

Safety and Enforcement Division



Safety and Enforcement Division 2017 Annual Work Plan

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MISSION AND VISION

The mission of the Safety and Enforcement Division (SED) of the California Public Utilities Commission (CPUC) is to work diligently to ensure that regulated services are delivered in a safe manner. In July 2014 the CPUC adopted a Safety Policy Statement, which further clarified the CPUC's overall safety strategy. Ultimately, we are striving to achieve a goal of zero accidents and injuries across all the utilities and businesses we regulate, and within our own workplace.

SED CHARTER

Safety and Enforcement Division Charter

Mission

The Safety and Enforcement Division protects utility workers and the public by ensuring that regulated entities maintain and provide safe services.

We Are:

➤ Safety professionals	➤ Dedicated public servants
➤ Protectors of consumers and the public	➤ Leaders by example
➤ Technical experts in our fields	➤ Tough, but fair
➤ Agents of change by promoting a culture of safety	➤ Committed and resilient
➤ A team that values each other	➤ Skilled and innovative
➤ Supportive coworkers who have each other's back	➤ Open, honest and caring
➤ Enforcement professionals	➤ Teachers of best practices
	➤ Promoters of workplace safety

Goals

- Create a management culture focused on ethical action, personal accountability, and public service leadership
- Regulated entities address and resolve safety issues in a timely manner
- Strive for and achieve excellence
- Working in SED is seen as a professional badge of honor by those inside and outside of the organization
- Be an organization that creates industry leaders
- Promote a strong enforcement culture at the CPUC
- Be early adopters of best practices
- Raise public awareness, empowering Californians to own their own safety

Values

Accountability | Excellence | Integrity | Open Communication | Stewardship

ELIZAVETA MALASHENKO: DIRECTOR'S VISION

My goal as SED Director has always been to build a premier safety organization in the United States. About three years ago, Ken Bruno and I visited Washington State Utilities and Transportation Commission to learn how they turned around their pipeline safety program after an Olympic Pipe Line accident in Bellingham that killed three youths on June 10, 1999. We spent several days there as Washington staff walked us through their decade-long effort to build a program that's now considered to be one of the top pipeline safety programs in the nation. I wanted to figure out what they did, so that at some point down the line the CPUC could be in their shoes. After Ken and I came back from Washington, we got together with the gas branch and over a three month period completely redesigned our gas safety program - from the way that we conduct audits to how we investigate safety incidents. Those efforts have resulted in a 12 percent jump in our Pipeline and Hazardous Materials Safety Administration (PHMSA) score in just 2 years¹. I'm incredibly proud of all the work that SED's gas branch has done, but I see it only as the beginning for what SED can achieve.

One area that continues to hold SED back is administrative support and internal operations. This domain spans budget management, travel approval and reimbursement, timekeeping, procurement of safety gear, vehicle management, contract management, hiring process, document management, process documentation and many other supporting activities that are vital to making SED run. This domain has been a challenge for the CPUC for some time. CPUC Executive Director Tim Sullivan refers to this problem as the "collapse of CPUC's administrative core", which he attributes to lack of resources and attention that this area has experienced for many years. As the CPUC makes a push to rebuild the administrative core, SED must participate in that effort and solve the related problems that exist within our own Division. Work related to improving SED administrative support and internal operations is going to be one of my top priorities for 2017. My mantra for this work is "no self-inflicted wounds". We may not be able to solve all of the issues, since many of them are outside of SED's control, but whatever is within our control we must fix.

Another area where I would like to see SED continue to grow is in the development of partnerships with communities and local governments, as well as state and federal agencies. Ensuring safety of the entire utility and rail infrastructure in California is an immense task and it's not something that SED can do alone. Last year, I negotiated agreements between CPUC and the Governor's Office of Emergency Services (Cal OES) and the Division of Oil, Gas and Geothermal Resources (DOGGR). Currently I'm in the process of finalizing the agreement with Cal FIRE. There are many other state and federal agencies with which CPUC can deepen relationship in order to jointly promote infrastructure safety. Engagement with local governments and communities is also key. At the end of the day, safety is always a local issue. Nothing makes that more apparent than when an incident happens and a community is impacted. I strive to have SED work in partnership with communities and local governments,

¹ PHMSA audits CPUC gas safety program every year. In PHMSA's evaluation of programs performance in 2012, CPUC received 84% of possible points tied to performance. In our latest evaluation that was done last year for program performance in 2015, CPUC received 96% of possible points tied to performance.

helping them address infrastructure issues before accidents happen and provide assistance and support if they do.

Finally, in 2017 I plan to do more to promote safety and communicate all of the great work that's being done by SED staff. One of the challenges for SED is that the vast majority of work that we perform remains invisible. There are no reports written about accidents that did not happen and no media coverage of days that go by without major incident because of the preventative work that's being done by SED. Many of the reports that SED produces are very technical and are not easily understood by those outside of the safety profession. But this doesn't mean that SED can't do more to educate others about safety and increase transparency into our work. My goal for 2017 is to find opportunities to communicate about safety, whether it's through writing blogs, social media, disclosing more documents on the website or presenting at different forums. I'm certain that the more people find out about SED, the higher their confidence will be in the effectiveness of CPUC's safety program.

I'm greatly motivated by SED's staff and their passion for safety. We have a great team and I can't wait to see what we accomplish in 2017. Thank you to SED staff for all of the hard work!

- Elizaveta Malashenko, Director, SED

SED STRATEGIC INITIATIVES AND GENERAL OPERATIONS

STRATEGIC PLANNING

In 2016, the CPUC went through a strategic planning effort, through which the CPUC adopted 15 Strategic Directives, 8 Governance Processes and 5 Commissioner-Staff Linkage Policies. In order to implement the adopted Strategic Directives, the Executive Director led CPUC staff through an effort to develop Action Items that are responsive to the overall strategy. In 2017, these Action Items will be presented to the Commission for review and feedback. For the purpose of annual work planning, SED assumes that the proposed Action Items are likely to move forward. However, this section should be considered draft until after the Commission has reviewed and accepted the proposal from the Executive Director.

The CPUC strategic plan can be found here:

<http://docs.cpuc.ca.gov/publisheddocs/published/g000/m164/k197/164197263.pdf>

ACTION ITEMS IN RESPONSE TO SAFETY STRATEGIC DIRECTIVE

SD-02-01 Safety Expertise Management

Ensure that we have the right people for the right job in the right place, adequately supported with tools and training. This includes several major work streams: (1) regionalization/ decentralization (2) classification review (3) training programs (4) productivity tools. This effort should also consider defining pathways for promotion for those specializing in safety.

SD-02-02 SED Operational Improvements

SED operational improvements include ongoing work to improve existing processes and close known gaps in documentation (e.g. having a documented process for managing unexpected issues in the field). Determine preferred solution for document management (e.g. content server or SharePoint) and refresh how documents are organized. Review and standardize codes that are being used for timekeeping to improve our ability to report on staff time allocation and have better information to support budget change proposals.

SD-02-03 Public Awareness Programs Expansion

Continue supporting Operation Life Saver and 811 programs. Identify opportunities to deepen engagement through stakeholder relations, promotional events, social media, etc. Identify other potential public awareness programs for cross promotion (e.g. disaster preparedness through Red Cross).

SD-02-04 External Partnerships

Continue the effort to enter into formal agreements with other state and federal agencies, including CAL FIRE, Cal OSHA, NTSB, NERC, NRC etc. Develop a list of agencies with priorities; assign leads for developing partnership with each entity; enter into legal agreements; develop a process for ensuring ongoing collaboration.

SD-02-05 CPUC Emergency Response & Crisis Management

Ensure that CPUC is ready to respond to emergencies in the state. Train all CPUC leadership in Incident Command System (ICS) fundamentals, widen participation in emergency response exercises, and conduct outreach to local governments to promote adequate emergency response preparedness throughout the state. Establish processes for continuous improvement of emergency response and business continuity processes.

SD-02-08 Industry Safety Risk Identification and Management

Review roles of SED Utility Risk Assessment and Office of Safety Analysis (OSA) to ensure cohesive risk management strategy. Ensure ongoing utility risk identification, assessment, and mitigation through creation of templates and guidelines for two new risk accountability reports created as part of General Rate Case risk safety framework. Define staff roles regarding review of and action based on these reports. As part of the next cycle of S-MAP applications, conduct a safety En Banc session for commissioners and executive management to allow regulated entities to explain how they are translating their enterprise risk management processes into operational safety programs via the S-MAP process.

ACTION ITEMS IN RESPONSE TO RELIABILITY AND RESILIENCY STRATEGIC DIRECTIVE

SD-03-01 Annually Review each Utility's Emergency Plan

Utilities are required to submit emergency plans to the CPUC, but there is no clear business rule on how these plans are reviewed by the CPUC. CPUC staff should jointly review all utility emergency plans looking for crossover issues such as communications impacts on electric utility's ability to respond to an event, and for best practices from other utilities. The utilities' state of resiliency in the face of potential catastrophic threats should be addressed in the SMAP and RAMP phase of their general rate cases so any funding needs can be identified as part of the GRC.

ACTION ITEMS IN RESPONSE TO RISK MANAGEMENT STRATEGIC DIRECTIVE

SD-15-02 Risk-Informed Decision Making in GRCs

Build upon ongoing development of risk-informed decision making in general rate cases by exploring how to extend the Safety Model Assessment Proceeding (S-MAP) to smaller energy utilities, and eventually to regulated water and telecommunications entities. As per directive of D. 14-12-025, begin engaging a next tier of smaller energy utilities in ways to incorporate risk-assessment into their rate cases, starting in 2018. As part of the next cycle of S-MAP applications, conduct a Safety En Banc session for Commissioners and executive management to allow regulated entities to explain how they are translating their enterprise risk management processes into operational safety programs via the S-MAP process.

SAFETY ACTION PLAN

In February 2017, the Commission adopted a Safety Action Plan and Regulatory Strategy, organized around four functional areas of safety management or "pillars":

- I. **Safety Policy:** Commission decision-making and development of rules and regulations

- II. **Safety Compliance and Enforcement:** Audit, investigation and penalty assessment activities
- III. **Risk Management:** Risk assessment and risk mitigation strategies
- IV. **Safety Promotion:** Communication, collaboration and outreach

The Safety Action Plan has a total of four Action Items, which SED will support as needed:

1. Periodic Safety Rulemaking Updating Rules & Regulations (Safety Policy)

This year's rulemaking will be focused on Water. SED does not foresee much need for engagement, but will help out if needed.

2. Utility Pole Management (Safety Compliance & Enforcement)

In reflection of utility poles' essential role in safety, reliability, and competition, the Commission will undertake a series of initiatives related to Utility Pole Management, including but not limited to: a rulemaking examining coordination between pole owners and attachers; a census of existing poles and attachments; the creation of a shared repository of information on utility poles and attachments; and the creation of a mobile app allowing users to document and report utility pole issues from their smartphones. SED will have an active role in all of these activities and SED Director will facilitate critical parts of the effort. Please see Electric Safety and Reliability Branch section for more details.

3. Implement a Staff Cybersecurity Group (Risk Management)

The Deputy Executive Director of Operations, working closely with the Director of the Policy and Planning Division, will take the lead in seeking approval for a Staff Cybersecurity Group by second quarter 2017. SED will support this effort as requested.

4. Safety Reporting System (Safety Promotion & Risk Management)

In 2016, SED's Utility Risk Assessment and Advisory Section staff developed a proposal for applying lessons learned from the aviation and oil industries to encourage electric and gas utilities to participate in a non-punitive "close call" reporting system. Keys to these systems are voluntary participation and sharing of safety-related information. SED intends to work with other Commission entities to support possible development of a utility framework in a rulemaking or other proceeding.

Annual Safety En Banc

In 2017, the CPUC will hold the third Annual Safety En Banc, which is organized by the Policy and Planning Division. SED will work closely with the Policy and Planning Division to support this effort and will participate in the En Banc.

SED GENERAL OPERATIONS

CPUC EXECUTIVE SAFETY COUNCIL

The CPUC Executive Safety Council's mission is to promote safety across the Commission, breaking down organizational silos. The Executive Safety Council discusses safety issues identified by staff, challenges facing the Commission and major risks facing the regulated

entities. The SED Director and Deputy Directors attend Executive Safety Council and provide staff support as needed.

SUPPORTING OFFICE OF GOVERNMENTAL AFFAIRS

There are several activities that are required in order to support the Commission's Office of Governmental Affairs. SED analyzes approximately 20-30 bills every legislative cycle, but there are also other important activities including answering questions from the legislature.

INTERNAL CROSS-DIVISION COORDINATION

The Utility Risk Assessment section supervisor reviews the list of new natural gas and electric proceedings on a recurring basis, flagging anything that has potentially significant safety implications. If safety issues are identified for a proceeding, the Utility Risk Assessment supervisor notifies impacted branch, industry division and Administrative Law Judges Division.

