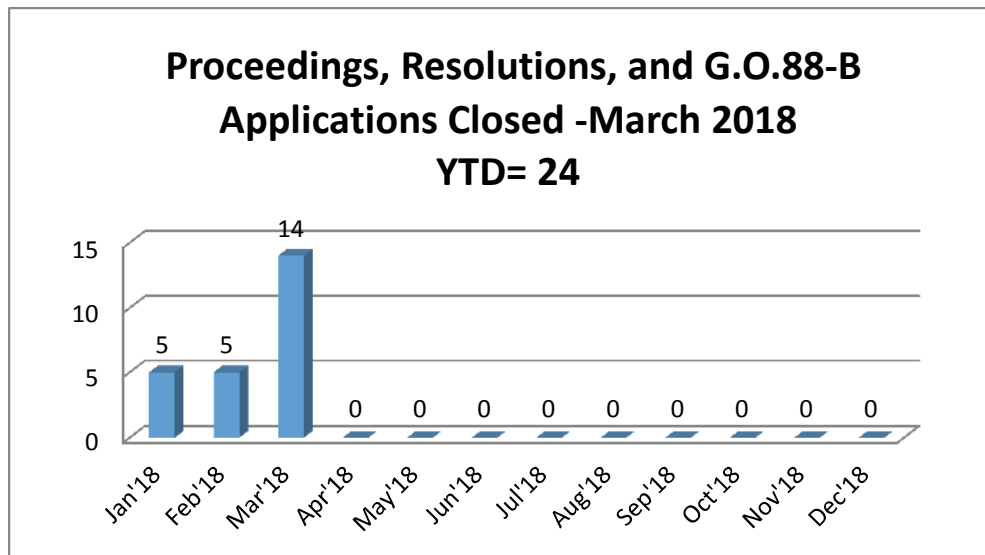
GO 88B - XREQ 2018030005 - On March 12, 2018, staff authorized the City of Los Angeles to alter the Sun Valley Metrolink Station Pedestrian at-grade crossing in the City and County of Los Angeles. The authorization expires in three years.

GO 88B - XREQ 2018030006 - On March 12, 2018, staff authorized the City of Los Angeles to alter the Sunland Boulevard at-grade highway-rail crossing in the City and County of Los Angeles. The authorization expires in three years.

GO 88B - XREQ 2018030007 - On March 12, 2018, staff authorized the City of Los Angeles to realign the Arvilla Avenue at-grade highway-rail crossing in the City and County of Los Angeles. The authorization expires in three years.

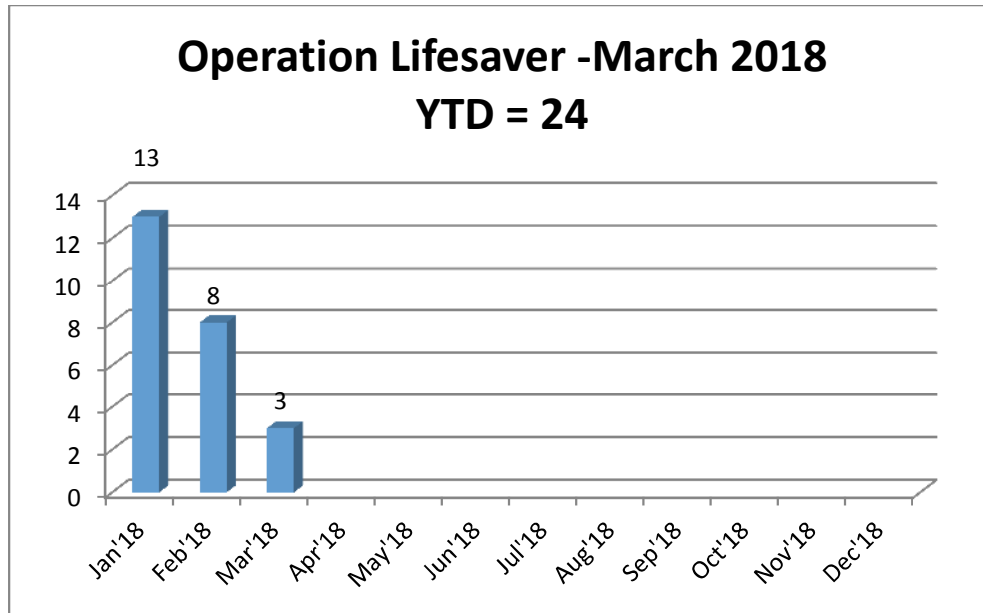
GO 88B - XREQ 2018030008 - On March 27, 2018, staff authorized the Santa Barbara County to alter the Butterfly Lane Pedestrian-Rail crossing in the County of Santa Barbara. The crossing improvements are part of the City’s pedestrian safety improvement project. The authorization expires in three years.

