Safety and Enforcement Division



Monthly Performance Report,
February 2017

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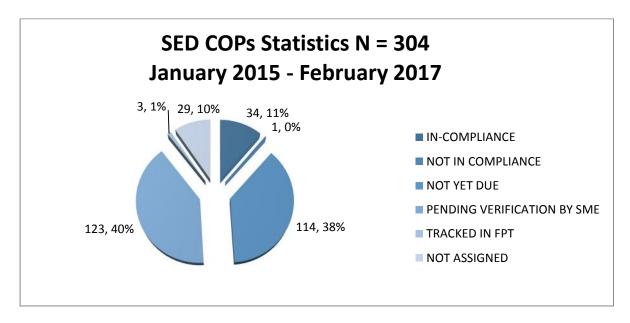
COMPLIANCE WITH ORDERING PARAGRAPHS (COPS)

Beginning with this report, the Compliance with Ordering Paragraphs tracker has segregated COPs statistics for Safety separately from the previous method, which included Transportation and Consumer Protection items. The numbers going back to the start of COPs tracking in January 2015 are reflected in the chart below.

Through January 31, 2017, SED shows 304 total entries in the COPS system; with 34 reaching compliance (11%), 114 (38%) not yet due for compliance, and 1 (<1%) currently remaining out of compliance. The remaining 187 (56%) are either pending verification or have not yet been assigned for verification.

During Since January 1, 2017, there were 32 new entries into the COPS system 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

No citations in 2017 YTD.

INSPECTIONS

2017 Inspections: GSRB has conducted 10 scheduled inspections in 2017 and has completed the final inspection report for 2 of these 10 inspections during 2017.

INCIDENT INVESTIGATIONS

As of February 28, 2017, GSRB Staff received 46 incidents year to date. All pre-2016 incident investigations have been completed. Metrics on 2016 Incident Investigations:

TOTAL reported in 2016	166	Percent
Open	45	27 %
Closed	121	73 %

The CY 2016 incidents¹ are categorized as follows:

- 135 Level 1 incidents
- 15 Level 2 Incidents
- 8 Level 3 Incidents
- 8 Level 4 Incidents

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 three self-identified violations in February 2017.

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.

NATURAL GAS RELATED PROCEEDINGS

- Distribution Record Keeping (I.14-11-008) (Commissioner Peterman/Lirag) (Advocacy):
 Decision 16-08-020 was issued on August 18, 2016, which ordered Pacific Gas and
 Electric to pay a fine of \$25,626,000 for several violations of General Order 112 and the
 Public Utilities Code. The decision also ordered PG&E to convene, support and report
 no later than 120 days after the effective date of the order a meet-and-confer process
 to develop additional remedial measures necessary to address the issues identified in
 the decision. Staff from GSRB attended two meet-and-confer sessions and submitted
 comments on PG&E's draft compliance plan, which was filed in the docket on December
 16, 2016. Additionally, SED has a pending application for rehearing that was submitted
 on September 26, 2016, and is still pending. On November 22, 2016, the Commission
 issued a Notice of Reassignment from ALJ Maribeth Bushey to ALJ Rafael Lirag. On
 December 16, 2016, Pacific Gas and Electric Company filed its Initial Compliance Plan.
- Gas Safety OIR (R.11-02-019) (Advisory)(Commissioner Guzman Aceves/ALJ Reassignment pending): Decision 15-06-044 Adopting Revised General Order (GO) 112-F signed by the Commission at its June 25, 2015, Commission Meeting. GO 112-F in Attachment A of D.15-06-044 is effective June 25, 2015; except that as to Sections 105, 122, 123, 125, 142, 143, 144, 145, and 162, the gas operators shall comply with these sections as soon as feasible but no later than January 1, 2017, unless compliance is extended for a particular provision pursuant to Rule 16.6 of the Commission's Rules of Practice and Procedure or its successor. R.11-02-019 was closed in June 2015, however, it was re-opened on an application for rehearing of the June 2015 decision by Office of Ratepayer Advocates and Utility Workers Union of America in July 2015. In addition, Pacific Gas and Electric Company filed a petition to modify Decision 15-06-044 on January 31, 2017, causing the proceeding to be re-opened and reassigned. Decisions on the rehearing requests and PG&E's petition are still pending.
- Mobile Home Parks Pilot Program (Implementing D.14-03-021): This decision established a three-year pilot program authorizing each California investor-owned utility to convert 10% of master-metered gas and/or electric Mobile Home Park spaces within its operating territory to direct utility service. The Pilot Program began on January 1, 2015, and will continue through 2017. No significant updates for February.
- OIR (R.16-07-006) (Commissioner Randolph/ALJ Wildgrube): In D.16-11-008, issued on November 17, 2016, the Commission directed SED to publish revisions to General Order 58A and closed the proceeding.

ELECTRIC SAFETY AND RELIABILITY PROGRAMS

ELECTRIC AND COMMUNICATIONS FACILITY PROGRAM: AUDITS AND INCIDENT

INVESTIGATIONS

In February 2017, Electric and Communications Facility Safety Section Staff:

- Received six electric incidents and closed five previously reported electric incidents;
- Investigated 24 customer safety and reliability complaints;
- Conducted two electric distribution audits;
- Issued two Notice of Violation (NOV) letters.

Metrics for Facility Incident Investigations as of February 28, 2017

Electric and Communication Facilities	Level 1	Level 2	Level 3	Level 4	Total ²
Total open incidents	7	22	34	41	104
Total incidents reported in 2017	2	3	6	8	19
Total incidents closed in 2017	3	2	3	7	15
Total open 2017 incidents	2	3	6	8	19
Incidents reported in February 2017	0	1	1	4	6
Incidents closed in February 2017	2	0	3	0	5

ELECTRIC AND COMMUNICATIONS FACILITY SAFETY: PROCEEDINGS

■ Investigation into Long Beach Incident (I.16-07-007) (President Picker/ALJ Cooke)(Advocacy): On July 15 and July 30, 2015, fires and explosions in underground electric vaults caused power outages that affected thousands of Long Beach customers for several days. On August 15, 2015, another fire occurred in an underground vault with additional outages. After ESRB's investigation and upon SED's recommendation, the Commission adopted an Order Instituting Investigation on July 14, 2016. In January 2017, the Commission approved the suspension of the current schedule to allow for potential settlement negotiations/agreement among the parties.

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.