CPUC INTERNAL AUDITS

SED is participating in CPUC internal audits and respective implementation of recommendations. Currently, SED is implementing recommendations from vehicle maintenance audit and is participating in the document management audit.

PREPARATION OF BUDGET CHANGE PROPOSALS

Budget Change Proposals (BCPs) need to be prepared annually per the fiscal year cycle and occasionally off-cycle for emergent needs. There are several resource needs in SED that require BCP development.

PERFORMANCE REVIEW AND INDIVIDUAL DEVELOPMENT PLANS

The goal for SED is to perform all performance reviews by the end of February every year.

COMPLIANCE WITH ORDERING PARAGRAPHS SYSTEM (COPS)

In 2015, the CPUC implemented an internal process to track industry compliance with ordering paragraphs from CPUC decisions. SED has designated COPS officers, who track the ordering paragraphs and provide updates to the status.

REPORTING

SED's goal is to keep internal and external stakeholders updated on work planned, work accomplished and key developments. The reports include:

- The annual plan
- Monthly progress reports to the Executive Director
- P.U. Code Section 911 (Safety: Gas/Electric) - annual summary of investigations.
- P.U. Code Sections 765 & 911.1 - NTSB recommendations and CPUC actions.
- P.U. Code Section 916 (Safety: Rail): General Rail Safety Report. This report includes info from sections 916.1, 916.2, 916.3, 916.4

SAFETY ALERT PROCESS

SED has a “Safety Alert” process to notify Commission leadership of important safety events as they take place. A Safety Alerts are sent out based at management’s discretion. Typical situations that warrant a safety alert include:

- Incident involving a fatality
- Incidents involving major injuries
- Incidents which are likely to involve major news coverage (local TV news networks, major newspapers including San Francisco Chronicle, Los Angeles Times, Sacramento Bee etc.)
- Significant emergency situations (e.g. fires, earthquakes etc.)
- Activation of utility Emergency Operations Center (EOC)
- Activation of CalOES EOC

TRAINING

Each program has specific requirements for training. Additionally, staff complete state mandated classes on Ethics, Defensive Driver Training, Sexual Harassment Prevention, and Privacy Training.

OFFICE OF UTILITY SAFETY

The mission of the Office of Utility Safety is to provide leadership in the energy and utilities industry and to develop, implement and enforce best in class safety programs within the regulated entities.

LEE PALMER: DEPUTY DIRECTOR'S VISION

During 2016, the Office of Utility Safety began making changes that will affect its working relationship with both internal and external offices to the CPUC with the end goal of improving both the efficiency and capacity of the Office of Utility Safety organization. These changes, along with a focus on internal training, filling position vacancies and promoting interagency collaboration will provide a fluid and transparent working relationship for both the Office of Utility Safety and those organizations it supports.

These are the priorities that the Office of Utility Safety in 2017 with the end goal of improving our capacity, effectiveness and timeliness:

- *Fill position Vacancies through aggressive marketing;*
- *Develop a standardized program to train and qualify Gas & Electric Safety and Reliability inspectors;*
- *Identify, train and codify Office of Utility Safety roles and responsibilities in Emergency Management;*
- *Continue to develop strong working relationships with Cal OES and CAL FIRE;*
- *Developing ways to streamline administrative functions across all branches of the Office of Utility Safety;*
- *Continue to Support the CPUC Regionalization plan;*

Here are some short references regarding broad goals for Office of Utility Safety in 2017. More specific goals and tasks are detailed in the individual branch work plans that follow.

The Primary goal for the Office of Utility Safety in 2017 is filling position vacancies. Upon joining SED in 2016, I found that the capacity of all three Office of Utility Safety branches to conduct critical regulatory functions was diminished due to a loss of institutional knowledge. As of August, 2016 the Office of Utility Safety had a 38% vacancy rate across all three branches. The current vacancy rate is 19%. It is imperative we continue to invest in identifying qualified candidates to fill mission essential staffing needs. The way ahead in 2017 includes the following:

- *Onboarding Program; Utilizing the People Partners onboarding program and hiring event the Office of Utility Safety will invest significant staff time in bringing in qualified personnel.*
- *Mentorship and Retention Program; In 2017 we will adopt the CPUC People Partners model for designating mentors for all new hires and Utility Engineers. The goal being both a method for knowledge transfer and to promote from within and maintain continuity.*

- *ESRB Utility Audit Program; ESRB plans to conduct approximately 20 audits in 2017, selected based on a risk criteria. In 2017, ESRB will review and further re-design the way that the audits are planned and conducted. New processes, combined with additional staff and training, will have a long term impact of increasing both the capacity and capability of ESRB.*

My second goal in 2017 is to develop a standardized program to train and qualify both Gas and Electric Safety and Reliability inspectors with the same level of quality. Currently there is no standard method to train and qualify inspectors, especially in ESRB². As there is no state standard, it is dependent on SED to create a universal method. This product should be consistent with current regulations and General Orders but also allow GSRB and ESRB the freedom to operate effectively throughout the state. In 2017 we will initiate the following:

- *Create a mentorship program that assigns seasoned inspectors with new hires in order to provide an on-call resource for new staff.*
- *Identify milestones for each program, GSRB and ESRB respectively, which provide program management with the necessary tools to evaluate the effectiveness of junior inspectors while also providing the inspectors with constructive feedback. These milestones should include measurable goals and be combined with mandatory training.*
- *Identify available state and federal training to enhance inspector standards and training methods. This would include partnering with external public utility commissions throughout the United States to learn best practices and methods.*

My third goal in 2017 is to identify, train and codify Office of Utility Safety roles and responsibilities in Emergency Management. In 2016 the CPUC drafted and adopted a Memorandum of Understanding (MOU) with the California Office of Emergency Services (Cal OES). The primary goal of this MOU is to enhance coordination between the CPUC and Cal OES. The Office of Utility Safety will utilize this MOU to both codify the Office of Utility Safety's role in emergency management and to increase its capacity to regulate utilities.

- *Identify available Cal OES Incident Command System (ICS) training. Identify and engage with State and Federal training to enhance inspector standards and training methods. This would include partnering with external public utility commissions throughout the United States to learn best practices and methods.*
- *Expand emergency management and exercise training with both state and regulated utilities.*

Through achieving these goals the Office of Utility Safety will be postured to take on the increasing responsibilities. The Office of Utility programs will ensure it has strong leadership with continuity and interagency support allowing for increased capacity and timeliness.

- Lee Palmer, Deputy Director, Office of Utility Safety, SED

² GSRB staff are trained extensively by PHMSA. They have to take a large number of core courses to be certified as an inspector. However, GSRB staff have training needs beyond required PHMSA courses. As part of this initiative, we will evaluate whether there are some other standard courses that should be offered to GSRB, such as investigative techniques courses performed by NTSB.

UTILITY RISK ASSESSMENT AND SAFETY ADVISORY

The mission of the Risk Assessment and Safety Advisory (RASA) section is to promote safety by ensuring that the regulated entities integrate risk analysis and risk management practices into their current operations, future planning and decision-making processes. The section's professional engineers and analysts apply technical and regulatory policy expertise to a wide variety of Commission proceedings and initiatives in order to:

- Identify, analyze, and mitigate present and potential risks in the natural gas & electric systems;
- Promote risk-informed decision-making in Commission proceedings, particularly General Rate Cases;
- Suggest improvements in audits and inspections performed by SED;
- Coordinate with other Commission divisions, State and/or Federal agencies to promote safety in regulated utility operations and research expenditures;
- Identify and promote new approaches to Risk Assessment and energy policy development through whitepapers, reports and presentations at industry conferences.

RASA is specifically tasked with monitoring proceedings and rate case testimony to ensure that relevant safety concerns are adequately considered:

- Identify safety concerns and issues that should be considered in new applications, rulemakings or investigations and provide recommendations to Commission decision-makers;
- Refer to appropriate agencies with overlapping or parallel jurisdiction any Safety concerns that arise in proceedings;
- Monitor compliance with Commission decisions and Ordering Paragraphs that provide specific directions to SED.

GOALS FOR 2017

2016 was primarily about building human and intellectual capacity for the Risk Assessment section and deepening our ability to provide effective advisory support for critical rulemakings, investigations, rate cases and other applications. In 2017, RASA staff will continue this work through by producing technical reports, staff proposals and evaluations of utility risk management methodologies, as well as providing guidance to utilities and stakeholders on how to document proposed spending priorities for operational safety improvements. RASA staff also will be developing the parameters of a utility Safety Assurance program through collection and tracking of relevant safety performance metrics and will continue its efforts to assess utility safety culture.

RASA staff expects to advance new approaches to risk and safety issues by making presentations for CPUC staff and, when the opportunities meet Commission criteria, through presentations and participation in energy industry events, conferences and seminars.

For 2017, RASA's priority will be to help bring several important proceedings to a conclusion, so that the safety-related policies being developed can be fully implemented and incorporated into utility practices. Another challenge will be to better define the work of the RASA beyond its support for proceedings, and to communicate our unique value to Commission management and decision makers.

In the coming year, RASA will be supporting the continuing evolution of risk-informed ratemaking as it moves from the Safety Model Assessment Proceeding (S-MAP) directly into general rate cases. Similarly, the rulemaking to develop "best practices" for achieving substantial reductions in methane emissions, and continued refinement of gas utility detection and reporting of methane will reach a major decision point in 2017. After that, RASA staff will oversee compliance plans to ensure that the state's gas system minimizes its contributions to greenhouse gas emissions to meet California's stringent greenhouse gas reduction goals.

RASA is committed to working cooperatively with the newly established Office of Safety Advocates to avoid overlap in responsibilities and to maximize Commission efforts to ensure that safety is adequately addressed in proceedings and decisions that impact utility operations and budgeting.

MAJOR PROCEEDINGS

Safety Model Assessment Proceeding (A.15-05-002, et al)

Phase 2 of this proceeding commenced in late 2016, following an Interim Decision in August 2016 (D.16-08-018). RASA staff continues to organize and facilitate workshops and working groups to explore new models for risk assessment in rate cases, to develop safety performance metrics and accountability reporting. With each successive General Rate Case filing, RASA's involvement in evaluation of safety and risk deepens, and 2017 will see four active rate cases in which RASA will take a leadership role to ensure that safety is fully and adequately considered. In addition, staff expects to support a 2017 Strategic Directive initiative to expand risk-assessment to smaller utilities and possibly other industry areas beginning in 2018.

Gas Leak Abatement OIR (R.15-01-008)

Following an extended period devoted to developing and refining requirements and templates for natural gas leak reporting required by SB 1371, RASA has moved into completing its recommendations for use of Best Practices for methane leak detection, quantification and elimination. The 2016 gas leak reports will serve as the baseline for emission reductions going forward, and the Best Practices will form the basis of utility compliance plans that will supplement Gas Safety Plans starting in 2018. Phase 1 of the rulemaking will reach a major decision in first quarter 2017, followed by Phase 2 work on cost-effectiveness/affordability, refinement of emissions factors and improved quantification of leaks, and development of policies for utilities to conduct pilot programs, new research, and addressing cost-recovery for necessary expenditures.

Investigation into Safety Culture of Pacific Gas and Electric Company and PG&E Corp. (I.15-08-019)

A report from expert witness consultant NorthStar is expected in March 2017, at which point the Commission will determine whether the consultant recommendations warrant further action in the investigation proceeding. RASA continues its role as contract manager, but may hand off participation in a second phase of the proceeding to safety advocacy.

Physical Security of the Electric Supply System (R.15-06-009)

After a year in hiatus, this two-part rulemaking resumed in 2017, with the RASA providing advisory support. This will entail an updating of data on utility security measures previously documents in 2014, revisiting recommendations from a SED report issued in February 2015, and organizing public and confidential workshops to review utility activities and policies to protect critical infrastructure.

Rulemaking to Develop and Adopt Fire-Threat Maps and Fire-Safety Regulations (R.15-05-006)

RASA will continue to provide advisory support for this proceeding, which in 2017 will focus on developing an advanced Fire Map 2 and considering “enhanced” safety policies and regulations that would apply to areas of high fire risk. This will involve organizing workshops and monitoring the progress of a separate technical working group. A recent decision in the proceeding has assigned certain responsibilities to SED, and the RASA will assist in meeting those compliance obligations.

Vehicle Electrification (A.17-01-020/-021/-022)

Utility on January 20, 2017, filed new applications for electrification of vehicles in response to Senate Bill 350. Although the applications referenced safety certification of equipment and training of charging station personnel, RASA will encourage a consistent platform among all the electric utilities to ensure that safety is built into the design and implementation of electric vehicle charging stations and policies.

As new applications, rulemakings and investigations are docketed with the CPUC, RASA staff will review and highlight safety aspects that should be considered, and provide advisory support to help build a record for decisions that fully consider and ensure safety for the public and for utility employees and contractors. RASA might not be the lead supporting entity, but will provide input and explore options for decision makers.