GO 88B - XREQ 2018030012, GO 88B - XREQ 2018030013, GO 88B - XREQ 2018030014 - On March 29, 2018, staff authorized the City of Tehachapi to alter three at-grade highway-rail crossings at Green Street, Hayes Street and Dennison Road in the City of Tehachapi, Kern County. The crossing improvements are part of the City’s pedestrian safety improvement project. The authorization expires in three years.



OPERATION LIFESAVER INC.

In March 2018, RCEB volunteers participated in an Operation LifeSaver Inc. (OLI) activity resulting in three presentations. On March 8, 2018, RCEB volunteers provided sample presentations as training for new volunteers covering rail safety messages for three groups: children, middle school age children/driver’s education, and adults. As time permits, staff participates in presentations, fairs, and community events to share the OLI rail safety message to the general public and professional drivers.



RAIL TRANSIT - RTSB

In March 2018, the Rail Transit Safety Branch (RTSB) completed the following activities:

CORRECTIVE ACTIONS PLANS

- Thirty-two (32) CAP's were opened.
- Forty (40) CAP's were closed.

INCIDENT INVESTIGATIONS

- Twenty-five (25) incidents were reported by Rail Transit Agencies (RTA).⁴
- Sixty-one (61) incident investigations were closed.

⁴ On 3/22/18 the Commission approved GO 164-E, which becomes effective on 5/1/18. Until then, GO 164-D is in effect. Per General Order 164-D, the Commission must be notified within 2 hours by rail transit agencies of incidents if they include one of the following: a fatality at the scene, or where an individual is confirmed dead within 30 calendar days of a rail transit-related incident; an injury to two or more individuals requiring immediate medical attention away from the scene; property damage to rail transit vehicles, non-rail transit vehicles, other rail transit property or facilities, and non-transit property that equals or exceeds \$25,000; a collision at an at-grade crossing; a mainline derailment; a collision with an individual on a rail right-of-way; a collision between a rail transit vehicle and a second rail transit vehicle, or a rail transit non-revenue vehicle; an evacuation due to life safety reasons.

MAJOR AUDITS

- The Bay Area Rapid Transit (BART) Triennial Safety and Security Review (conducted September 11 – 22, 2017) report is currently under final management review and the final draft will be sent to BART for preliminary factual review. Upon completion, the final version will be placed before the Commission for final approval via Resolution.
- Staff and the lead auditor continue to finalize the write up the checklists and draft report for the Sacramento Regional Transit District (SRTD) Triennial Safety and Security Review conducted October 9 – 20, 2017, for management review.
- RTSB Staff continue to write up checklists for the Triennial Safety and Security review of Santa Clara Valley Transportation Authority (VTA) conducted November 6-17, 2017.