- Investigation into Huntington Beach Incident (I.15-11-006) (Commissioner Randolph/ALJ Kim) (Advocacy): A subcontractor was fatally injured in a Southern California Edison underground vault in Huntington Beach. On December 15, 2016, SED and Southern California Edison filed a settlement agreement for Commission consideration.
- 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. The schedule anticipates that a final map and the new rules will be in place by the end of 2017. Over the next several months, parties will be holding numerous workshops and filing comments to address proposed rules and mapping products.
- Applicability of Right-of-Way Rules to CMRS Carriers (R.14-05-001) (Commissioner Randolph/ALJ Kenney) (Advocacy): D.16-01-046 adopted GO 95 amendments to provide Commercial Mobile Radio Service (CMRS) carriers with nondiscriminatory access to public utility infrastructure, including poles. The decision closed the proceeding. ESRB is undertaking follow-up work directed by the decision, and on March 1 filed a petition to adopt, amend, or repeal rules in GO 95 (P.17-03-004).
- 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 to consider repeal of GO 95, Rule 18, the Commission opened this proceeding to consider specified amendments to, and possible repeal of, Rule 18 of GO 95. On January 25, 2017, SED and other parties requested a suspension in the schedule to allow settlement discussions; in response, the ALJ has suspended due dates for comments and reply comments in the rulemaking. A prehearing conference is scheduled for April 11, 2017.
- Physical Security of the Electric System (R.15-06-009) (Commissioner Rechtschaffen/ALJ Kelly) (Advocacy): Phase I will address physical security for electric supply systems, and additional phases will address disaster and emergency preparedness plans for electrical corporations and regulated water companies. A prehearing conference was held on February 2, 2017. On February 21, 2017, SED filed a response to the ALJ's ruling regarding questions presented at the prehearing conference.
- Electric Storage Procurement (R.15-03-011) (Commissioner Peterman/ALJ Cooke) (Advisory): ESRB continues to provide advisory support to help determine best practices related to energy storage, and the proper way to inspect such facilities. A set of inspection protocols was issued for review by the ALJ on September 29, 2016, who sought comment on whether Commission general orders need to be revised to include the protocols. On January 10, 2017, the assigned ALJ issued a ruling seeking comments on the joint staff Proposed Rules for Station Power for Electric Storage Devices and reply comments were filed by January 31, 2017. On February 24, 2017, the assigned Commissioner issued a Proposed Decision that is currently being reviewed by the parties. ESRB will continue to follow, review and evaluate all documents related to safety.
- Distributed Energy Resources (R.14-08-013) (President Picker/ALJ Mason/ALJ Allen) (Advisory): On February 10, 2017, the Commission held a workshop on DER Growth Scenarios and Load Forecasting. A February 27 Assigned Commissioner's Ruling set a new schedule for developing a utility framework based on the workshop discussions, with

- working group meetings scheduled during April and May. ESRB continues 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. Additionally, this bill requires the Commission (for electrical corporations) or the governing board (for publicly owned electrical utilities or electrical cooperatives) to review and to accept, accept provisionally, or reject the submitted plans. ESRB is planning next steps for the Commission's consideration.

ELECTRIC AND COMMUNICATIONS FACILITY SAFETY: 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 and attends quarterly meetings.

ELECTRIC GENERATION SAFETY AND RELIABILITY: INVESTIGATIONS, INSPECTIONS, AND AUDITS

The Electric Generation Safety and Reliability Section staff has performed the following in February 2017:

- Monitored nine forced and 58 planned outage reports submitted by natural gas and renewable power plants and recorded them in the outage report database.
- Completed the audit report of the Walnut Creek power plant audit and sent it to the Generating Asset Owner (GAO).
- Continued to verify the corrective actions that were taken by the GAOs as a result of the Colusa, Redondo Beach, and Inland Empire power plants audits for compliance with GO 167 requirements.
- Reviewed a total of 210 Re-certification of Maintenance, Maintenance Plan Summaries, and Thermal Logbook verified statements that were received from the power plants that are 50 MWs or larger.
- Continued to work on the investigation of the Ocotillo incident that resulted when one
 of the towers on a wind turbine buckled and fell.
- Worked closely with the California Energy Commission for the investigation of the fire that occurred at Delta Energy Center in Pittsburg.
- No safety incidents were reported this month. Please see the 2017 year-to-date incident statistics in the table below.

Metrics for Generation Incident Investigations as of February 28, 2017

Electric Generation Incidents	Level 1	Level 2	Level 3	Level 4	Total ³
Total open incidents	0	0	2	0	2
Total incidents reported in 2017	0	0	1	0	1
Total incidents closed in 2017	0	0	0	0	0
Total open 2017 incidents	0	0	1	0	1
Incidents reported in February 2017	0	0	0	0	0
Incidents closed in February 2017	0	0	0	0	0

UTILITY RISK ASSESSMENT AND SAFETY ADVISORY

REVIEWING SAFETY & RISK IN GENERAL RATE CASES

On November 30, 2016, San Diego Gas & Electric and Southern California Gas Company (aka the Sempra Utilities) submitted their filings for the Risk Assessment and Mitigation Phase (RAMP) -- (I.16-10-015/016).

The framework and expectations for RAMP filings were established by decisions in the Risk-Informed Decision Making for General Rate Cases OIR (D.14-12-025 in R.13-11-006) and in the subsequent Safety Model Assessment Proceeding (S-MAP) (D.16-08-018 in A.15-05-002, et al.). In these decisions, the Commission directed the Safety & Enforcement Division staff to provide an evaluation of the utilities' RAMP filings, to assess how utilities were identifying operational safety risks and applying risk management and mitigations to those risks, and to provide recommendations that can be incorporated in the subsequent GRCs.

SED's evaluation, which will be issued on March 7, 2017, takes into account the completeness of the utilities' proposal and report including consistency and compliance with criteria established in D.16-08-018 and the Scoping Memo issued for this proceeding:

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.

- Whether or not key safety risks have been assessed;
- Whether or not alternatives have been fully considered and adequately discussed;
- Whether or not there are gaps in identifying risks and mitigation options; and,
- The efficiency of risk mitigation funding, proposed spending, and the amount or level of mitigation planned for SDG&E's and SoCalGas' next GRC cycle.

In all, the utilities presented 28 risks that were considered significant, using the agreed upon cut-off for risks that scored high in terms of potential safety consequences. Staff agreed that this approach presented a manageable level of risk analysis for a first-time RAMP, although the Commission may decide upon a different threshold for inclusion in the future. Also, the methodology for evaluating the severity and probability of risks may change as a result of more experience and determinations made in the S-MAP.

Staff's analysis emphasized Strengths of the risk chapters, Areas of Improvement, and some recommendations for the utilities to improve their justification for proposed mitigations.

Among risks identified by the utilities are those posed by "Adaptation to Climate Change."