GENERAL RATE CASES

Throughout 2016, RASA has worked closely with utilities and intervenors to develop the framework and substance for new aspects of the Rate Case Plan that are being developed in the S-MAP proceeding (see above) to incorporate a risk-informed approach to General Rate Cases (GRCs). Each GRC exhibits a deeper and more refined set of expectations for utilities to show how they are identifying, prioritizing and addressing safety and operational risks. This effort is unique in utility regulation nationally, and the RASA provides expert analysis and

assistance to bring about successful collaboration to resolve what could be highly contentious issues and proceedings.

- **PG&E 2017 General Rate Case (A.15-09-001)** RASA is assisting in the drafting of a proposed decision, which is expected to be issued in 1st Quarter 2017. Ongoing responsibilities will include working with PG&E on the structure and content of safety spending accountability reports due starting in 2018.
- **SDG&E/SoCal Gas General Rate Case (A.14-11-003/004)** Although the rate case has closed, RASA continues to coordinate with Energy Division rates team to ensure utility compliance with accountability reporting requirements from the final decision D. 16-06-054.
- **SCE 2018 General Rate Case (A.16-09-001)** RASA is issuing an evaluation report of safety and risk aspects of the SCE GRC. Parties have the opportunity to request a workshop to review the report, and will respond to RASA's findings and recommendations in their forthcoming testimony.
- **SDG&E/SoCal Gas Risk Mitigation Assessment Phase (RAMP) (I.16-10-015/016)** This first of its kind proceeding will establish the utilities' proposed safety risk and mitigation portfolio that will be part of their 2019 GRC filed in 2018. RASA is preparing a RAMP evaluation report due February 28, and will also organize a workshop to review its conclusions and recommendations and allow the utilities to further explain their process for assessing mitigation proposals, alternatives and the new "risk-spend efficiency" approach to evaluating safety performance.
- **PG&E's Gas Transmission & Storage/GRC** The next GT&S rate case will be filed in mid-2017, and its first RAMP proceeding will commence in late 2017. As with other rate cases, Risk staff will be providing advisory support to decision makers, and evaluating utilities proposals for risk management, mitigations and safety.

OTHER SAFETY INVESTIGATIONS

Incident investigations and enforcement actions are generally pursued by advocacy sections within SED, notably ESRB and GSRB. In some cases, the RASA is asked to provide advisory support and technical assistance, including the pending **I.16-07-007** investigation into extended power outages in Long Beach in SCE territory.

GAS UTILITY SAFETY PLANS

The RASA has accepted responsibility for review of Gas Safety Plans as codified by Pub. Util. Code §§ 961 and 963, and as ordered by the Commission in D.12-04-010. Each Utility Operator must make any modifications to its Gas Safety Plan identified by the Commission's Safety and Enforcement Division. With recent changes to General Order 112-F, natural gas companies will be filing revised Gas Safety Plans for review and approval. Risk staff is working with the GSRB to review the criteria for evaluation under the revised General Order. Staff is currently devising a work plan for segmenting review of what are expected to be extensive Gas Safety Plan filings in March 2017.

Additionally, the Compliance Plans for Gas Leak Abatement being determined in R.15-01-008 (above) will be incorporated into Gas Safety Plans beginning in 2018, and RASA is actively

developing templates and review policies for those filings in cooperation with the regulated companies and stakeholders.

OTHER COMPLIANCE ACTIVITIES

Evaluation of Risk Mitigation Effectiveness

SED identifies hundreds of violations, safety hazards and risks every year through the audits, inspections, incident investigations, customer complaints, reviews or reports and other activities. When SED identifies potential safety issues, SED works with utilities to ensure that the issues are addressed. Some issues are fixed immediately, but some situations are more complex and require corrective action plans to be put in place for longer-term activities. The groups within SED that identify safety issues are responsible for tracking their resolutions, but there are additional opportunities to go back and review the effectiveness of corrective actions taken. In 2017, RASA staff will work closely with ESRB and GSRB to identify opportunities for RASA to do further analysis of corrective actions that the utilities have been directed to take and the effectiveness of their implementation. RASA will further assess the risks for these actions and work with GSRB and ESRB on the recommended next steps and prioritizing the higher risk work.

Whistle Blower and Safety Flag

RASA staff administers and monitors the CPUC's whistleblower web site, ensuring that confidential complaints about utility practices are routed to the proper entities within the CPUC. In 2016, the Commission added a Safety Flag system for agency employees to report safety concerns and possible violations, and RASA works with the CPUC's Safety Ombudsman to manage that system.

PG&E GT&S Pipeline Audit

D.16-06-056 in the PG&E GT&S 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 or a third party. Three components of the audit:

- To assess whether relevant projects are PSEP-related or GT&S related
- The extent to which costs may have been inflated due to issues including acceleration of PG&E's system remediation work
- The extent to which the work is necessary because PG&E either had not performed it correctly in the past or that it was previously funded but never conducted

RASA staff and Energy Division are working together to review PG&E's documentation for 104 pipeline projects that are subject to the audit. At this point, Risk staff expects the audit will be done by CPUC staff to ensure completion during 2017, and the audit report will become part of the record of the case for PG&E's expected application for rate recovery of reasonable costs, based on the audit findings.

Monthly Safety Metrics

RASA is responsible for compiling the monthly SED report on metrics and activities, called for in the 2015 Safety Action Plan, and which is now publicly updated on the CPUC web site.

LEGISLATIVE LIAISON

All Staff and sections of SED expect that part of their job is to respond to inquiries from the Legislature and support the Office of Governmental Affairs (OGA) in producing timely analysis of pending bills and background for issues that may be considered in legislation. RASA staff, in particular, has served as SED's legislative liaison throughout 2016, and will continue this critical support for the 2017-18 legislative sessions as required.

INDUSTRY OUTREACH

RASA staff are sought-after speakers at regulatory forums and industry conferences and seminars, explaining Commission policies and proceedings related to utility safety and risk. RASA staff will continue to seek opportunities to participate in such industry forums that benefit the CPUC's ability to perform its charter.

RASA is already scheduled to provide a presentation on CPUC policies related to energy storage safety at a national Energy Storage Safety (ESS) Forum in February 2017 that is sponsored by the U.S. Department of Energy. RASA also continues to participate in the ESS working groups to develop standards, codes and best practices for installation and inspection of energy storage systems at residential and commercial sites.

INTRA- AND INTER-AGENCY COOPERATION

In the course of its activities to support many of the above proceedings, the RASA works closely and cooperatively with other SED branches and with other Commission entities (Energy Division, Office of Ratepayer Advocates, Policy and Planning, and the newly created Office of Safety Advocates). RASA also works with Staff at the California Air Resources Board and the California Energy Commission, among other agencies. This is expected to continue in 2017 and beyond.

TECHNICAL REPORTS AND RISK IDENTIFICATION

When it was created in 2011, the Risk Assessment section had a primary task of identifying potential risks to natural gas operations, conducting original research into those issues and producing whitepapers or technical reports to provide recommendations for further action by policy makers. With the more recent emphasis on providing safety advisory support for proceedings and rate cases, these reports have tended to be geared toward advancing specific aspects of the rulemakings or investigations.

During 2017, Staff will work with the SED Deputy Director develop a new work plan for researching safety and risk related topics outside of the context of current proceedings, to identify new areas for Commission consideration and new approaches to resolving difficult

aspects of risk analysis. Below are some possible areas that staff would pursue in 2017 and 2018.

A New Paradigm for Electric Generation Safety Regulations

With a new distributed generation framework evolving throughout the electric industry, existing policies for reliability inspections of electric generation facilities are limited and limiting. New domains that include, small-scale generation, energy storage, interconnected devices, and sensors/monitoring/controls, are inconsistently addressed in the regulatory jurisdictional and safety oversight context.

Trends Toward Utility “Hot Work”

As part of the PG&E Safety Culture investigation, Risk Staff learned that PG&E and other utilities are increasingly performing maintenance on live conductors, to save time and reduce outage inconvenience for customers. This holds implications for safety and training of utility line workers and contractors. A review of national best practices might be a valuable avenue for the RASA to follow.

ALARP 2

Risk staff previously explored the risk-management concept of “As Low as Reasonably Practicable” (ALRP) in the S-MAP proceeding. Further development of ALARP could include explorations of risk tolerance, how to value human consequences, and how ALARP can inform regulatory decisions.

Utility use of contracting and impact on safety

SED has investigated several incidents and non-compliances associated with contractors. While SED does not differentiate between utility employees and contractors for the purpose of compliance and enforcement, contracting does have an impact on operations. In several cases, SED has observed that utilities did not have proper controls in place to ensure that the contractors were performing work safely and in compliance with CPUC regulations. SED would like to partner with Energy Division to explore the utility use of contracting and impact on safety and rates.

Evaluation of National Electric Safety Code

National Electric Safety Code (NESC) is a national industry standard of the safe installation, operation, and maintenance of electric power and communication utility systems. This project will evaluate how NESC could be used by the CPUC to benefit CPUC’s electric and telecommunications safety program.

GAS SAFETY AND RELIABILITY BRANCH

The mission of the Gas Safety and Reliability Branch (GSRB) is to enforce Federal and State natural gas and liquefied petroleum gas regulations by ensuring that California intrastate gas pipeline systems are designed, constructed, operated, and maintained according to applicable safety regulations. GSRB complements its enforcement role by promoting a culture that inspires and institutes the values of natural gas safety best practices by providing

leadership and technical expertise in a variety of forums such as the National Association of Pipeline Safety Personnel technical committees and various other gas safety forums.

PHMSA – STATE PIPELINE SAFETY PROGRAM RELATED ACTIVITIES

The California legislature, through its agreement with the Department of Transportation's Office of Pipeline Safety has empowered the CPUC to enforce minimum federal pipeline standards in addition to CPUC's General Orders and Public Utilities Code for operators of intrastate natural gas and liquefied petroleum gas systems. The CPUC is certified under 60105 of the Federal Pipeline Safety Statutes (49 U.S.C. § 60101 et Seq.)³. The safety standards apply to the design, construction, operations, and maintenance of pipeline facilities. GSRB performs its work under the oversight from the DOT's Pipeline and Hazardous Materials Safety Administration (PHMSA).

The CPUC follows the DOT Grant-in-Aid Program and must adhere to strict application and submission procedures, and exercise good grant management practices to receive the benefits of the federal grant. The scope of the grant is to support up to 80% of the cost of personnel, equipment and activities reasonably required to carry out inspection and enforcement activities of intrastate pipeline facilities as necessary per the applicable chapters of Title 49 of the Code of Federal Regulations. Grant support is provided to SED by the CPUC's Administrative Services Division. Below are some additional requirements of the CPUC certification:

- Response to Program Evaluation (due within 60 days of receiving PHMSA's audit)
- Progress Report (due February 22, 2017)
- Year-end Payment (due March 1, 2017)
- Gas Safety Program Evaluation by PHMSA, scheduled for August 2017.
- Annual update letter to NTSB on recommendations by June 30th of each year.
- Base Grant Application due September 2017
- Attendance at NAPSAR Regional meeting, Coeur d'Alene, ID April 2017
- Attendance at annual NAPSAR National meeting, Cleveland, OH September 2017
- Ensure each inspector has a minimum of 85 inspection days / year

PHMSA Annual Evaluation

Each year, the Gas Safety Program is audited by the PHMSA. The program experienced significant improvement in its 2016 annual evaluation for calendar year 2015 activities. GSRB continuously incorporate feedback from PHMSA and refine Gas Safety Processes and Procedures. There are both follow-up activities from the previous audit CY-2015 and preparation for the next audit CY-2016 which is expected in August

2017. The table below details the areas for continuous improvement in program performance:

³ California does not exercise jurisdiction over municipalities.

PHMSA Feedback from Evaluation & Internal Efforts	
Recommendation	Status
It is still taking several months in some instances to get compliance documents sent to the pipeline operators. Please take action to provide more timely notification to pipeline operators of identified issues and bring those issues to closure.	In 2017 GSRB has now changed timeline targets to timeline expectations. Staff’s performance will be reflected in their Annual Personnel evaluations.
PHMSA found that improvement continues to be needed in getting Operator Qualification (OQ) and Integrity Management (IM) information uploaded into the Federal database in a timely manner.	IA will automatically make these uploads once fully implemented. In the interim period, continue with manual entry and task supervisors quality assurance for the uploading of required OQ & IM forms.
It is important that States verify all pipeline operators’ gas transmission integrity management programs (IMP) are up to date. This would include a review of IMP plans, along with the monitoring of progress on operator assessments and remedial actions in the field. Although the CPUC has the Pipeline Safety Enhancement Program (PSEP) with operators in place, there still needs to be a great deal of improvement in the efforts to ensure IMP plan progress monitoring and field verifications are taking place and documented appropriately	GSRB SUE – Specialist Paul Penney was officially appointed as IMP Process owner. Paul is helping craft the process and developing GSRB procedure for recurring field verifications as well as IM inspection schedules.