ADMINISTRATIVE ACCOMPLISHMENTS

- **General Order 164-E:** On March 22, the Commission adopted Resolution ST-207. This action revised GO 164-D (Rules and Regulations Governing State Safety Oversight of Rail Fixed Guideway Systems) and changed its designation to GO 164-E. The new regulations will become effective on May 1. The changes were made in order to comply with the new 49 CFR Part 674⁵ adopted by the Federal Transit Administration (FTA).
- **Federal Certification of SSOA Programs:** State Safety Oversight Agencies (SSOAs) have until April 15, 2019 to have their program certified by FTA. In order for the CPUC to receive FTA certification, as discussed above, on March 22 the Commission adopted GO 164-E. RTSB also needs to bring its Program Management Standard (Procedures Manual) in compliance with the new 49 CFR Part 674, and provide the FTA a list of other required documents. Currently, CPUC is in Stage 3 of the Certification process, which has the following 4 stages:
 - Stage 1 – State (Commission is the designated SSOA for the state) is working on its submissions to the FTA. Where applicable, legislation has not yet been enacted or executive action taken.
 - Stage 2 – State has submitted some requirements to the FTA.

⁵ Code of Federal Regulations (CFR); Title 49 – Transportation; Chapter VI – Federal Transit Administration, Department of Transportation; Part 674 – State Safety Oversight

California Public Utilities Commission | Safety and Enforcement Division

- Stage 3 – State has submitted all required documents to the FTA and is engaged in a dialogue with the FTA to address comments and questions. Where applicable, all required legislation has been enacted.
- Stage 4 (Certified) – State has successfully met all SSOA Program requirements, including the resources to carry out the requirements, and has received FTA certification.

Training:

- One engineer completed the required Safety Management Systems Principles for Transit course provided by the Transit Safety Institute.
- Three inspectors completed the Effectively Managing Transit Emergencies course provided by the Transit Safety Institute.

PROCEEDINGS / RESOLUTIONS

Ongoing:

- **I.16-06-010 Investigation into Fatal Accident on BART Tracks (Commissioner Randolph/ALJ Kim)** - On June 28, 2016, the Commission instituted a Formal Investigation in response to a two fatality BART accident on October 19, 2013. On December 18, 2017, the Commission issued a ruling extending the statutory deadline for this proceeding until June 23, 2018, to consider pending appeals filed by both BART and the Safety and Enforcement Division.

SAFETY CERTIFICATION AND OVERSIGHT OF RAIL TRANSIT AGENCY PROJECTS

- **AirTrain Extension Project:** On August 10, 2017, Resolution ST-205 approved the AirTrain Extension Safety Certification Plan (SCP). The project expands the existing AirTrain System to include a new Long Term Parking (LTP) Garage Station and add an additional in-line Hotel Station serving a future hotel. Additional planned changes include an upgrade to line-of-sight (LOS) train to wayside signaling and communications, field retrofits of 39 vehicles to LOS technology, an upgrade to the Central Control, a 2000 ft. guideway extension, four additional guideway crossover switches, additional traction power system, and 3 new

Innovia APM 100 vehicles. The project will have three Safety Certification Verification Reports, as it has three phases and will start revenue services accordingly, from October 2018 to June 2019. AirTrain submitted draft design conformance checklists to which Staff returned comments.

- **BART New Vehicle Procurement:** BART is in the process of procuring 775 new rail vehicles. BART submitted its Interim Safety and Security Certification Verification Report on October 30, 2017 and a Request Letter on January 12, 2018 to place new cars into revenue service. RTSB approved this request with a letter dated January 17, 2018. In late April, BART plans to invite CPUC staff to a test run of the next 10 cars anticipated to enter revenue service.
- **East Contra Costa BART Extension:** This project, also known as eBART, will add 10 miles of track extending rail service eastward from the Pittsburg Bay Point station utilizing eight Diesel Multiple Unit (DMU) vehicles. RTSB inspectors and engineers have participated in site visits of the eBART Maintenance Facility where they rode the trains and inspected the rail, vehicles, and switches. Staff also inspected the eBART Operations Control Center. RTSB staff participated in an eBART Safety and Security Certification Review Committee meeting on March 27, 2018. BART plans to submit its final SSCVR for this eBART project on April 12, 2018. The projected start date for revenue service is May 26, 2018.
- **Silicon Valley Berryessa Extension (SBVX):** BART and VTA are currently in the process of jointly constructing a 10-mile BART system track extension and two new stations – the Milpitas and Berryessa stations. On March 1, 2018, Staff attended and participated in the SSRC meeting. On March 6, 2018, Staff attended and participated in the SVBX Workshop related to possible revenue service date and discuss the next upcoming activity testing for phase 3. SVBX team is working with CPUC staff to resolve the FTA PMOC audit findings. CPUC staff has scheduled weekly meetings with the SVBX team.
- **Downtown Sacramento Streetcar Project:** FTA has provided funding for preliminary engineering and development for this project, but they have not received a FTA full-funding grant award. A Joint Powers Authority has been established as the system owner/operator