SUMMARY

Climate Change Adaptation is a long-term strategy for dealing with the expected drivers and potential consequences of significant changes to weather patterns and ecological conditions posed climate change. How those changes play out will vary over time and according to geographic location, and SDG&E and SoCal Gas have begun to assess potential risks, and their filings in this RAMP indicate an initial level of mitigation activity that could increase over time.

The companies provided differing worst-case scenarios for this risk category. For SoCal Gas: "An extreme rain event hits the SoCalGas territory after several years of drought resulting in high risk areas giving way to land/mudslides and flooding in low-lying areas. There are damages to access roads and multiple exposures of high pressure pipelines along with one of the pipelines failing. Multiple-year projects are required involving extensive permitting and repairs to restore the infrastructure with millions of dollars in costs."

In contrast, SDG&E's worst-case is related to Wildfires: "Extreme winds in SDG&E's Fire Threat Zone during a time of drought and elevated temperatures could cause a wire down event leading to a wildfire. This type of event could result in few serious injuries, service disruptions, and regulatory, legal and financial impacts."

While the underlying assessment of risk drivers, identified threats and consequences are similar for each of the utilities – indeed the residual risk scoring outcome for both utilities is identical – each utility has a distinguishable set of adaptation actions and strategies which, at least at this point, are leading to vary different proposals for potential mitigations and expected costs.

The proposed mitigations for SDG&E appear to be focused on planning and forecasting, such as continuing meteorological support and working in collaboration with climate advisory groups, academics and consultants. The gas utility is projecting increased geological hazard analysis, strain gauge installation for improved system monitoring, and a larger investment in capital expenditures related to improving slope stability and erosion control.

From what could be characterized as minimal baseline controls, devoted to existing activities, SoCal Gas, in particular, projects an approximately eight-fold increase in annual spending for adaptation mitigations from \$700,000 for control activities in 2015 to as much as \$14 million - \$19 million for capital and O&M spending in the 2017-2019 period.

However, what is presented in the Adaptation chapters in this RAMP is evidently only part of the story with regard to utility approaches to the risks posed by climate change.

For one thing, what are commonly called mitigation activities specific to climate change (efforts to reduce greenhouse gas emissions as a way to potentially avoid the worst climate impacts) are not addressed in this analysis. The utilities correctly note that Adaptation is "the adjustment in natural or human systems in response to actual or expected climate changes". Also, some potential consequences of changed conditions attributable to failure to adapt, including catastrophic damage to pipelines, are addressed separately in the RAMP analysis.

But of particular concern is that the SDG&E adaptation chapter failed to discuss some of the utility's existing efforts to assess vulnerability to utility substations located in coastal areas that might be subject to sea-level rise as a result of climate change.

Especially useful in terms of thinking about future mitigation projects is the South Bay substation relocation project approved by the Commission (in D.13-10-005 and amended in D.15-01-006).

Perhaps the utility felt that because there is no pending GRC project ask along these lines, it was not relevant to the current RAMP, but clearly it should be incumbent upon utility planners to beginning thinking and preparing for future consequences – which could appear sooner than currently anticipated. For both utilities, it might be wise to refine the expected timeline for planning for Climate Change impacts from 50-100 years, to a 20-50 year horizon.

STRENGTHS

The SoCal Gas risk assessment for climate change adaptation evidences a notable shift in thinking about the vulnerabilities to gas transmission and distribution systems. When threat assessment focuses only on extreme weather events (severe storms, wind storms, etc.) it would appear that gas systems might be relatively more resilient because much of the infrastructure is underground. However, beginning in 2015, the company began assessing vulnerabilities to its high-pressure systems "because a failure or rupture due to a climate-change related risk may potentially result in a catastrophic event" compared to a failure on medium pressure pipelines.

This led to assessment of three geographic areas of SoCal Gas territory – the San Joaquin Valley, the Cajon Pass corridor, and the Coastal valley area – with particular eye toward their histories of drought, subsidence, landslides and mudslides. In its current assessment of identified risks, the above-ground weather impacts and wildfire threats are supplemented by these threats:

- Flooding due to sea level rise
- Subsidence due to drought/groundwater depletion
- Effectiveness of cathodic protection may diminish
- Landslides and mudslides
- Exposure of underground pipelines
- Levee failures

This analysis was a factor in SoCal Gas articulating a clear "reasonable worst case scenario" for use in developing a residual risk score. Given recent weather-related events, this scenario may not be a distant future threat, but something the utilities must consider in the near term.

AREAS FOR IMPROVEMENT

The SDG&E analysis of Safety impacts rests heavily on the potential for increased wildfires, but it also alludes to "long-term power outages...fast moving flood-waters, and extreme heat."

The chapter does include a table of "vulnerabilities" that are mapped to other RAMP chapters.

These do acknowledge the areas of Wildfires, Electric Infrastructure Integrity, Catastrophic

Damage to Pipelines (both medium pressure and high pressure), as well as Employee,

Contractor and Public Safety.

With SDG&E's proposed mitigations focused on continued meteorology support and its Climate Advisory Group, the utility seems to be exhibiting a too restrictive categorization of the interactivity of risks associated with Climate Change. As part of its ongoing participation in the department of Energy's Partnership for Energy Sector Climate Resilience, SDG&E may want to draw on the experience of other utilities to view climate challenges in a more holistic manner.

PROCEEDINGS

- Investigation into Safety Culture of Pacific Gas and Electric Company and PG&E Corp. (I.15-08-019) (President Picker/ALJ DeAngelis) (Advisory): NorthStar Consulting has been conducting an intensive schedule of meetings with utility executives and managers, as well as field visits to monitor how safety is being discussed and safety practices instilled in the company. The Risk section is project manager for this contract, and SED staff has attended many of these interviews and field visits. NorthStar is currently drafting a report due for public release in April 2017.
- Safety Model Assessment Proceeding (A.15-05-002, et al) (Commissioner Rechtschaffen/ALJ Kersten) (Advisory): The Phase 1 Interim Decision to advance this proceeding (D. 16-08-018) determined that the risk scoring models initially proposed by utilities were not adequate and should be supplemented by use of a multi-attribute scoring model that was proposed by stakeholder groups TURN/Indicated Shippers/Electric Producers & Users Coalition. Following a November 16, 2016, pre-hearing conference, the Phase 2 Scoping Memo was issued on December 13, 2016, establishing a new schedule for the proceeding. Test Drive working groups commenced in mid-January. A workshop for joint utility methodologies was held on February 15, 2017.