GSRB Staff Certification and PHMSA Training

GSRB staff are trained and certified in Oklahoma City, OK by PHMSA. Core courses must be completed within 36 months from completion of the first training course. There are additional courses for integrity management certifications, Liquefied Natural Gas inspections, Operator

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Qualification, Control Room Management, Drug & Alcohol testing, and SCADA. The core training is included in the table below:

Table 1 – PHMSA Core	
Mandatory Course Codes	Mandatory Courses - Title
PHMSA-PL1250	Safety Evaluation of Gas Pipeline Systems
PHMSA-PL1255	Gas Pressure Regulation & Overpressure Protection
PHMSA-PL1310	Plastic and Composite Materials
PHMSA-PL3242	Welding and Welding Inspection of Pipeline Materials
PHMSA-PL3256	Failure Investigation Pipeline Failure Investigation Techniques
PHMSA-PL3293	Corrosion Control of Pipeline Systems
PHMSA-PL3257	Pipeline Safety Regulation Application and Compliance Procedures

In addition, GSRB management agreed to organize a 1 ½ to 2 day basic pipeline safety training for CPUC employees in 2017 at the CPUC's headquarters. PHMSA has agreed to present some of the training concepts, subject to travel authorization. GSRB staff and management will lead this training.

NATIONAL ASSOCIATION OF PIPELINE SAFETY PERSONNEL

GSRB staff participates in several National Association of Pipeline Safety Personnel (NAPSR) technical committees. Technical committees are vitally important for keeping current with changes in the industry and sharing best practices. GSRB management will look for additional technical groups as opportunities present themselves. The following GSRB staff participate in these technical groups:

- Sunil Shori serves on the NAPSR Plastic Pipe Data Committee (PPDC) as well as serving on the Common Ground Alliance Committee (CGA).
- Alin Podoreanu serves on the American Society of Mechanical Engineers (ASME) 31Q Committee.
- Paul Penny serves on the PHMSA Integrity Management Work Group.
- Banu Acimis served on the Gas Piping and Technology Committee (GPTC) in 2016.

INSPECTIONS (AUDITS)

GSRB plans to conduct 69 inspections of the major gas utilities in 2017, including Integrity Management and Operator Qualification inspections. GSRB will also run PHMSA's Inspection Assistant (IA) on a parallel basis for approximately 19 of the inspections. IA is PHMSA's pipeline safety software required on Federal PHMSA inspections and encouraged for

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States. The goal is to monitor this change to IA from our traditional checklist and field notes transcribed into a report to a more uniform, efficient and organized system. In addition, the inputs in IA will be automatically updated into PHMSA’s database. GSRB has assigned a process owner to monitor the development and refinement of this new IA program for inspections and incorporate input from our engineers on the ground. If successful, the full shift to IA will be in 2019. The timeline expectation for completion of Inspection Reports is 60 days. Staff and supervisors will be monitored closely on this timeline expectation in 2017.

2017 Planned Inspections (Audits)	
Week of	Inspection
1/9/2017	Sempra O&M
1/23/2017	Southwest Gas O&M
	SoCalGas T: SJV
1/30/2017	PG&E O&M
	SoCalGas T: South Desert
2/6/2017	PG&E East Bay Division
	SoCalGas T: Basin
	Central Valley Gas Storage
2/27/2017	PG&E Fresno Division
	SoCalGas D: NW – San Fernando Valley
3/6/2017	PG&E CRM
3/13/2017	PG&E Sonoma
	SoCalGas D: SE - OC Coast
3/20/2017	PG&E Topock District
	Gill Ranch Gas Storage
	SoCalGas T: North Desert
3/27/2017	Alpine
4/3/2017	SoCalGas T: Compressor Stations
	Lodi Gas Storage
4/10/2017	SoCalGas T: Compressor Stations
	PG&E North Valley Division
4/17/2016	PG&E DIMP
4/24/2017	PG&E Humboldt Division
	SoCalGas T: SDG&E Trans.
5/1/2017	PG&E Yosemite Division
	SoCalGas T: Coastal
5/8/2017	PG&E Burney District
5/15/2017	PG&E Sacramento Division
	SoCalGas D: NW - San Joaquin Valley

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5/22/2017	PG&E Sacramento Division
	SoCalGas D: SE - Inland South
6/5/2017	PG&E Tracy District & McDonald Island
	SoCalGas T: Producer Sites
6/12/2017	PG&E Peninsula Division
	SoCalGas T: Producer Sites
6/19/2017	SWG N. & S. Tahoe and Truckee Districts
6/26/017	PG&E DeAnza Division
	SoCalGas D: NW - North Coast
7/10/2017	PG&E Mission Division
	SoCalGas D: NW - Mid City LA
7/17/2017	PG&E San Jose Division
	SoCalGas D: SE - Orange North
7/24/2017	PG&E Milpitas District
7/31/2017	SoCalGas D: SE - San Gabriel Valley
8/7/2017	PG&E North Bay Division
	Sempra DIMP
8/14/2017	PG&E San Francisco Division
8/21/2017	PG&E Rio Vista& Los Medanos Districts
	SoCalGas D: NW - Central Coast
8/28/2017	PG&E Hollister District
	D: SDG&E - South
9/11/2017	PG&E Hinkley District
	SoCalGas D: NW - North Valley
9/18/2017	PG&E Stockton Division
	D: SDG&E - North
9/25/2017	SWG D&A
10/2/2017	PG&E Meridian District
	SoCalGas D: SE - Mountain Pass
10/9/2017	PG&E Willow District
	SoCalGas D: NW - South Coast
10/16/2017	D&T: SWG - Victorville
10/23/2017	PG&E Kern Division
	SoCalGas D: SE - Desert Valley
10/30/2017	PG&E Sierra Division
	S: Aliso Canyon
11/6/2017	West Coast Gas

11/13/2017	PG&E Kettleman District
11/27/2017	PG&E Diablo Division
12/4/2017	PG&E Central Coast Division
	D: NW - Harbor Corridor
12/11/2017	Wild Goose Gas Storage
	SoCalGas D: SE - Inland East

INCIDENT INVESTIGATIONS

GSRB investigates more than 200 incidents a year. For latest statistics, please refer to the latest SED Monthly Report. The timeline expectations for completion of incident investigations and associated incident levels are provided below:

Table 4: Incident Levels and Timelines	
Level 1	60 days
Level 2	120 days
Level 3	150 days
Level 4	≥ 180 days

Level 1: The incident did not result in injury, fatality, fire or explosion. The incident may be due to an unrelated event outside of the Operator’s control. The assigned engineer’s investigation should focus on responding to the corresponding decision boxes. The incident report should be a short, simple statement stating the basis for closure (this would typically be a summary of the responses to the decision boxes). The incident should be finalized and approved by the Supervisor within 60 days after assignment to Staff⁴. Examples include: A vehicle damaging a meter-set assembly, a third-party dig-in caused by the excavator’s failure to request for an Underground Service Alert ticket, or fire incidents where the origin of the fire is unrelated to the gas systems, also referred to as “secondary ignition”⁵.

Level 2: The incident did not result in injury, fatality, fire or explosion. The incident may have been reported due to Operator judgment. The incident may have potentially been caused by the Operator’s non-compliance with code requirement. The incident should be closed⁶ within 120 days after assignment to Staff. Examples include: an over-pressurization of a pipeline, over-

⁴ Incidents are assigned by the Supervisors on the day the incident is reported, or on the next business day if received after hours (between 0-3 days). Progress of incident reports will be tracked using the date the incident was reported.

⁵ Title 49 CFR Part 191, under *General Instructions* for filling out Form PHMSA F 7100.1, defines “secondary ignition” as a fire where the origin of the fire is unrelated to the gas systems subject to Parts 191 or 192, such as electrical fires, arson, etc., and includes events where fire or explosion not originating from a gas distribution system failure or release was the primary cause of the gas distribution failure or release, such as a house fire that subsequently resulted in – but was not caused by – a gas distribution system failure or release.

⁶ “Closed” includes approval of incident report and notifying the Operator of the probable violation.

odorization, or an incident resulting in a controlled release or temporary disruption of supply to customers in which the Operator anticipates general public concern.

Level 3: The incident resulted in a release of gas but the incident did not result in injury, fatality, fire or explosion. Operator's non-compliance with code requirement cannot be ruled out. The cause of gas release may have to be determined by laboratory tests and/or further analysis. The investigation should be closed within 150 days after assignment to Staff. Examples include a release of gas potentially caused by construction defect, mechanical failure, or corrosion.

Level 4: The incident resulted in injury, fatality, fire or explosion caused by release of natural gas from the Operator's facilities. A thorough investigation is needed and may take 180 days or more to close after assignment to Staff.

ALSO CANYON INVESTIGATION

SED is conducting an investigation into a leak at Aliso Canyon gas storage facility operated by Southern California Gas Company (SoCal Gas). On October 23, 2015, SoCal Gas crews discovered a leak in Standard Sesnon 25 (SS25) well and it subsequently took 112 days for SoCal Gas to stop the leak. The Division of Oil, Gas and Geothermal Resources (DOGGR) of the Department of Conservation and the CPUC have jurisdiction over the Aliso Canyon storage field. Both DOGGR and the CPUC have launched parallel investigations. DOGGR has primary jurisdiction over the well and is focusing its investigation on the mechanical and operational condition of the well to determine the cause of the well failure and the subsequent natural gas leak.

The CPUC investigation is being conducted by SED. SED's investigation includes an assessment of SoCal Gas's emergency response; design, construction, operations and maintenance activities of the failed well; SoCalGas management of contractors involved in Aliso Canyon, actions both preceding and following the failure that the company took to promote the safety, health, comfort, and convenience of its patrons, employees, and the public at the Aliso Canyon storage field.

In addition, DOGGR and the CPUC jointly directed SoCal Gas to hire an independent third party to perform a technical root cause analysis of the well failure. The third party, Blade Energy Partners, was jointly selected by the agencies. Once the root cause analysis is complete, it will be shared with the agencies and the public. SED will review the root cause analysis and utilize the information as part of the investigation as needed.

UTILITY SELF-IDENTIFIED VIOLATIONS REPORTS

CPUC Decision 16-09-055 changed the reporting criteria from mandatory to voluntary for Utility Self-identified violations (SIVs). GSRB performs an investigation of the highest risk SIVs meeting its internal investigation criteria. SIVs not included as an immediate investigation are included in the annual review and then elevated to an investigation or closed. SIV investigations are also considered for citations where warranted.

MOBILE HOME PARK (MHP) AND PROPANE INSPECTION AND ENFORCEMENT PROGRAMS

The GSRB is responsible for ensuring the safety of mastered metered natural gas systems in mobilehome parks. SED inspects mobilehome parks that take natural gas service through a master meter and then distribute it to park residents through their own system of underground pipes. GSRB also inspects systems where liquefied petroleum gas (LPG), i.e. propane, is distributed from a master tank through underground pipes to multiple customers. GSRB has jurisdiction over Propane Master Tank systems serving two or more customers inside a mobilehome park or 10 or more customers in residential or commercial districts. GSRB currently inspects over 2800 mobilehome park operators and 600 propane operators once every seven years pursuant to a risk-based inspection schedule. Inspections consist of reviewing operation and maintenance records, evaluating emergency procedures, and performing field inspections of the gas or propane systems.

- Conduct at least 360 MHP and 94 propane inspections based on a risk-based inspection schedule
- Administer the Master Meter Transfer Program (began January 1, 2015)
- Billing & collections are currently performed by the CPUC's Fiscal Office

PROCEEDINGS

The following CPUC proceedings are natural gas related in which GSRB is involved in:

- **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. Additionally, SED has a pending application for rehearing that was submitted on September 26, 2016. 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) (Commissioner Aceves) (Advisory):** 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 applications requesting 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. The decisions on the rehearing requests and PG&E's petition are still pending.

- **Order Instituting Rulemaking on the Commission's Own Motion to Revise General Order 58A to Comply with Decision 14-01-034 (R.16-07-006) (Commissioner Randolph/ALJ Wildgrube):** The Order Instituting Rulemaking on the Commission's Own Motion to Revise General Order 58A to Comply with Decision 14-01-034 was issued on July 20, 2016. The Joint Utilities addressed the proposed changes to GO 58A and provided some suggested edits to improve clarity or consistency with earlier legislation and prior Commission decisions. ALJ Wildgrube requested that SED review and provide him advisory support on the Joint Utilities "Simplified Proposal" found in the Opening Comments of San Diego Gas & Electric Company (U 902 M), Southern California Gas Company (U 904 G), Pacific Gas and Electric Company (U 39 G) and Southwest Gas Corporation (U 905 G) on Order Instituting Rulemaking on the Commissioner's Own Motion to Revise General Order 58A to Comply with Decision 14-01-034. On September 7, 2016, SED provided ALJ Wildgrube comments on the Joint Utilities "Simplified Proposal." ALJ Wildgrube, reviewed SED's comments. R.16-07-006 resulted in D.16-11-008. That decision was voted on November 10, 2016 and was issued November 17, 2016. The decision revised GO 58A to adopt new standards for "constituents of concern" found in biomethane. The new standards require biomethane transported in a utility's gas pipeline system meet the gas quality requirements and biomethane constituent specifications in the utility's tariff and consistent with Health & Safety Code section 25421. (GO 58A 7.e.) A utility is required to notify the Commission and commence remedial action if levels of hydrogen sulfide or total sulfur exceed specified limits. (GO 58A 7.a-d.) The utilities are also required at least every five years and no later than January 22, 2019 to review and update the standards. (GO 58A 7.f.) The decision has been published on the Commission's website.
- **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 issued under the gas and electric safety citation programs should be adopted.
 - Both the gas and electric safety citation programs should be modified to make utility reporting of self-identified potential violations voluntary.
 - Under the modified rule, we will not require the utility to notify city and county officials of a self-identified potential violation unless staff requires it.