involving the City of Sacramento and City of West Sacramento. They are utilizing the expertise of SRTD in the provision of design and construction oversight, and they will be the eventual system operator. This will be helpful for the project, as the Streetcar will operate over a portion of the existing SRTD tracks.

- **Central Subway Project (CSP):** The San Francisco Municipal Transportation Agency (SFMTA) is excavating 1.7 miles of tunnel to extend the Muni Metro Third St. Line to provide a direct transit link between the Bayshore and Mission Bay areas to SoMa, downtown San Francisco, and Chinatown. SFMTA estimates a start of revenue service on December 10, 2019. In March, CSP satisfactorily responded to some of RTSB staff's questions related to two documentation submittals sent to the Safety and Security Certification Review Committee (SSCRC) within the past year. Per SFMTA, CSP has been building the head house at Yerba Buena/Moscone Station. CSP is continuing to construct the street surface platform at 4th St and Brannan St.
- **LA Metro (LACMTA) P3010 New Vehicle Procurement Project:** Los Angeles County Metropolitan Transportation Authority (LACMTA or LA Metro) is in the process of procuring up to 235 new rail vehicles. These vehicles are intended to expand passenger capacity for the recently completed projects (Expo Phase 2 and Foothill Extension Phase 2) and the future LAX/Crenshaw line currently under construction. Staff is following a new approval process to provide a conditional electronic approval based on monthly review of the open item lists and the reports on vehicle test performance. Staff will recommend official approval to RTSB management after a successful review of the Car History Books (CHBs) in person. As of March 1, 2018, RTSB has officially approved 113 P3010 LRVs for revenue service.
- **LACMTA HR4000 Heavy Rail Vehicle Procurement:** LACMTA is in the process of procuring a base order of 64, with options for up to 282, new heavy rail vehicles (HRV) to provide for the future expansions of Regional Connector and Purple Line Extensions, and to replace the aging HRV fleet operating on the Red Line subway. Resolution ST-185 approved the procurement option. To date, there have been no vehicles delivered.

- **LACMTA Regional Connector Project:** Currently in tunnel boring and utility relocation phase. Staff regularly attends LACMTA's monthly Fire Life Safety and Security Meetings, as well as SSCRC Meetings, and has approved a temporary shoofly track to allow tunnel boring to commence. The tunnel-boring machine has completed boring the second parallel tunnel.
- **LACMTA Purple Line (Westside) Extension Project:** LACMTA is currently extending the Purple Line. The Westside Purple Line Extension, previously named the Westside Subway Extension, extends service from the terminus at Wilshire/Western Station to Westwood (UCLA and Veteran's Administration Hospital). This extension will consist of nearly nine miles of heavy rail subway and seven stations. The agency plans construction in three sections and is currently in the utility relocation phase.
- **LACMTA/MGLFECA Foothill Extension Phase 2B:** LACMTA and Metro Gold Line Foothill Extension Construction Authority (Foothill Authority) have submitted the project's SCP. It was approved by Resolution ST-194, "Granting Approval of the Los Angeles County Metropolitan Transportation Authority and Metro Gold Line Foothill Extension Construction Authority Foothill Extension Phase 2B Safety Certification Plan", on January 19, 2017. Phase 2B alignment is from the current terminus of LACMTA Gold Line, Azusa Station, to the City of Montclair. It will traverse through six cities with six new stations on 12.3 miles of light rail transit (LRT) at-grade track. Foothill Authority held the project's Groundbreaking Ceremony on December 2, 2017 at Citrus College in Glendora.
- **LACMTA Gold Line-Chinatown Station Pilot:** LACMTA has requested a variance from GO 143-B's Section 9.07 for the Gold Line's Chinatown Station. This variance allows the installation of a pilot project. The project is called the Platform Track Intrusion Detection System (PTIDS). It is a radar-based system designed to detect intrusions of individuals and/or objects falling from the platform onto the right-of-way. The pilot project started on September 2017 and will continue through December 2019. LACMTA will need to submit another variance request if it decides to implement this project on a permanent basis.
- **LACMTA Crenshaw/LAX Corridor Project:** LACMTA is constructing a new light rail transit line through the Crenshaw/LAX Corridor. The Line will travel 8.5 miles from the existing Metro Exposition Line at Crenshaw and Exposition Boulevards to the Green Line and will