- PG&E 2017 General Rate Case (A.15-09-001) (President Picker/ALJ Roscow) (Advisory): On August 3, 2016, Pacific Gas & Electric and 14 parties filed a Joint Motion for Commission approval of a settlement of issues in the TY 2017 General Rate Case (A.15-09-001. A joint exhibit of testimony on executive compensation and safety was filed on October 3. An Energy Division report on past safety spending was issued in late October. A Proposed Decision approving the settlement with some modifications was issued on February 27 for consideration at the April 6, 2017, business meeting.
- Gas Leak Abatement OIR (R.15-01-008) (Commissioner Rechtschaffen/ALJ Kersten) (Advisory): Gas companies filed their annual reports on leaks and emissions during 2015 on June 17, 2016. An ALJ ruling January 19, 2017, issued for comment a Joint CARB/CPUC report on the June 2016 leak survey data, and a RASA staff recommended list of Best Practices for leak detection, quantification and mitigation, which may form the basis of utility Compliance Plans. Comments on these staff recommended Best Practices and on the Joint Report were received February 10, with replies on February 17, 2017.
- SCE 2017 General Rate Case (A.16-09-001) (President Picker/ALJs Roscow & Wildgrube) (Advisory): While not subject to the full S-MAP/RAMP requirements for this GRC cycle, SCE has included some level of analysis of its risk mitigations in the new GRC application testimony filed September 1, 2016. SED Risk Assessment staff issued an evaluation report on January 31, 2017.
- Long Beach Outage Incidents (I.16-07-007) (President Picker/ALJ Cooke) (Advisory): In July and August 2015, a series of fires and explosions in underground electrical vaults caused repeated power outages in Long Beach. Following an investigative report by SED's Electric Safety & Reliability Branch (ESRB) the Commission on July 14, 2016, adopted an Order Instituting Investigation SED's and SCE asked the ALJ to suspend the proceeding schedule. On January 10, 2017, ALJ Cooke approved the suspension and directed parties to provide status reports on a monthly basis; the next report is due March 10, 2017.
- Electric Storage Procurement (R.15-03-011) (Commissioner Peterman/ALJ Cooke) (Advisory): In compliance with D. 16-01-032 (Track 1 decision in this rulemaking), staff has convened a technical group to consider appropriate Safety-related issues for facility inspections of grid-connected storage operated by utilities. The resulting set of inspection protocols was issued for review by the ALJ on September 29, 2016, who sought comment on whether Commission general orders need to be revised to include the protocols. A Proposed Decision was rendered on February 24, determining SED may begin using the new inspection protocols without changes to GO 167 or GO 174. The order is set for consideration April 6, 2017.
- Fire Safety Rulemaking (R.15-05-006) (President Picker/ALJ Kenney/ALJ Kao) (Advisory): 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 July 2016, then-assigned Commissioner Florio issued an amended scoping memo and ruling directing the Fire Safety Technical Panel (FSTP) to develop a work plan for creation and adoption of Fire Map 2. Parties filed a work plan on October 7, 2016, proposing a process for developing Fire Map 2. D. 17-01-009 adopted a revised workplan and schedule on January 19, 2017. Workshops and working groups are underway.

- Physical Security of Electric Infrastructure (R.15-07-009) (Commissioner Rechtschaffen/ALJ Kelly) (Advisory) After a year-long hiatus, this proceeding resumed with a Pre-Hearing Conference on February 2. Risk section staff issued data requests to IOUs to update information from 2014. Staff is preparing for a series of workshops to address various issues in the proceeding, to be determined in the pending Scoping Memo.
- PG&E Gas Transmission & Storage Rate Case (A.13-12-012/I.14-06-016) (Picker) (Advisory): The GT&S case was decided on June 25, 2016, with D.16-06-056. Among other provisions for disallowances for safety lapses, the decision also disallowed from immediate recovery \$696.4 million for 2011-2014 capital expenses above that previously approved in Gas Accord V. \$120 million is permanently disallowed, but \$576 million would be subject to an audit by Commission staff. Staff has been doing preliminary analysis of PG&E's documentation of GT&S projects and programs to scope out the audit.

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 - 1/01/17 - 2/28/2017

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

Confirmed or Possible Whistleblower Complaints						
						Rail
			Safety	Safety	Fraud	
January	0	0	1	0	0	0
February	0	0	0	0	0	0
Total 2017	1	9	3	2	3	2

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

Test, Incomplete or Duplicate Whistleblower Complaints		
January	1	
February	0	
YTD	1	

OFFICE OF RAIL SAFETY

RAILROAD SAFETY - ROSB

In the month of February 2017, SED Staff's Railroad Operations group completed the following:

New Incidents Investigated	12
Informal Complaints Investigated	1
Safety Assessments/Reviews	4
Compliance Actions	1031 ⁴
Major Inspections Completed - Such as Focused Inspections	4
Operation LifeSaver Presentations	5

ROSB Inspection, Investigation & Field Activities

February 16, 2017: CPUC Rail Safety Inspector Jacob Peterson participated in an Operation Lifesaver event at Banning High School. Operation Lifesaver is a pro-active, preventative railroad safety program designed to make the public aware of railroad safety hazards and how

⁴ Previously we only counted defect violation citations as a compliance action. But we are now including Inspection Reports as part of that number. It was felt that adding the inspection report numbers is a more accurate reflection of the number of monthly compliance actions.

to avoid them. Two presentations were given to a total of 58 students and staff using a PowerPoint presentation and a video.

February 17, 2017: CPUC Rail Safety Inspector Chris Ranford performed two Operation Lifesaver presentations to two high school classes at Banning High School, in Banning. The presentation was given 40 students and high school staff.

February 18, 2017: CPUC Rail Safety Inspector Carlos Tapia performed an Operation Lifesaver presentation in Los Angeles at the Los Angeles City Attorney's office. The presentation was given to five adults who have been cited by law enforcement for trespassing onto RR property.

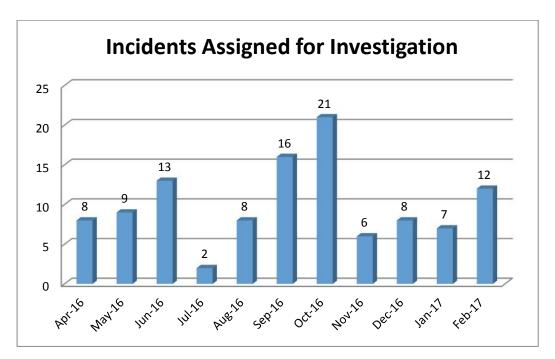
February 22, 2017: A team of two CPUC and one FRA railroad safety inspectors performed a joint focused inspection with a UPRR Hazardous Materials Manager in the UPRR yard in Roseville. The Roseville yard is UPRR's largest classification yard in Northern California and hundreds of hazardous materials shipments pass through this facility each day. Trained UPRR employees inspect each tank car containing hazardous materials when the cars arrive at the facility and another inspection before they depart the facility to detect leaks of flammables, poisons, inhalation hazards, and other potential threats to human health and property. Accurate identification of the contents is vital to emergency responders. Loose manway bolts and unsecured valve handles can, and have, resulted in release of contents from temperature changes, failure of a closure, or vandalism. A release of contents could have resulted in environmental and public safety hazards, as well as a fine of \$15,000.00 levied against the shipper.