However, the status of R.14-05-013 became "reopened" when on February 21, 2017, Jerry Hill issued a petition for modification, requesting that the Commission modify the Decision so as to keep in place, rather than weaken, the mandatory reporting requirements that were imposed under ALJ-274.

- **Application of San Diego Gas and Electric Company (SDG&E) and Southern California Gas Company (SoCalGas) to recover costs recorded in their Pipeline Safety and Reliability Memorandum Accounts (PSRMA) (A.14-12-016) (Commissioner Peterman/ALJ Mason) (Advisory):** This proceeding deals with disposition of expenses in the balancing account for pipeline safety work. Pursuant to Decision (D.) 12-04-021, SoCalGas and SDG&E created the PSRMAs to record Pipeline Safety Enhancement Plan (PSEP)-related Operations and Maintenance (O&M) and capital costs. The Application requests review of the capital and

O&M expenditures and requests recovery of the revenue requirement associated with those costs. The Safety and Enforcement Division (SED) performed a technical review examining the decision making process and the reasonableness of the actions and prioritizations proposed in the PSEP. SED examined the likelihood of these actions being achieved as intended, identified possible modification or elimination of elements of the proposals that will not unduly increase public risk, and raises other issues which the CPUC should be aware of. On December 15, 2016, the Decision (D16-12-063) was issued and SoCalGas is authorized to recover \$33,130,567 and SDG&E is authorized to recover \$108,000. This proceeding is closed.

- **Application of Southern California Gas Company (U904G) and San Diego Gas & Electric Company (U902G) to Proceed with Phase 2 of their Pipeline Safety Enhancement Plan and Establish Memorandum Accounts to Record Phase 2 Costs (A. 15-06-013) (Commissioner Picker/ALJ Mikita) (Advisory):** Southern California Gas Company (SoCalGas) and San Diego Gas & Electric Company (SDG&E) submit this application (Application) for authorization to proceed with Phase 2 of their Pipeline Safety Enhancement Plan (PSEP) and to establish memorandum accounts for the purpose of recording Phase 2 planning and engineering design costs for subsequent review and approval by the Commission. The Safety and Enforcement Division (SED) formerly Consumer Protection and Safety Division (CPSD) performed a technical review examining the decision making process and the reasonableness of the actions and prioritizations proposed in the PSEP. CPSD examined the likelihood of these actions being achieved as intended, identified possible modification or elimination of elements of the proposals that will not unduly increase public risk, and raises other issues which the CPUC should be aware of. On December 1, 2016, Commission issued the Decision 16-12-009 that granted SoCalGas and SDG&E request for authority to defer Gas Transmission Pipeline Projects and Closed the Proceeding. On December 1, 2016, the Decision 16-12-022 issued and SoCalGas and SDG&E are authorized to have a total award \$61, 080.91. On the same date, the Decision 16-12-072 was issued for order correcting error and the proceeding was closed.
- **Assessment of the Long-term Viability of Natural Gas Storage Facilities (I.17-02-002) (Commissioner Randolph/ALJ Semcer) (Advisory):** The well blowout (Standard Sesnon 25) at Aliso Canyon Storage field in the Aliso Canyon Storage Field resulted in an unintentional release of natural gas into the atmosphere for many months. This gas leak incident continued for nearly four months. In the interim, residents of nearby communities complained of health issues and alleged their exposure to natural gas release as the cause. The Governor of California declared a state of emergency on January 6, 2016, and thousands of households were evacuated and housed in nearby cities. Senate Bill 380, Pavley. Natural gas storage bill repealed Section 715 and added Section 714 to the Public Utilities Code to require that the Public Utilities Commission (Commission), no later than July 1, 2017, shall open a proceeding to determine the feasibility of minimizing or eliminating use of the Aliso Canyon natural gas storage facility located in the County of Los Angeles while still maintaining energy and electric reliability for the region. The Commission was required to consult with State Energy Resources Conservation and Development Commission, the Independent System Operator, the local publicly owned utilities that rely on natural gas for electricity generation, the Division of Oil, Gas, and Geothermal Resources

in the Department of Conservation, affected balancing authorities, and other relevant government entities, in making its determination. California Public Utilities Commission, in consultation with the Division of Oil, Gas and Geothermal Resources, the California Air Resources Board and the California Energy Commission, requested the California Council on Science and Technology (CCST) to conduct an independent study in accordance with the Provision 14 of the Governor's Proclamation of a State Emergency. This study shall assess the long-term viability of natural gas storage and shall address the operational safety and potential health risks, methane emissions and supply reliability for gas and electricity demand in California, and the role of storage facilities in the long-term greenhouse gas reduction strategy.

- **Pipeline Open Access Rules and Related Enforcement Provisions for Biomethane (R.13-02-008) (Commissioner Rechtschaffen /ALJ Wong) (Advisory):** The AB 1900, Public Utilities Code Section 784 requires the California Public Utilities Commission (Commission) to adopt common carrier pipeline access rules to ensure that each gas corporation provides nondiscriminatory open access to its gas pipeline system to any party for the purposes of physical interconnecting with the gas pipeline system and effectuating the delivery of gas. The purpose of the law was to increase the use of biomethane in California, thereby reducing the greenhouse gas emission. The Commission issued several decisions on how to implement the AB 1900's directive. In the Decision 14-01-034 on January 16, 2014, the Commission noted there was insufficient scientific evidence to justify lowering the minimum heating value for gas entering the public gas pipeline in California. Interested in obtaining a thorough review of available scientific information relating to incorporating biomethane into public gas pipelines, the Office of the Governor requested the California Council on Science and Technology (CCST) to prepare a report evaluating options for delivering biomethane to public gas pipelines and potential cost impacts and safety. The role of Safety Enforcement Division (SED) is to provide advisory support in preparing the scope of work for the CCST's study as it relates to safety and public health impacts. As such, SED reviewed the scope of work prepared CCST and provided comments on the key issues related to public health and pipeline safety. At this point, CCST has received comments from SED and other interested parties and has revised the scope of work accordingly.
- **In The Matter of the Application of San Diego Gas & Electric Company (U902G) and Southern California Gas Company (U904G) for a Certificate of Public Convenience and Necessity for the Pipeline Safety & Reliability Project. (A.15-09-013) (Commissioner Randolph/ALJ Kersten) (Advisory):** The project described in the application, the Pipeline Safety & Reliability Project, involves replacing the existing 1949 vintage pipeline (Line 1600) with a new and larger diameter gas transmission pipeline (Line 3602). SDG&E proposed to install line 3602 in a separate right-of-way in place of the existing Line 1600 and convert the existing Line 1600 to a distribution main line at a substantially reduced pressure. SED requested and reviewed the results of SDG&E's In-Line inspection data. The ILI inspection data revealed the presence of hook cracks in the pipeline. The Commission immediately issued a safety directive to SDG&E to do four things including reduce the Maximum Allowable Operating Pressure (MAOP) from 800 to 512 psig and the Commission subsequently issued resolution SED-1 to SDG&E. If Commission approves, Line 3602 will be installed and Line 1600 will be converted to a distribution main with reduced pressure from

its existing operating pressure and no hydrostatic test will be required. The Safety and Enforcement Division (SED) performed a technical review of available records related to Line 1600 from the pipeline safety and integrity perspective. SED is performing advisory role on all safety and reliability related matters on this proceeding. This proceeding is still ongoing. Energy Division is in discussion with MCAS Miramar about the environmental document to be prepared and next steps prior to holding public meetings.

- **PG&E Rule 1 violation OII (I.15-11-015) (Commissioner Picker/ALJ Mason) (Advocacy):** The Order Instituting and Ordering Pacific Gas and Electric Company to Appear and Show Cause Why It Should not be Sanctioned for Violations of Article 8 and Rule 1.1 of the Rules of Practice and Procedure and Public Utilities Code Sections 1701.2 and 1701.3 was issued on November 19, 2015. CPUC opened this investigation into PG&E's failure to timely report ex parte communications and for engaging in improper ex parte communications in violation of Article 8 of the Rules of Practice and Procedure (C.C.R. Title 20, Div. 1, Ch. 1, Sections 8.1 et seq.), Rule 1.1 of the Rules of Practice and Procedure, and Public Utilities Code (Pub. Util. Code) §§ 1701.2(c) and 1701.3(c) related to eight proceedings. Additionally, PG&E is ordered to show cause why it should not also be found to have violated the prohibition on ex parte communications in the Pipeline Investigations, as alleged by the City of San Bruno in the Pipeline Investigations. Decision 16-11-023 was issued on November 10, 2016 which extended the statutory deadline in this proceeding to May 17, 2017. The current status of the proceeding is active.

SPECIAL PROJECTS

Post San Bruno PG&E Special Audits

Decisions from the San Bruno Investigations (D. 15-04-024) require SED staff to perform several audits to ensure that PG&E is complying with the Decisions. The main audits are:

- PG&E MAOP Audit (2nd Quarter 2017)
- PG&E Mariner Audit (4th Quarter 2017)
- PG&E Recordkeeping Audit (4th Quarter 2017)

Mobile Home Parks Pilot Program

CPUC decision D.14-03-021 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.

NTSB recommendations on Integrity Management

In early 2015, NTSB issued a report on transmission pipeline integrity management with 22 applicable recommendations. GSRB will continue to consider the best way to implement these requirements in our IM program and determine which items require a Commission action.

Natural Gas Storage

Southern California Gas Company's (SoCalGas) Aliso Canyon natural gas storage facility in Los Angeles County reported a natural gas leak from one of its storage wells (Standard Sesnon 25)

on October 23, 2015 and halted the gas leak on February 12, 2016 and Division of Oil, Gas, and Geothermal Resources confirmed it sealed on February 15, 2016. This gas leak has been estimated by experts to be the largest documented natural gas leak in the U S. This leak was halted on February 12, 2016 using a relief well (P39A). CPUC participated in the effort to halt the leaking SS-25 Well and issued safety directives to SoCalGas and all the other Gas Storage operators in California to conduct gas leak survey of its entire storage facilities in CA. In addition Safety and Enforcement Division (SED) directed SoCalGas to make safe the SS-25 well and release control of the SS-25 well site to SED for an independent failure investigation and Root Cause Analysis investigation. SED and Division of Oil, Gas, and Geothermal Resources (DOGGR) jointly evaluated three internationally recognized Root Cause Analysis (RCA) firms, then selected Blade Energy Partners (Blade) out of the three firms to perform the independent RCA investigation of the SS-25 well blow-out and directed SoCalGas to retain Blade for its services. SED's parallel failure investigation of the SS 25 well includes data analysis, review personnel actions before the event, company's safety culture, company's operation and maintenance practice. SED will incorporate relevant data from the RCA investigation into its final SS-25 well failure investigation report and then follow up with enforcement action if warranted by the facts of the investigation.

The Public Utilities (PU) Code Section 714, required CPUC to open a proceeding no later than July 1, 2017, to determine the feasibility of minimizing or eliminating use of the Aliso Canyon natural gas storage facility while maintaining energy reliability for the region.

DOGGR issued an Emergency Regulations that mirrored the Governor's proclamation that was issued on February 5, 2016. The Emergency Regulations that DOGGR issued in 2016, provided the framework for its new Proposed Permanent Regulations. The draft of the proposed new permanent regulation was published on July 2016, and it's progressing through DOGGR's rulemaking process. The final permanent regulation is expected to be in place third quarter of 2017. In addition, DOGGR Safety Review team per DOGGR Supervisor's Emergency Orders, are witnessing the two Batteries of Tests that the operator is mandated per SB 380 to perform prior to resuming gas injection at the Aliso canyon Storage field. This safety review inspection is running concurrently with DOGGR's safety investigation team's failure investigation. The U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration (PHMSA) issued an interim final rule (IFR) on December 14, 2016 that revised the Federal pipeline safety regulations (49 CFR Part 192) to address safety of underground natural gas storage facilities that includes wellbore tubing and casing well integrity.

Enforcement of 811 "Call before you dig" program

Excavation damages are the most frequent cause of incidents on the natural gas pipeline system. The state of California was audited by PHMSA in April 2016 and deemed inadequate with respect to enforcement on non-utility excavators. In 2016 the State of California established the concept of the "California Underground Facilities Safe Excavation Board" to enforce the provisions California's One Call Law. The Board member still need to be appointed by the Governor and regulations must be promulgated. Both the CPUC and the State Fire Marshall will lose points after 5 years if our status is not updated by PHMSA to adequate.