serve the cities of Los Angeles, Inglewood, El Segundo and portions of unincorporated Los Angeles County. The project is currently in the construction phase that staff monitors via regular meetings. The review team has approved all of the Safety Certification Design Checklists. The next step is the Safety and Security Certification Review Team's verification of the Safety Certification Construction Checklists. This activity should be substantially complete on or around May 1, 2019 for an October 31, 2019 revenue service start date.

- **Los Angeles Streetcar:** The Los Angeles Streetcar is a project that is advancing under the Los Angeles County Measure M funding. The preliminary design is proceeding, in spite of the lack of LACMTA's identification for near term funding. Staff are reviewing a request from LA Streetcar regarding vehicle crashworthiness/strength requirements for their vehicles.
- **LAWA Automatic People Mover Project:** Los Angeles World Airports (LAWA) is developing a multi-billion-dollar upgrade to the ground transportation system at Los Angeles International Airport (LAX). The Landside Access Modernization Program (LAMP) includes a landside Automated People Mover (APM), a Consolidated Rent-A-Car (CONRAC) facility, multiple Intermodal Transportation Facilities (ITFs), and a comprehensive network of roadway improvements. The APM system will feature the design and construction of an approximate 2.25-mile-long, elevated dual-lane guideway, consisting of six stations. Three stations will connect new rental car, airport parking, and Metro facilities to the airline terminals. Three stations in the Central Terminal Area will provide fast and easy connections to nine airline terminals with a pedestrian walkway system. On February 22, 2028, LAWA kicked off a Third Party Roles and Expectations Meeting for the LLAMP that will include the APM Project. The Third Party Summit will include the APM Contractor team – LINXS, the 11 key LA City Departments, LA County- Flood Control, LACMTA, Caltrans, CPUC and the LAWA teams.
- **Orange County Transportation Authority (OCTA) OC Streetcar Project:** The OC Streetcar (OCSC) project consists of 4.15 miles of track between the Santa Ana Regional Transportation Center in the City of Santa Ana and the Harbor Boulevard/Westminster Avenue intersection in the City of Garden Grove. The Agency plans construction to begin in

mid-2018, and revenue service late to commence in 2020. However, to date FTA has not awarded a full-funding grant agreement. Design is wrapping up, and the construction phase will be starting up soon. Staff continues to attend the SSRCR and Fire Life Safety Committee meetings for this project. OCTA Board approved the vehicle contract award to Siemens Industries on March 26. OCTA will be conducting the required Buy America pre-award audit and negotiating associated contract terms.