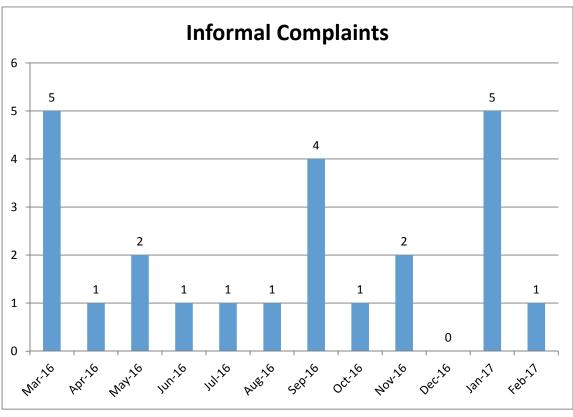
The railroad safety inspection team found 16 tank cars with 21 defects. The defects ranged from missing or incomplete markings, labels, and placarding, to loose manway bolts and unsecured valve handles Federal laws require secure tank cars with accurate identification.

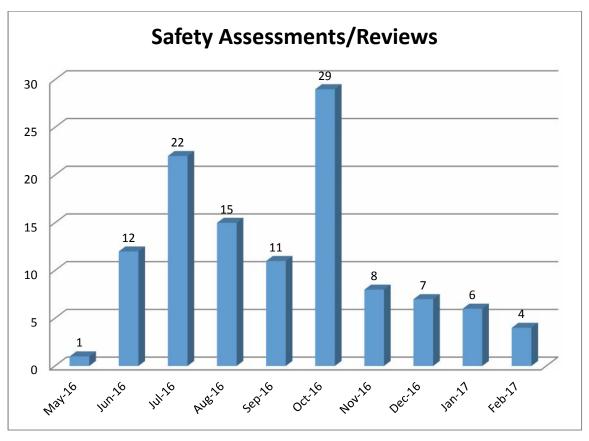
The railroad safety inspection team notified the UPRR Hazardous Materials Manager and Car Department Supervisor of the defects. The UPRR manager immediately had the loose closures tightened, and UPRR personnel were dispatched to correct the marking/label/placard issues. The shippers were also notified of the defects so that they can review their safety procedures to prevent future occurrences of cars not being in compliance with federal regulations.

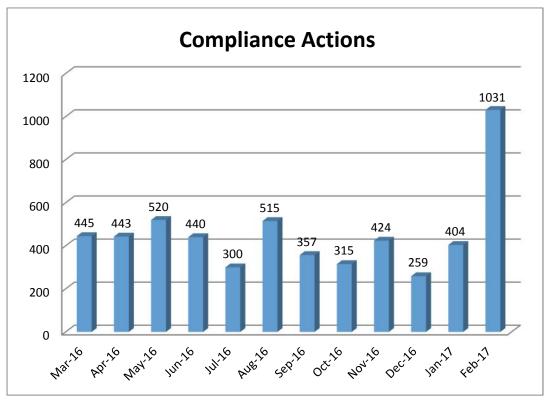
February 27, 2017: A CPUC interdisciplinary railroad safety team consisting of two CPUC operating practices inspectors and one CPUC hazardous materials inspector made an unannounced focused inspection of the UPRR yard in Roseville. The inspectors focused on UPRR's use of the blue-flag protection of railroad employees that provides safety to workers by ensuring that the equipment they are working on or near is not moved. The inspectors also evaluated the rolling stock containing hazardous materials to ensure accurate identification of hazardous materials in case of a derailment.

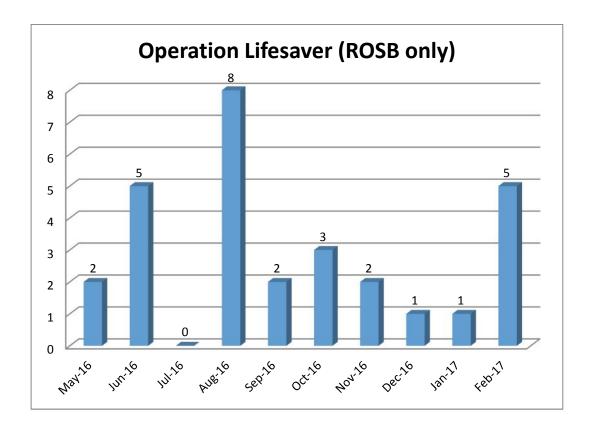
The CPUC railroad safety team found the blue flag protection provided to the railroad employees at the Mechanical Repair Facility was displayed in compliance with federal regulations and railroad operating rules. The team identified three cars containing hazardous materials that did not display accurate information about the contents of the cars. This inaccurate display could lead to misidentification of the cars' contents, which could result in emergency responders using the wrong material to mitigate a spill or explosion in an emergency situation. Federal law requires transporters of hazardous materials to mark each side and each end of the tank car with specific identification numbers, and ensure each side includes the proper shipping name or its common name. The CPUC railroad safety team reported the defective cars to UPRR management. UPRR placed the cars in "bad order" status, which prevents the equipment from leaving the yard on an outbound train until repairs are completed.











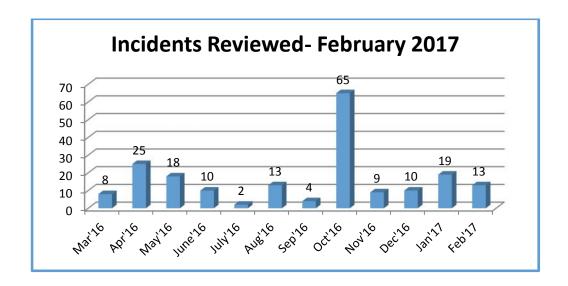
RAIL CROSSINGS AND ENGINEERING BRANCH - RCEB

In February 2017, the Rail Crossings and Engineering Branch completed the following:

	New During Period	Closed During Period
Crossing Incident Reviews	8	13
Informal Complaints Investigations	1	2
Safety Assessments/Quiet Zones/Reviews	38	38
Environmental Reviews	40	40
Proceedings, Resolutions and G.O. 88-B Reviews	7	9
Operation LifeSaver Presentations	4	4

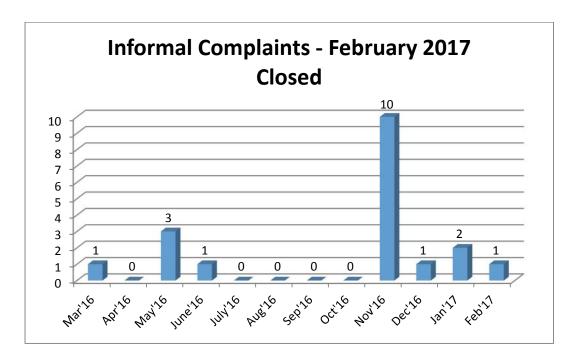
RAIL CROSSING INCIDENT INVESTIGATIONS

In February 2017, the Rail Crossings and Engineering Branch (RCEB) engineers assigned 8 new incidents at highway-rail and highway-light rail transit (LRT) crossings (crossings) for review, and completed 13 crossing incident reviews and evaluations.