ELECTRIC SAFETY AND RELIABILITY BRANCH

The mission of the Electric Safety and Reliability Branch (ESRB) is to enforce state statutes and regulations regarding the safety and reliability of electric and communication facilities in California, to ensure that the facilities are operated and maintained in a safe and reliable manner to protect and promote the public health and safety, and to facilitate an environment inside and outside of the Commission that increases the safety and reliability of these facilities.

ESRB IN TRANSITION

This will be a year of big changes for ESRB, as we rebuild to fill staff vacancies while meeting an increasing work load. ESRB has 27 authorized positions; however, 10 of those positions were vacant at the beginning of 2017. In order to ensure the safety and reliability of electric and communication facilities in California, our focus in 2017 will include the following tasks:

- Hiring and training staff. As described in more detail below, ESRB's current resources hinder its ability to meet its mission and goals. During 2017, ESRB plans to fill its current vacancies and also is seeking funding for additional critical positions. A comprehensive training program for new ESRB staff also will be needed.
- Major proceedings. ESRB will continue to participate in major proceedings at the Commission; improved staffing levels will enhance our ability to advocate for rule changes where needed to promote safety and reliability.
- Incident investigations. ESRB will continue to thoroughly investigate safety incidents; additional staffing will allow us to determine in a more timely manner whether the utility or Generating Asset Owner violated any GO or other regulatory or statutory requirements.

Due to the staffing challenges, ESRB will need to be very careful about prioritizing the use of staff time; the branch may not be able to accomplish all of the things that we would like to do in 2017.

HIRING AND TRAINING STAFF

A primary effort for ESRB in 2017 will be the hiring of new staff and enhanced training of both new and current staff. In 2017, the ESRB program will continue to grow in order to meet increasing demand. In addition to filling the vital staff vacancies, ESRB is seeking to increase its staffing level by nine additional staff members in 2017 through two Budget Change Proposals. With the additional staff, ESRB plans to increase its regional, on-the-ground presence throughout California, achieve full roll-out of the new citation programs for electric and communication providers, increase the number of inspections and audits of electric and communication providers, improve its risk assessment capabilities, and implement new statutory provisions regarding utility wildfire mitigation plans.

As new staff is hired, they will be onboarded through the CPUC People Partners Onboarding program. Unlike GSRB, there is no federal or industry standard for certifying ESRB staff and

engineers. To facilitate the development and productivity of new hires, ESRB management will expand and enhance its training and mentorship program so that the new ESRB safety staff are able to excel at their jobs.

PRIORITY RULEMAKINGS AND RELATED ACTIVITIES

In 2017, ESRB will continue its participation in several high-priority rulemakings and related activities, in which the Commission is considering significant changes to our safety programs for electric and communication facilities providers.

R.16-12-001: Consideration of Changes to Rule 18 in General Order 95 (President Picker and ALJ Kenney)(Advocacy): In response to a petition filed by SED, the Commission opened this rulemaking to consider whether to eliminate Rule 18, as SED has advocated, or alternatively adopt amendments to Rule 18. Rule 18 allows electric and communication providers up to 59 months to correct violations of GO 95, or to forgo corrections altogether if the provider deems the violation to be an “acceptable safety and/or reliability risk.” While SED supported adoption of Rule 18 initially, in practice the rule has hindered SED’s ability to compel utilities to correct safety hazards, to the detriment of public safety. The procedural schedule has been suspended to accommodate settlement discussions; a prehearing conference is scheduled for April 11, 2017.

Rulemaking (R.) 15-05-006 (successor to R.08-11-005): Fire Safety Rulemaking (President Picker and ALJs Kenney and Kao) (Advocacy): These rulemakings are in response to the devastating wildfires of 2007. R.15-05-006 is developing a fire-threat map (Fire Map 2) to identify high fire-threat areas in California, and will consider adoption of additional fire safety regulations. The expected completion date is December 2017. In January 2017, the CPUC adopted an intensive two-track work plan for completion of Fire Map 2 and adoption of additional fire safety regulations by the end of 2017. Timely completion of this rulemaking is a priority for the CPUC and therefore ESRB will be prioritizing staffing to ensure our adequate participation.

Pole Management OIR and Pole Census OII (President Picker) (Advisory): The proceedings addressing pole management issues are being developed by CPUC staff. The latest vision is that the purpose will be to examine the status of databases and database applications in California regarding pole and conduit information, including pole location, attachments, material, ownership, and management; and the implications of such data management for safety and access. The Pole Management OIR will be consistent with the Competition OII Ordering Paragraph 5 and will address pole access issues to include joint owned poles, leased space and right of ways. The Pole Census OII will create a pole census database, including a geographic location of where each pole is located, who is using the pole, what entities have attached, and how they are managed.

R.14-05-001: Applicability of Right-of-Way Rules to Commercial Mobile Radio Service Carriers (Commissioner Randolph and ALJ Kenney) (Advocacy): D.16-01-046 amended Commission rules, including GO 95, to allow CMRS carrier nondiscriminatory access to public utility infrastructure, including poles, and to ensure that CMRS facilities are constructed and

maintained in a safe manner. The decision instructed SED to evaluate whether certain GO provisions regarding pole loading calculations, interference with fall-protection gear, and pole-top extensions should be revised and to develop proposed rules. ESRB has undertaken the directed evaluations including filing a petition for rulemaking on these limited issues.

R.15-06-009: Physical Security of the Electric System (Commissioner Rechtschaffen and ALJ Kelly) (Advocacy): Phase I will address physical security for electric supply systems in California. Additional phases will address disaster and emergency preparedness plans for electric utilities and regulated water companies. ESRB has filed comments and is waiting for a scoping memo for further guidance in the proceeding.

Other Rulemakings: ESRB will continue to monitor proceedings in which safety issues might arise, and may take an advocacy or advisory role as needed. Current proceedings in which ESRB acts in an advisory role include:

- R.15-03-011: Electric Storage Procurement
- R.14-08-013: Distributed Energy Resources
- R.14-07-002: Net Energy Metering
- R.12-11-005: California Solar Initiative

ORDERS INSTITUTING INVESTIGATION

The Commission currently has two Order Instituting Investigation (OII) proceedings pertaining to ESRB incident investigations. ESRB is a party (an advocacy role) in these cases and these cases will remain a priority for ESRB staff until the proceedings are concluded.

Investigation (I.) 16-07-007 (President Picker and ALJ Cooke) (Advocacy): On July 15, 2015, fires and explosions in underground electric vaults caused power outages that affected thousands of Long Beach customers for several days. On July 30, 2015, another fire occurred in an underground vault leading to additional outages. The procedural schedule in this OII has been suspended and settlement discussions are underway.

Investigation (I.) 15-11-006 (Commissioner Randolph and ALJ Kim) (Advocacy): On September 30, 2013, a subcontractor was fatally injured in an SCE underground vault in Huntington Beach. ESRB and SCE have entered into a settlement agreement in this proceeding. If the settlement is approved, SCE will pay a \$2.01 million penalty, to be deposited to the General Fund of the State of California, and will make significant agreed-upon enhancements to its contractor safety program, at shareholder expense. The settlement agreement was filed on December 15, 2016, and is pending Commission consideration.

INCIDENT INVESTIGATIONS

Electric utilities and Generating Asset Owners are required to report to the Commission any incidents that meet specified criteria to be classified as a “reportable incident.” These incidents typically are reported via a Commission online safety incident and emergency reporting portal available at <http://www.cpuc.ca.gov/emrep/>.

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ESRB investigates all reportable incidents and responds to all customer inquiries and complaints. Based on historical volumes, electric utilities can be expected to report about 125 incidents in 2017 and Generating Asset Owners can be expected to report about 5 incidents. While there are fewer incidents at generation facilities, the investigations of such incidents tend to be relatively complex. ESRB investigated or otherwise addressed 209 customer inquiries and complaints in 2016.

The following table summarizes the status of pre-2017 reportable incidents as of March 15, 2017:

Year	Number of reportable incidents	Incidents Open				
		Total	Level 4	Level 3	Level 2	Level 1
2015	123	15	9	4	1	1
2016	110	69	25	23	17	4

ESRB has a goal to close by July 1, 2017 all Level 1 and Level 2 incidents that occurred prior to January 1, 2017, and to close the remaining pre-2017 Level 3 and Level 4 incidents as quickly as feasible thereafter.

ESRB classifies reportable incidents into four categories, as follows:

LEVEL	Criteria for incidents reported by electric utilities	Criteria for incidents reported by Generating Asset Owners	Target Processing Times
1	Incidents that don't meet Level 2, 3, or 4 criteria	Incidents that don't meet Level 2, 3, or 4 criteria	60 days
2	A power interruption not due solely to outside forces	Incident occurred during an electric Alert, Warning or Emergency (AWE)	120 days
3	Damage estimated to exceed \$50,000 and caused, at least in part, by the utility or its facilities	Significant outage that was due, at least in part, to plant equipment and/or operations	150 days
4	A fatality or injury that required hospitalization and was caused, at least in part, by the utility or its facilities	A fatality or injury that required hospitalization and was caused, at least in part, by plant equipment and/or operations	180 days or more, depending on circumstances

ESRB prepares an incident report for each investigation, including an assessment of whether the utility or Generating Asset Owner violated any General Order or other regulatory or statutory requirements. ESRB typically notifies the utility or Generating Asset Owner of any violations and requires that a corrective action plan be submitted to ESRB. Notable incident investigations that are underway include the following:

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- October 11, 2016 incident at an SCE substation in Torrance
- October 18, 2015 Moss Landing transmission tower failure
- September 9, 2015 Butte fire

AUDIT AND FACILITIES INSPECTION PLANS FOR 2017

ESRB conducts audits and related facilities inspections of electrical corporations, municipal electric utilities, electric cooperatives, Communication Infrastructure Providers, and Generating Asset Owners. ESRB's audit and facility inspection activities will be curtailed somewhat during 2017, in recognition of current staffing limitations and that a focus on staff hiring and training is necessary in 2017 in order to improve ESRB's audit/inspection program in subsequent years.

ESRB has an internal goal of auditing each district (or equivalent) of electricity providers and Communication Infrastructure Providers at least once every five years, and has commenced an effort to incorporate risk analysis to improve the effectiveness of its audit/inspection program. ESRB's requested staff enhancements would provide resources needed for an in-depth study of trends and patterns in violations and safety incidents, which will assist ESRB in scheduling audits and inspections more effectively based on identified risk factors. Until a more detailed assessment is undertaken, ESRB has considered known risk factors including history of safety incidents, violations, reliability concerns, and poor performance in a previous audit, in selecting electric utility and Communication Infrastructure Provider districts for audits/inspections during 2017.

ESRB's planned 2017 audits/inspections of utility and Communication Infrastructure Provider (CIP) districts are listed below:

ESRB Facility Audits/Inspections Held or Planned for 2017		
Week of:	Type of Audit/Inspection	Utility/CIP District
2/6/2017	Distribution	SCE – Blythe
2/27/2017	Distribution	SCE – Ridgecrest
3/13/2017	CIP	Charter – Riverside
3/13/2017	Distribution	Sacramento Municipal Utility District
3/13/2017	CIP	AT&T North – Sonoma
3/20/2017	Distribution	SCE – Yucca Valley
3/20/2017	Distribution	PG&E – Yosemite
4/3/2017	Distribution	Redding Electric Utility

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4/3/2017	Distribution	PG&E – Diablo
4/17/2017	Distribution	SCE – Kernville
4/17/2017	CIP	Comcast – Delta Valley
4/24/2017	Distribution	LADWP – Lincoln Heights
5/15/2017	Distribution	SCE – Monrovia
5/22/2017	Distribution	Needles
6/5/2017	Distribution	SCE – Long Beach
7/10/2017	Distribution	Liberty Utility – Lake Tahoe
7/10/2017	CIP	T-Mobile Wireless – Bay Area
9/18/2017	Distribution	PacifiCorp – Modoc County
10/2/2017	CIP	Sierra-Tel – NE Fresno
11/13/2017	Distribution	SCE – Thousand Oaks
12/4/2017	Transmission	SCE – Northern Areas

ESRB will undertake an audit/inspection of the Mandalay Generating Station during the week of March 15, and plans three additional audits/inspections of Generating Asset Owner facilities this year, which are not yet scheduled. ESRB will consider risk factors such as age of the facility and history of safety incidents and forced outages in selecting generating facilities for audits/inspections.

In addition, ESRB will complete work remaining from earlier audits/inspections:

- For five electric facilities audits and one Communication Infrastructure Provider audit performed prior to 2017, audit reports have been sent to the audited entity. Responses from two entities are due by late February 2017 and the others are due by mid-March 2017. The responses will be reviewed and additional follow-up work will be conducted as required.
- The 2015 Redondo Beach power plant audit report was sent to the Generating Asset Owner and the audit response letter with a corrective action plan was received and evaluated. Most corrective action items were completed in 2016 and the remaining outstanding items will be monitored and verified in 2017.