- **SFMTA LRV4 Procurement to Expand and Replace the Rail Fleet:** This project is scheduled for completion in 2027. The safety and security certification-related aspects of this project are being monitored by Staff through regular meetings, review of records produced pursuant to the requirements of the project SSCP (e.g. Certificates of Conformance and associated supporting documentation for certifiable elements at pertinent project milestones), and observations of vehicle testing. SFMTA plans to launch a three-car train sometime in the spring but will first launch two-car trains on the N-Judah line, which serves an average of 45,000 passengers on the weekday – SFMTA’s heaviest passenger subway line. Before two-car and three-car trains may be placed into service, SFMTA will need approval from CPUC Staff. Manufacturing of the new LRV4s by Siemens Industry, Inc. is expected to ramp up in March. Siemens is manufacturing the new trains in Sacramento. SFMTA will start receiving one new train a week from Siemens. The SFMTA expects to have the first 24 trains arrive by the summer, and to have 64 trains by next year. In March, RTSB management sent three letters to SFMTA that authorized the placement of five vehicles into revenue service. These vehicles are to operate as single cars. To date, SFMTA has run the new cars as single-car trains. It has also tested trains with multiple cars. On the current trajectory, CPUC approval of SFMTA’s SCVR for multi-car operations could allow for the placement of multi-car trains into revenue service by late spring.
- **San Diego Trolley, Inc. (SDTI) Mid-Coast Corridor Project:** The San Diego Metropolitan Transit System Mid-Coast Corridor Project is a 10.9-mile double-track light-rail transit line, which begins at the Old Town Transit Center in San Diego. The project provides future SDTI revenue service to the Linda Vista, Clairemont, University California San Diego (UCSD) and the University City areas. The additional stations will be Tecolote Road, Clairemont Drive,

California Public Utilities Commission | Safety and Enforcement Division

Balboa Avenue, Nobel Drive, potential Veterans Administration (VA) Medical Hospital, UCSD West (along Voigt Drive), UCSD East (along Voigt Drive), Executive Drive, and University Town Center (UTC) Transit Center. Construction started in 2016 and revenue service is planned to begin late 2021. Staff continues to attend the System Safety Review Committee Project Meetings and Fire Life Safety Committee Project Meetings. Staff received the Safety Certification Plan (SCP) for the MTS Light Rail Vehicle Procurement (SD9) on February 15, 2018 for review and approval. Forty-five (45) Siemens SD9 vehicles being constructed at Siemens Transportation Systems, Inc. Sacramento, CA are being procured to provide service for the future MTS Mid-Coast Project. Staff is currently evaluating the SCP to ensure the Plan meets GO164-D requirements.