INFORMAL COMPLAINTS

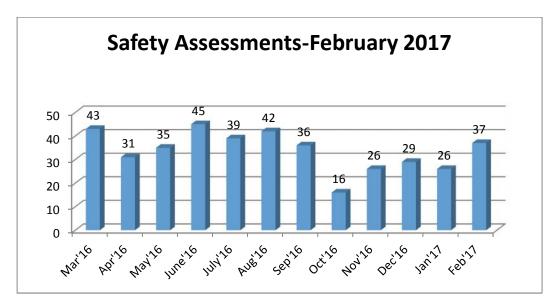
In February 2017, RCEB received one new complaint involving a rough surface highway-rail crossing in the City of Lompoc. RCEB staff responded and closed one informal complaint about pedestrian warning devices at a San Diego crossing.

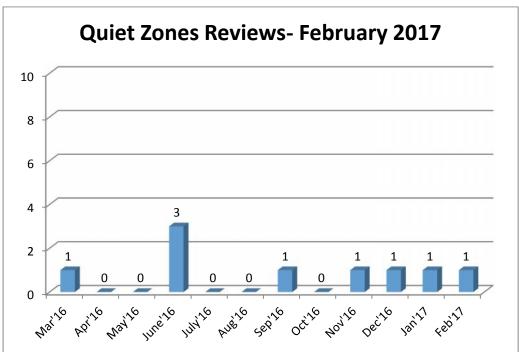


SAFETY ASSESSMENTS, QUIET ZONES AND REVIEWS

In February 2017, RCEB completed 37 rail crossing safety assessments involving communications, field inspections, and diagnostic reviews with railroads and local agencies. RCEB also completed a Quiet Zone review for the City of Galt crossings.

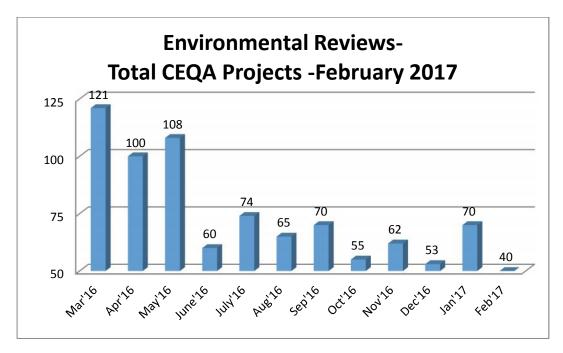
• QTZN 2013060002 -The City of Galt (Galt) proposed a 24 hr QZ at five at-grade crossing along Union Pacific's (UP)Fresno Subdivision under the March 19, 2013, Notice of Intent (NOI), including Elm Avenue/Orr Road (752742U), A Street (752741M), C Street (752740F), F Street (752739L) and Kost Road (752738E). The line is used by UP, BNSF and Amtrak. CPUC issued comments on the NOI on May 20, 2013. Galt issued the January 28, 2016, Notice of Establishment (NOE), effective February 22, 2016.

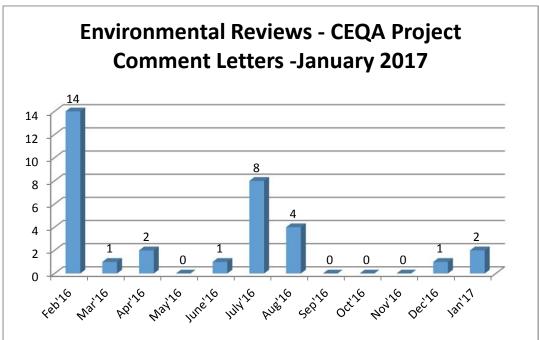




ENVIRONMENTAL REVIEWS

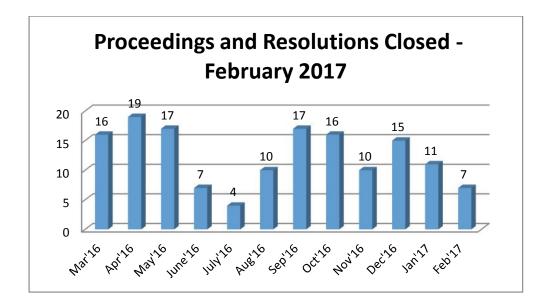
In February 2017, RCEB reviewed 40 CEQA reports and did not issue any comment letters. When railroads and local agencies plan new projects or developments, staff reviews the documents submitted by the agencies for safety impacts to crossings. The review addresses safety issues in highway-rail crossing design and nearby intersections during the design phase of the projects.





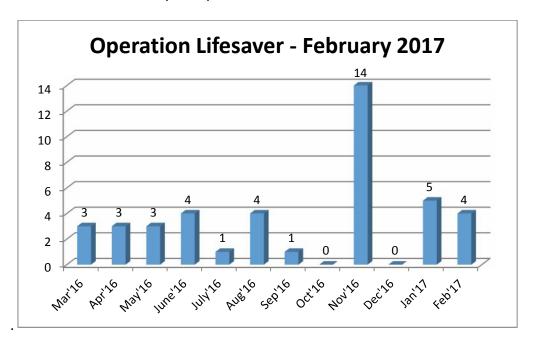
PROCEEDINGS, RESOLUTIONS AND G.O. 88B REVIEWS

In February 2017, RCEB staff received six new General Order 88-B applications and one formal proceeding. RCEB approved seven General Order 88-B applications.



OPERATION LIFESAVER INC.

In February 2017, RCEB completed two Operation LifeSaver Inc. (OLI) events that resulted in two presentations and manning a booth at an agriculture safety event. Staff shared the rail safety message with two elementary groups (60 students) at the Lodi Grape Festival Grounds in Lodi; and, one event at the Zenith Agriculture Training event in Fresno. As time permits RCEB staff continues to volunteer and participate in OLI events and activities.