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- The 2015 Inland Empire power plant audit report was sent to the Generating Asset Owner and the audit response letter with a corrective action plan was received and evaluated. Most corrective action items were completed in 2016 and the remaining outstanding items will be monitored and verified in 2017.
- The 2016 Colusa power plant audit report was sent to the Generating Asset Owner in October 2016. The audit response letter with a corrective action plan was received in November 2016 and is being evaluated.

ENFORCEMENT ACTIVITIES

Incident investigations and facility audits/inspections include an assessment of whether the electric utility or Generating Asset Owner violated any General Order or other regulatory or statutory requirements. ESRB typically notifies the utility or Generating Asset Owner of any violations and requires that a corrective action plan be submitted. ESRB then monitors and works with the utility or Generating Asset Owner to ensure that the violations are corrected.

SED was recently given authority to issue citations to electric utilities (authorized by Commission Decision (D.) 14-12-001) effective January 1, 2015). The natural gas and electric safety citation programs were then combined by D.16-09-055 effective September 29, 2016. And a new citation program for Communication Infrastructure Providers was authorized by Commission Resolution SED-3 effective December 1, 2016. In addition to assessing monetary penalties, a citation requires the utility or Communication Infrastructure Provider to correct the identified violations. Two electric citations were issued in 2015 and one was issued in 2016. It is likely that SED will issue several citations to electric utilities and Communication Infrastructure Providers during 2017, as it works to fully implement the electric utility and Communication Infrastructure Provider citation programs.

INVESTIGATION OF OUTAGES AT POWER PLANTS

Pursuant to Public Utilities Code Section 761.3, ESRB enforces standards for the maintenance and operation of power plants owned by Generating Asset Owners in California. In prior years, ESRB has investigated and inspected outages at large natural gas-fired power plants (plants whose capacity is 50 megawatts (MW) or more). Due to stabilization of the electric market over the past decade and the increased reliance on renewables, ESRB is changing its outage reporting and monitoring procedures.

First, because renewable resources are an increasingly critical part of the generation mix, the outage reporting requirements will now apply to large renewable facilities in addition to large natural gas-fired power plants. Second, outage reporting requirements will be limited to (1) forced outages or derates of at least 50 MW that last at least 24 hours and (2) planned outages or derates of at least 50 MW that last at least 72 hours.

These new procedures will allow ESRB to monitor generation outages more effectively, and to perform better trend analyses. ESRB will use this information to help identify problematic patterns of forced outages, including plants in transmission-constrained or other critical areas, and to target power plant audits more effectively.

OTHER ACTIVITIES

SB 1028 (Hill) “Electrical corporations: wildfire mitigation plans”: SB 1028 (Hill) added Sections 8385 – 8387 to the Public Utilities Code, requiring electrical corporations, publicly owned electrical utilities, and electrical cooperatives to prepare wildfire mitigation plans. The Commission (for electrical corporations) or the governing board (for publicly owned electrical utilities or electrical cooperatives) must review and comment on the submitted plans. The Commission also must monitor and audit the effectiveness of electrical corporations’ wildfire mitigation plans and determine if each electrical corporation is satisfactorily complying with its wildfire mitigation plan. ESRB, CAL FIRE, Cal OES and the regulated utilities have initiated coordination ahead of the Commission’s implementation of this new statutory requirement. This includes the drafting of a Memorandum of Understanding between the Commission and CAL FIRE to facilitate roles and responsibilities in executing SB 1028.

Ongoing monitoring of remedial actions related to Malibu Canyon fire: The Commission adopted several decisions in I.09-01-018 regarding the 2007 fire in Malibu Canyon, which ESRB is monitoring:

- D.12-09-019: AT&T, Sprint, and Verizon Wireless agreed to upgrade certain poles in Malibu Canyon, have an independent contractor perform a random survey of poles with AT&T, Sprint, and/or Verizon attachments, and bring any problematic poles into compliance. Repairs to the poles along Malibu Canyon Road are still pending, due in part to delays in receiving needed permits from local government agencies.
- D.13-09-026: NextG (now Crown Castle) was ordered to have a safety audit performed by an independent contractor to determine the maximum foreseeable winds in Malibu Canyon and to upgrade its facilities to meet the wind loads. Crown Castle has completed the work and SED plans to finalize and post a report during the first quarter of 2017.
- D.13-09-028: SCE is required to perform pole loading assessments and remediation work on poles in the Malibu area. SCE is still performing the remediation work. SED must file a report no later than 6 months after the final bi-monthly report from SCE.

Compliance filings: Electric facility and generating plant owners must submit several filings in compliance with General Order requirements. ESRB tracks timely submission, reviews documents for completeness and accuracy, and updates databases with the information provided. Filing requirements include the following:

General Order	Entities	Filing requirements	Due dates
GO 165	Owners of electric distribution and transmission facilities	Number of inspections by type and the number of inspections not completed during the prior year.	July 1 of each year
GO 166	PG&E, SCE, SDG&E, PacifiCorp, NV Energy (formerly Sierra Pacific)	Emergency response plan, and prior year compliance with GO 166 standards for operation, reliability, and safety during emergencies and disasters	October 31 of each year
GO 174	Owners of substations not	Summary of inspection program, including any	July 1 of each year

	subject to CAISO operational control and/or FERC reliability standards	changes, and summary of completed and past due inspections during the prior year.	
GO 167	Generating Asset Owners with facilities \geq 50 MW, with certain exclusions	Maintenance plan summary and list of supporting documents for each maintenance plan standard	February 1 of odd-numbered years
		Verified statement regarding compliance with logbook standards	February 1 of odd-numbered years
		Operations plan summary (including emergency plans) and list of supporting documents for each operation standard	February 1 of even-numbered years

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.

Power Plant Fact Sheets: ESRB maintains profiles of over 50 large natural gas-fired electric generators, which contain ownership information, technology and configuration, operating parameters, regulatory constraints, and more. In 2017, ESRB plans to contact each generator to update the profiles. The plant profiles are used within SED and are shared with Energy Division staff and others within the Commission to assist in their analyses and studies.

Coordination and cooperation: ESRB will continue to pursue increased coordination with the Energy Division, the CEC, CAISO, CalFire, CAL OES, CalOSHA, and other entities to improve the efficiency of our operations and activities. ESRB also observes and participates in utilities' emergency preparedness exercises around the state.

OFFICE OF RAIL SAFETY

The mission of the Office of Rail Safety is to protect the public, rail workers, and the environment from unsafe rail operations and practices in the state. The Office of Rail Safety strives to proactively and effectively enforce state and federal laws, regulations, orders, and directives relating to transportation of persons or commodities by rail.

ROGER CLUGSTON: DEPUTY DIRECTOR'S VISION

During 2016, I began making changes that will affect the Office of Rail Safety organization, and thus improve its operational efficiency. These changes, along with a focus on internal training and effective cross branch communication and sharing of human resources, will allow for a more cohesive and supportive work environment for all three branches.

These are ongoing tasks that we are addressing in 2017 to improve our safety culture and effectiveness:

- *Regionalization plan;*
- *Developing ways to utilize human resources across all branches of Office of Rail Safety;*
- *Creating leadership opportunities to develop future leaders;*
- *Creating a mentorship program to capture institutional knowledge;*
- *Cross discipline and cross branch training to improve rail industry knowledge and skill;*
- *Internal General Order and Public Utilities Code training to improve knowledge, proper application in the field and enforcement options;*
- *Continuing to "look beyond the regulations."*

Here are some short references regarding gains made by Office of Rail Safety from the 2016 Work Plan and broad goals for Office of Rail Safety in 2017. More specific goals and tasks are detailed in the individual branch work plans that follow.

My first goal in 2016 was to focus on specific steps to make improvements in the overall effectiveness of the Office of Rail Safety. It is imperative in promoting rail safety values and implementing a positive safety culture change within Office of Rail Safety to continue with the proactive programs/projects discussed in last year's work plan, and to set new goals for 2017. These programs and goals include:

- *Risk Management program, utilizing the Risk Management Status Report, specifically: looking beyond the regulations*
 - *Progress has been made coaching those new to the idea and getting them onboard with the program; more formalized Risk Management Status Report training and mentoring forthcoming in 2017.*
- *Railroad Bridge Evaluation Program*
 - *We increased the number of bridge inspections and will increase our inspection activity again in 2017, based on bridge assessed risk reprioritization. 2017 will also see rail transit bridges included in the program.*

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- *Create proactive special focus groups, based off the example of the Crude Oil Reconnaissance Team*
 - *We will be initiating a railroad tunnel risk evaluation project in 2017.*
- *General Order Training Program*
 - *Significant progress has been made, and the program will begin training staff in February 2017.*
- *Develop future leaders for all three Branches, through mentoring and delegating responsibilities to those who desire to step up and perform beyond their regular assignments*
 - *This is an ongoing endeavor, but we have begun in earnest to recruit those individuals willing to step up and participate beyond their duty statements.*

My second goal in 2016 was to remove the stovepipes from all three Branches and focus on utilizing the talents and skills of all Office of Rail Safety staff. To do so required altering the mindsets of managers, supervisors, and office and field staff to think about Office of Rail Safety in a different light. That is, to see it as one organization that holds three specialty groups: railroad, rail transit and grade crossing experts. That has been set into motion and will be further enhanced in 2017. For example:

- *Empowering managers and supervisors, as well as inspection staff, to communicate, assist and develop more open dialogue and partnering with all Public Utilities Regulatory Analysts, field and engineering staff, and risk assessment staff - regardless of which branch a person might be assigned to*
- *Encouraging PURAs to participate in staff meetings away from their normal duty stations and have them participate in projects where their unique individual skill sets can be utilized more effectively*
- *Encouraging and promoting cross branch participation in inspection activities and staff meetings*
- *PURAs to take part in cross branch and General Order training, which will require learning more about how all three branches function and thus be able to assist each other in finding solutions for problems and streamlining practices and procedures*
- *Empowering branch managers and supervisors to actively recruit new leaders*
- *Empowering branch managers and supervisors develop effective approaches to delegate responsibilities with those individuals who desire to take leadership roles*

My third goal was to focus on more comprehensive General Order and Public Utility Code training for all ORS inspection staff through a new initiative called the General Order Training Program. This program is designed to compel inspection staff to become more engaged during the training exercises. This is achieved by having smaller, more intimate groups participating in the exercises, allowing for more personalized training and thus achieving a better understanding of the regulations and how they are applied. General Order Training Program will be rolled out over three days in February 2017.

- Roger Clugston, Deputy Director, Office of Rail Safety, SED

RAIL SAFETY RISK MANAGEMENT AND HIGH SPEED RAIL

The Risk Management Team (RMT) was formed to analyze potential risks within the railroad and rail transit industries operating in California. It is comprised of three Senior Utility Engineers and one Public Utilities Regulatory Analyst. Below are the main RMT efforts planned for 2017.

INVESTIGATE RAIL HEAD WEAR LOSS

The RMT will work with ORS track inspectors to evaluate the risks of rail head wear loss in areas of high tonnage freight traffic. Using visual observations and rail geometry data supplied by the railroads, the RMT and ORS inspectors can issue RMSRs to railroads recommending that they replace rail that has worn beyond safe limits, thereby reducing the likelihood of excessive wide gage, rail rollover and subsequent derailments.

USE GEOGRAPHIC INFORMATION SYSTEM (GIS) TECHNOLOGY TO MAP DATA.

With the assistance of other SED personnel as necessary, the RMT will use GIS and RSSIMS data to show accident locations on maps of California. This will enable the RMT and the ORS Branches to correlate accident data with such things as geographic features (e.g., potentially unsafe road configurations), and to target locations posing various risks, e.g., relatively high numbers of accidents, poor visibility, or insufficient signage. One area of inquiry is whether pavement markings warning of rail crossings can be improved.

INVESTIGATE RAILROAD TUNNEL HAZARDS.

Railroad tunnels present an array of hazards, but there are few data on tunnel numbers, locations, and conditions. The RMT will investigate these and other issues affecting railroad tunnels in California.