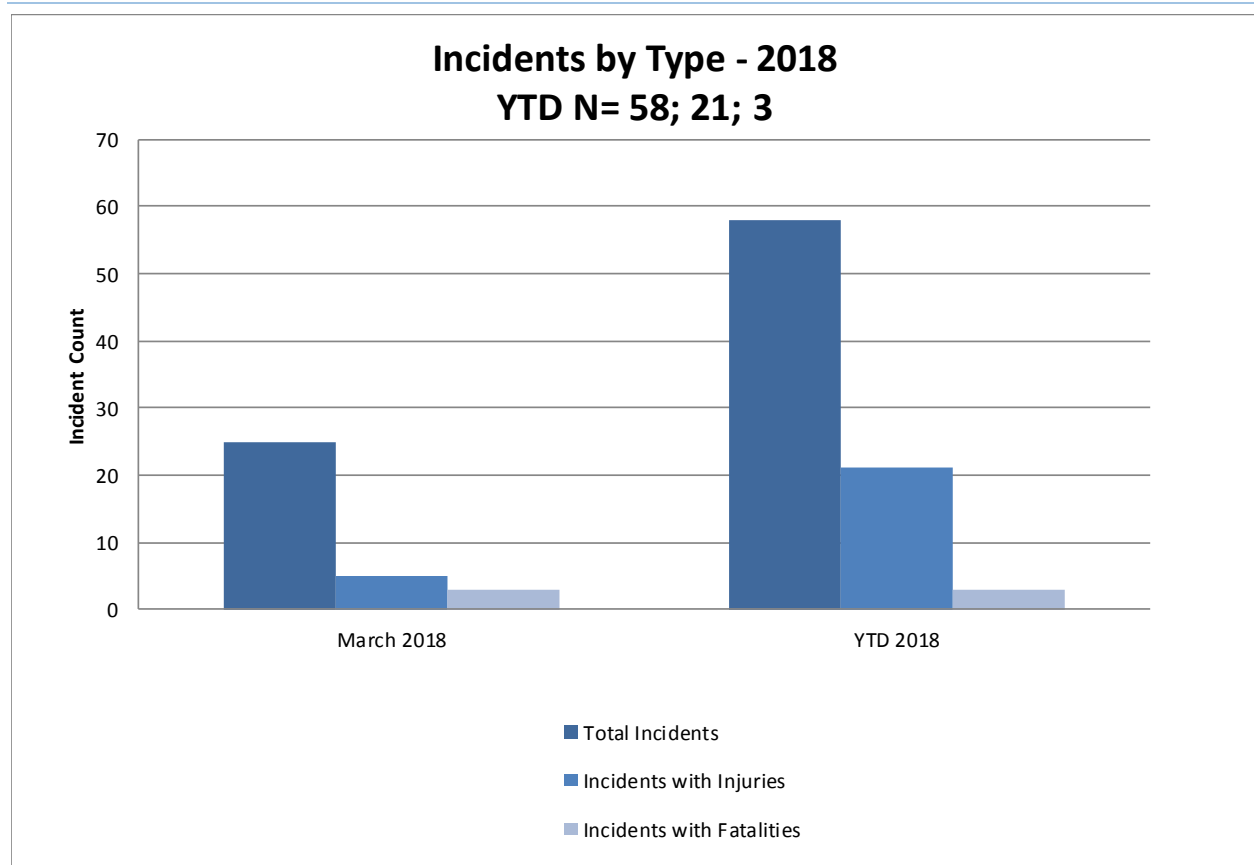
STATISTICS SUMMARY

Investigations for Month		YTD 2018
Incidents Reported	25	58
Incident Investigations Closed	61	178
Complaints Investigated	0	0
Rail Transit Inspections	40	105
Triennial Review	0	0

Corrective Action Plans		YTD 2018
New Corrective Action Plans	32	93
From Triennial Review	0	0
From Incidents	2	7
From Internal Safety/Security Audits	0	0

From Rail Transit Inspections	30	86
From Hazard Management	0	0
Closed Corrective Action Plans	40	63
From Triennial Review	0	1
From Incidents	0	1
From Internal Safety/Security Audits	0	1
From Rail Transit Inspections	40	60
From Hazard Management	0	0

ONGOING DATA / TRENDS



CORT MONTHLY REPORT

Delta Trading, L.P.—March 28, 2018

Delta Trading (Bakersfield) currently received one hundred and forty (140) manifest tank cars for the month of March loaded with crude oil at their Paloma Gulf Station site located approximately twenty (20) miles southwest of Bakersfield. These manifest cars originate in Wyoming and are not Bakken crude. The oil is pumped down from Canada to the Phillips 66 facility located in Natrona, Wyoming to be loaded.

Kern Oil Refining—March 28, 2018

Kern Oil Refining (Bakersfield) is currently receiving approximately four (4) manifest tank cars weekly loaded with crude oil. These manifest cars originate from New Mexico and are not Bakken crude oil. For the month of March Kern received one crude oil unit train from New Mexico and was not Bakken crude oil. This train will enter California on the BNSF at Needles, California and is expected to consist of 102 tank cars.

Plains All American—March 28, 2018

Received an update from Plains All American (Taft) they received 5 trains for the month of March, four (4) have been offloaded two (2) are in route to Canada for reloading. The final inbound train is waiting to depart Bakersfield. For April, they have been informed to plan for receiving four (4) crude oil unit trains but they have not received a schedule on these trains as yet. The weather has cleared in Canada but they are still having trouble running trains due to congestion. These trains will originate from Edmonton (Alberta) Canada and will not be Bakken crude oil. These trains will enter California on the BNSF from Klamath Falls, Oregon. These unit trains are expected to consist of 99 tank cars each.

Currently, there were six (6) crude oil unit trains that entered California in March with none of them containing Bakken crude oil.

###