RAIL TRANSIT - RTSB

In February 2017, the Rail Transit Safety Branch (RTSB) welcomed our new Signal and Train Control Inspector, Salvador Herrera, for the Southern California office. RTSB completed the following:

CORRECTIVE ACTIONS PLANS

2 CAPs were closed this month.

INCIDENT INVESTIGATIONS

- In February 2017, 26 incidents were reported by RTAs.⁵
- 17 incident investigations were closed by RTSB.

PROCEEDINGS / RESOLUTIONS

Ongoing:

I.16-06-010 Order Instituting Investigation (OII) (Commissioner Randolph/ALJ Kim) - On June 28, 2016, the Commission instituted a Formal Investigation in response to a two fatality Bay Area Rapid Transit (BART) accident on October 19, 2013. The purpose of this investigation is to a) examine the accident, b) determine whether BART repeatedly violated state codes and regulations by failing to provide adequate protection for BART's wayside workers, c) whether BART's train-operating personnel's lack of training and certification contributed to the accident, d) whether BART violated Rule 1.1 of the Commission's Rules of Practice and Procedure by failing to provide the Commission with an accurate list of who would be operating its trains during a strike occurring at the time of this accident, and e)

⁵ 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.

whether Rule 1.1 was violated by BART's failure to obtain prior approval of the use of uncertified, untrained, and unapproved personnel to operate trains during the strike.

Additionally, the investigation will determine whether BART should be fined or otherwise penalized for any of these violations.

A prehearing conference was held on October 11, 2016. On October 18, 2016, both parties filed a Joint Case Management Statement. On December 28, 2016, the Commission issued a scoping memo for the case, identifying the topics to be investigated and affirming the need for a hearing. Additionally, both parties were ordered to file another joint Case Management Statement. BART and SED are currently engaged in a debate over evidence, and filed separate Case Management Statements on January 13, 2017. On January 23, 2017, ALJ Kim issued a ruling setting the dates of evidentiary hearing to February 13-16, 2017. On February 1, 2017, ALJ Kim issued a ruling reminding BART to adhere to ex parte communication rules. BART summited documents related to non-disclosure agreement between National Transportation Safety Board (NTSB) and parties to investigation. On February 8, 2017, ALJ Kim opened hearing for BART's two in limine motions, a motion filed by a party to a lawsuit which asks the court for an order or ruling limiting or preventing certain evidence from being presented. On February 9, 2017, ALJ Kim issued a ruling on BART's two In Limine motions, Motion to Dismiss, and two Motions to Accept Late-filed Opposition In Limine, and SED's Motion for Continuance of the Hearing and Motion for Order Shortening Time to Respond for Continuance. BART and SED filed responses, with SED filling a couple of motions with BART responding. The evidentiary hearing adjourned on February 15, 2017, ALJ Kim requested parties to review exhibit list and exhibits for submission by ruling dated March 1st, having received no requests for corrections or amendments; ALJ is preparing final exhibits and exhibit list.

Approved:

ST-199 - On January 9, 2017, SED filed a proposed resolution with the Commission to approve SED's final report for the triennial security review of San Francisco Airport Automated People Mover System. This Resolution was approved by the Commission on the February 9, 2017, Commission meeting.

ST-198 - On January 9, 2017, SED filed a proposed resolution with the Commission to approve SED's final report for the triennial safety review of San Francisco Airport Automated People Mover System. This was approved by the Commission on the February 9, 2017, Commission meeting.

SAFETY CERTIFICATION AND OVERSIGHT OF RAIL TRANSIT AGENCY PROIECTS

- AirTrain Extension: The San Francisco International Airport (SFO) AirTrain Extension Project will expand the existing AirTrain System to include a new Long Term Parking (LTP) Garage and add an additional in-line station (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 three new Innovia APM 100 vehicles. The project is currently in the final design phase. The project may have multiple Safety Certification Verification Reports, as it has multiple phases and will start revenue services accordingly, from October 2018 to June 2019. Safety Certification Plan review is underway. Staff attends weekly progress meeting.
- BART New Vehicle Procurement: BART is in the process of procuring 775 new rail vehicles. BART has already received ten of these vehicles (five D cars and five E cars) for testing, and is storing them at its Hayward Yard facility. RTSB staff is witnessing testing and participating in Safety and Security Certification meetings to oversee the procurement process. BART will submit its interim State Safety Certification Verification Report (SSCVR) for these first 10 vehicles in approximately June 2017. The 10-car pilot train should be ready for revenue service in mid-July 2017. Engineering tests, qualification tests and safety-related testing is on-going. Mainline tests are being conducted during blanket hours (1-3am). Safety-related tests currently in progress are Stability and Curve Negotiation (8010) and Communications, Signs & PIS (8052C.)
- The 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. This project is currently in the construction phase, and

is being safety certified by RTSB, whose staff regularly attends safety certification meetings. Signal testing is on-going. Trains are currently undergoing testing during the non-revenue hours. Station and Maintenance Facility construction is currently on-going. Track work is completed. eBART is hiring new staff for operations. This project expects to be in revenue service by approximately May 2018. The draft System Safety Program Plan is almost ready for RTSB's review.

- BART Warm Springs Extension: This project proposes an additional 5.4 Miles of BART track connecting the currently existing Fremont BART station with a new BART station located in the Warm Springs district in the city of Fremont. Construction has been monitored by RTSB and will be safety certified when complete. Staff has attended and witnessed testing. Additionally, RTSB staff inspected this project on September 13, 2016. Staff is in the process of reviewing past test records pertaining to the Safety Certification Verification Report (SCVR). Warm Springs Station plans to open on or after March 25, 2017.
- Silicon Valley Berryessa Extension: T and Santa Clara Valley Transportation Authority (SCVTA) are currently in the process of jointly constructing a 10-mile track extension and two new stations the Milpitas and Berryessa stations. The project is expected to be completed in the Fall 2017, and is currently in the construction and testing phase for Traction Power Substation (TPSS), Train Control, Communication, etc., and in the pre-testing phase for other elements of the system. RTSB Staff regularly attends and participates in the Safety and Security Review Committee (SSRC) and Fire Life Safety and Security Committee (FLSSC) meetings and monitors the project progress. Additionally, RTSB Staff receives weekly or monthly schedule updates via email on the testing progress.
- SFMTA New Vehicle Procurement: San Francisco Municipal Transportation Agency (SFMTA) is in the process of procuring 260 new rail vehicles, which will be received by SFMTA over the next 15 years. The first batch, consisting of 24 cars, will be received in 2017. All new vehicles will be put through a wide range of tests in order to complete the safety certification process. RTSB staff will attend monthly meetings with SFMTA to oversee the Safety Certification Process and to monitor the progress of testing. The project is in the construction specification conformance phase.

- Central Subway Project: 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, and Chinatown. This project, due to be completed in 2019, is in the construction phase and is being monitored by RTSB through regular meetings, review of documentation related to safety certifiable elements to ensure conformance with specified safety requirements and design criteria, and site visits.
- 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 to provide the needed capacity expansion for the recently
 completed projects (Expo Phase 2 and Foothill Extension Phase 2), and for the future
 LAX/Crenshaw line which is currently in construction. On March 4, 2016, RTSB staff
 approved the LACMTA request to introduce the first batch of P3010 cars into revenue
 service after review of the Safety Certification Verification Report, various test records, and
 the individual vehicle history books. Currently, fifty-nine (59) P3010 vehicles have been
 approved for revenue service by RTSB staff.
- LACMTA HR4000 Heavy Rail Vehicle Procurement: LACMTA is in the process of procuring 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 existing aging HRV fleet.
- LACMTA Regional Connector Project: Currently in utility relocation phase. RTSB staff regularly attends LACMTA's monthly Fire Life Safety and Security Meetings, as well as Safety and Security Certification Review Meetings.
- LACMTA Purple Line (Westside) Extension Project: LACMTA is currently expanding rail network and services, including 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, consisting of nearly nine miles of track and seven stations, is planned to be constructed in three sections, and is currently in the utility relocation phase. RTSB staff regularly attends LACMTA's monthly Fire Life Safety and Security Meetings, as well as Safety and Security Certification Review meetings.

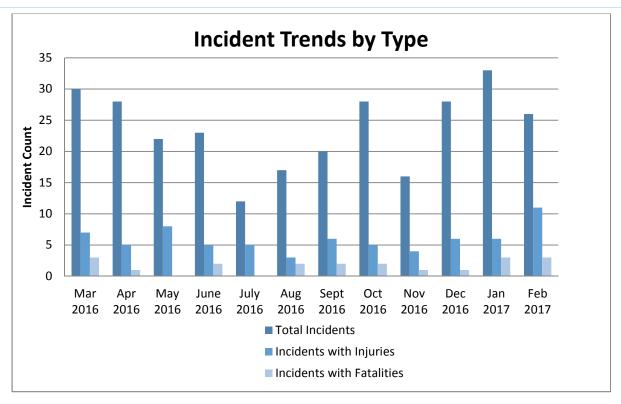
- LACMTA/MGLFECA Foothill Extension Phase 2B: LACMTA and Metro Gold Line Foothill Extension Construction Authority have submitted the project's Safety Certification Plan (SCP), which was approved by Resolution ST-194, on January 19, 2017.
- LACMTA Crenshaw/LAX Corridor Project: LACMTA is constructing 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 LACMTA Green Line and will serve the cities of Los Angeles, Inglewood and El Segundo; and portions of unincorporated Los Angeles County. The project is currently in the early construction phase and is being monitored by RTSB through regular meetings. The project is due to be completed in 2019.
- 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) campus and the University City areas The additional stations will be: Tecolote Road, Clairemont Drive, 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 began late 2016 and revenue service begins late 2021. RTSB staff is attending the System Safety Review Committee Meetings and Fire Life Safety Committee meetings for this project. The Safety and Security Certification Plan (SSCP) for the project has been reviewed, which was approved by the Commission on January 19, 2017, via Resolution ST-186.
- Other SoCal Safety Certification Projects: Several projects are in various phases of early design and engineering in the Southern California region: OC Streetcar Project (in Orange County), LA Streetcar Project (in City of Los Angeles), and LAX Automated People Mover (for Los Angeles International Airport). Safety upgrades to the Angels Flight Railway (in City of Los Angeles) are currently under review. RTSB staff regularly attends Fire Life Safety Committee meetings, Safety Certification Team meetings, etc., to monitor and track any safety related issues.

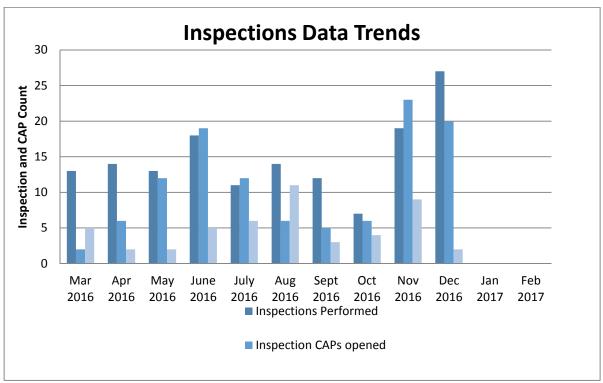
STATISTICS SUMMARY

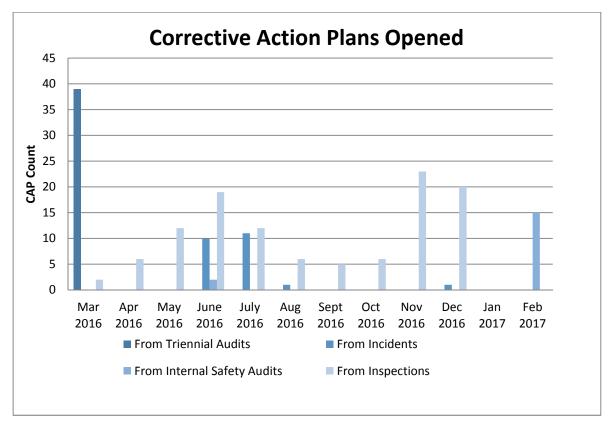
Investigations	
Incidents Reported	26
Incident Investigations Closed	2
Complaints Investigated	0
Rail Transit Inspections	0
Triennial Audits	0

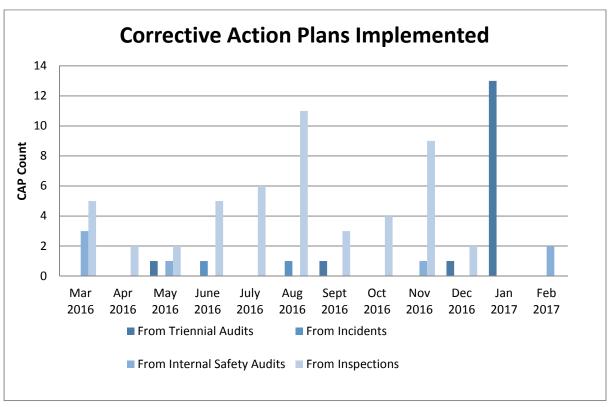
Corrective Action Plans			
New Corrective Action Plans	0		
From Triennial Audits	0		
From Incidents	0		
From Internal Safety/Security Audits	15		
From Rail Transit Inspections	0		
Closed Corrective Action Plans	2		
From Triennial Audits	0		
From Incidents	0		
From Internal Safety/Security Audits	2		
From Rail Transit Inspections	0		

ONGOING DATA / TRENDS









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