HIGH SPEED RAIL TEAM

The High Speed Rail Team is comprised of one Senior Utility Engineer and one Public Utilities Regulatory Analyst. In 2017, the High Speed Rail Team plans to:

- Meet with California High Speed Rail Authority (CHSRA) and contractor representatives to discuss CPUC oversight and related issues and to ensure conformance with CPUC General Orders
- Consult with CPUC Legal Division as necessary, e.g., if the CHSRA objects to General Order provisions
- Participate in Commission proceedings if waivers or modifications to current General Orders or adoption of new High Speed Rail-specific General Order are deemed necessary
- Review available CHSRA design plans, specifications, etc. for conformance with GOs and other relevant standards
- Attend CHSRA Fire and Life Safety and Security Committee meetings in person or by phone

- Monitor HSR developments via CHSRA communications and articles in relevant periodicals
- Coordinate visits to HSR construction sites with Office of Rail Safety inspectors to observe progress
- If any HSR-related Risk Management Status Reports are submitted by ORS inspectors or other personnel, discuss with CHSRA and resolve
- Provide input to HSR-related Rail Safety Advisory Committee proceedings and Federal Railroad Administration rulemakings as appropriate

RAILROAD OPERATIONS AND SAFETY BRANCH

PROGRAM SUMMARY

The CPUC Railroad Operations and Safety Branch (ROSB) supports the CPUC on matters relating to freight and intercity passenger railroad safety. ROSB Railroad Safety Inspectors examine railroad tracks, signaling systems, rail cars and locomotives, hazardous materials, railroad operating practices, and railroad bridges to detect, assess and, where appropriate, mitigate risks associated with railroads that operate in California. As well as dealing with violations of existing regulations, Inspectors also carry out proactive assessments of potential risks before dangerous conditions are created, e.g., as manifested in near-misses. In addition, ROSB personnel may provide comments on major pending federal and state legislation, regulations, and other rail-related policies.

GOALS FOR 2017

ROSB has identified seven goals to be attained, or significantly furthered, by the end of 2017. The primary work plan focus is ensuring that the railroad infrastructure transporting passengers, crude oil and other hazardous materials, and/or other freight products, is structurally sound. This will be accomplished by:

- Rigorous inspections and evaluations of the existing railroad operations and infrastructure
- Proactive risk management reporting
- Planning evaluation during the construction phases of new crude oil and other hazardous materials railroad system infrastructure

Goal 1: Keep Boots On the Ground

One of the biggest benefits to public safety comes from having inspectors review the infrastructure on the ground. This is the best method to validate that railroad operators have adequate maintenance and inspection programs in place. Having inspectors in the field has always been the core of ROSB operation and we will continue to make this a priority in 2017. The work of the inspectors falls in different areas summarized below.

Goal 2: Roll out General Order Training Program

Much of ROSB's regulatory authority in railroad safety comes from CPUC's power to promulgate and enforce its own General Orders. Several General Orders are targeted specifically at

railroads, e.g., to maintain safe distances between railroad cars and obstructions near tracks. ROSB's General Order Training Program is intended to develop Inspector skills in proper General Orders and Public Utilities Code identification, application, remediation and enforcement procedures, as well as familiarizing non-Inspector staff with these regulatory tools.

This comprehensive training program includes initial assessment of skills by students via an assessment test, classroom training in principles and regulations, field training and mentoring, and a final assessment of student understanding of course material. Upon completion, students will be certified for a period of one year, with annual requalification training required to maintain General Order Training Program certification. Phase I training will begin in February of 2017. General Order Training Program development will continue through 2017 and beyond to adapt the process to all General Orders and Public Utilities Codes.

Goal 3: Enhance Risk Management Status Report Process

Continue the use of, and seek further enhancement opportunities for, ROSB's Risk Management Status Reports. In the course of field work, ROSB Inspectors sometimes identify items of concern that are either: (1) out of their area(s) of expertise; (2) outside of formal/official reporting and action protocols; or (3) despite prior formal or informal regulatory action, are still safety risks. When this happens, the inspectors complete a Risk Management Status Reports. Apart from documenting ROSB's risk management efforts, Risk Management Status Reports are used to notify railroads and other responsible parties of risks, which frequently results in actions being taken by these parties to eliminate these risks and prevent their recurrence.

Goal 4: Monitor Crude Oil and Coal Train Movements

Continue the activities of the Crude Oil Reconnaissance Team in preparation for increased crude oil transportation, should it come. In the event of oil and gasoline prices rising, there may be an increase in the number of crude oil trains entering California.

Crude Oil Reconnaissance Team inspectors, who are comprised of inspectors from several different railroad disciplines, inspect crude oil railroad infrastructure projects, e.g., transfer structures, railroad operating procedures and railroad tracks, for compliance with applicable regulations, with a focus on proactive risk assessments. Crude Oil Reconnaissance Team also monitors crude oil (and coal train) movements into and within California, and creates monthly reports documenting these movements.

Goal 5: Expand Railroad Bridge Evaluation Program

Further develop the Railroad Bridge Evaluation Program to include rail transit systems. California has over 6,500 railroad bridges, some of which are over a hundred years old. Federal Railroad Administration (FRA) has only one bridge inspector for the entire western region, who covers ten other states besides California. The Railroad Bridge Evaluation Program was developed to supplement FRA efforts and to better ascertain the condition of California railroad bridges from a risk management perspective. An initial list has been created that prioritizes

bridges for evaluation, based on such factors as population density in the vicinity, whether the bridge is used by short line railroads, and whether passengers are carried on that route.

Initially, Railroad Bridge Evaluation Program was staffed by two inspectors. In January 2017, one Railroad Bridge Evaluation Program inspector left the ROSB for a promotion in the Rail Transit Safety Branch (RTSB). This is a great opportunity to expand the Railroad Bridge Evaluation Program so that it will encompass RTSB. This leaves a vacancy in ROSB that will reduce 2017 bridge observations until a replacement can be recruited, but that endeavor is underway.

The Railroad Bridge Evaluation Program made observations of 157 railroad bridges in 2016. In 2017, the lone remaining ROSB bridge inspector expects to observe at least 80 bridges statewide. Railroad Bridge Evaluation Program will continue to work cooperatively with the FRA bridge inspection program to assist FRA in determining the compliance of railroad bridges with FRA regulations.

Goal 6: Continue the Positive Train Control Program

The federal Rail Safety Improvement Act of 2008 required Class I Railroad mainlines handling poisonous-inhalation-hazard materials and any railroad main lines with regularly scheduled intercity and commuter rail passenger service to fully implement Positive Train Control by December 31, 2015. In late 2015, Congress extended the deadline by at least three years to December 31, 2018, with the possibility for two additional years if certain requirements are met.

Positive Train Control uses communication-based/processor-based train control technology that provides a system capable of reliably and functionally preventing train-to-train collisions, overspeed derailments, incursions into established work zone limits, and the movement of a train through a main line switch in the wrong position.

ROSB staff has been actively engaged in design review, observations, and inspections during the development and construction of Positive Train Control systems in California. The Positive Train Control Program is staffed by two inspectors. In 2017, the Positive Train Control Program will create monthly reports for passenger and freight Positive Train Control implementation, and conduct field observations to assess the progress of California railroads in implementing Positive Train Control.

Goal 7: Rollout New Inspector Activity Reports

Activity Reports, previously called Weekly Activity Reports (or WAR reports), describe findings ROSB Inspectors make during routine inspections of railroad infrastructure. Some of these reports are selected to be included in the Annual Report to the Legislature. Previously, reports of findings submitted by different Inspectors in different regions of the state varied in format and content, and often needed extensive editing before they could be used in a public document. Initial rollout of the Inspector Activity Reports process includes familiarization with examples of writing styles, content requirements, and formatting standardization.

MAIN WORK ACTIVITIES

The main work activities of ROSB are field inspections and incident investigations. Below is the summary of the volume of work anticipated in each of those categories.

Inspections

ROSB has 40 inspectors who collectively perform more than 2,180 inspection days, which include inspections in different categories summarized below.

Hazardous materials inspections at California sea ports will:

- 471 inspection days in 2016; increase to 500 inspection days in 2017
- Increase sea port inspection collaboration with US Coast Guard from occasional to weekly
- In compliance with the Local Community Rail Security Act of 2006, California Public Utilities Codes 7665 to 7667, two Hazmat and Security inspectors will review and report on the adequacy of railroad security plans for the 35 railroads located within the State of California - by May 1, 2017

Track- increase walking track inspection miles, especially along crude oil train routes:

- 35 miles per inspector in 2016; increase to 40 miles per inspector in 2017

Operating Practices inspectors will:

- Increase passenger train head-end rides from 1 to 2, per inspector, monthly
- Perform quarterly locomotive engineer certification audits
- Participate with FRA in mountain grade audits, when scheduled

Motive Power & Equipment inspectors will:

- Focus on training of new MP&E inspectors (2)
- Attempt to make mandated inspection points, although short staffed

Signal & Train Control (S&TC) inspectors will:

- Focus on training new S&TC staff (2)

Quarterly Inspections

Each quarter all disciplines conduct a quarterly inspection of which produces an additional 20 inspections each year. The quarterly inspections are designed to concentrate on specific areas of concern where regulatory non-compliances may be present. Disciplines produce a formal write up complete with results of the inspection, defects, and or violations taken.

Investigations

ROSB receives over 800 incident reports every year. All are reviewed and determination is made as to which incidents will require further investigation. Typically, 10 to 15 percent require full investigation. ROSB policy is to conduct investigations on all at grade crossing accidents and

incidents. Any incident or accident that occurs 50' and less from the actual crossing is also investigated. All mainline train derailments that occur with high priority to any train derailments that occur in any of the (19) designated Local Safety Hazard Sites. Standard protocols have been established for staff when they are asked to gather information such as taking pictures and obtaining information while on the site of any accident /incident or injury involving any railroad employee or any incident that may happen on railroad property. Relaying that information to the supervisor who will begin putting together a formal write up to explain the details of the incident.

IMPROVE QUALITY OF WORK PRODUCTS

ROSB is dedicated to continuous improvement of work products. The following are the goals for 2017:

- For all major types of ROSB work products, further develop consistent templates and examples of completed work products that represent the quality of execution that meets or exceeds expectations
- Raise the overall quality and integrity of work products being produced by developing clear management expectations, re-communicate those expectations to staff and hold management and staff accountable
- Provide railroad safety inspectors and analysts with thought-provoking assignments that identify the greatest public, railroad employee, and environmental risks, and propose recommendations that would most effectively mitigate those risks

TECHNICAL SKILL DEVELOPMENT

ROSB is dedicated to keeping the skills of staff current and providing opportunities for all members of ROSB to grow in their careers. The following are the priorities for 2017:

- Each team (e.g. Railroad Bridge Evaluation Program, Crude Oil Reconnaissance Team, Risk Management Team) to identify training opportunities to be incorporated into team goals
- Supervisors and management to research more training opportunities; seek staff input to assist by identifying new training opportunities.
- Encourage staff to take on more leadership roles commensurate with their duties and abilities
- Further develop the General Order Training Program throughout ROSB in 2017

RAIL TRANSIT SAFETY BRANCH

PROGRAM SUMMARY

The Rail Transit Safety Branch (RTSB) mission is to ensure that California rail transit systems are designed, constructed, maintained, and operated in a safe and secure manner for passengers, employees, and the general public. RTSB is responsible for implementing the rail transit and other fixed guideways safety program for the State. The Commission has been designated by

California Public Utilities Commission | Safety and Enforcement Division

the Governor's office as the State Safety Oversight Agency for participation in the Federal Transit Administration (FTA) State Safety Oversight program.

The SED RTSB staff performs inspections, audits and investigations and advises management and the Commission of their recommendations regarding rail transit and other fixed guideway system safety matters. RTSB staff receive incident notices and investigate accidents and conduct inspections of rail transit and other fixed guideway systems. RTSB also conducts comprehensive Triennial Safety and Triennial Security Audits; develop new or modified Commission General Orders; monitors transit agency operational and safety activities and analyze and evaluate new project safety certification plans.

TRIENNIAL AUDITS AND REPORTS

RTSB performs comprehensive safety and security audits of rail transit operators on a triennial basis. These audits involve reviews of rail transit agency processes and procedures pertaining to compliance with CPUC's General Orders, review of records, site inspections and other activities to evaluate the agency's implementation of their system safety program plan, standard operating procedures, accident investigations, and maintenance practices. One triennial audit reviews the safety of the rail transit agency, and another evaluates the security of the rail transit system. The triennial safety audits typically last one to two weeks and involve a dozen or more RTSB inspectors and engineers. The audit activities and findings are then presented in a report, which, depending on workload typically takes 10 to 15 weeks to compile. The triennial security audit is typically conducted concurrently with the triennial safety audit, but is documented in a separate report. Each of the two reports requires a Resolution offering RTSB report and findings for Commission's consideration, review and approval.

In 2016, RTSB performed five triennial audits and three triennial audits are scheduled for 2017. Below is the planned schedule for completion of triennial audits and corresponding reports:

Transit System	Audit Dates	Target CPUC Voting Meeting
Sacramento Airport APM	2/22-25/2016	1/19/2017
SFO Airtrain	8/1-5 2016	2/9/2017
LA Metro	9/19-30/2016	4/6/2017
BART Oakland Airport Connector	10/24-28/2016	4/27/2017
Getty Center Museum APM	12/5-9/2016	5/11/2017
BART	9/11-22/2017 (Scheduled)	March 2017
Sacramento Regional Transit	10/16-27/2017 (Scheduled)	April 2018
Santa Clara Valley Transit Authority	11/6-17/2017 (Scheduled)	May 2018

INSPECTIONS

RTSB performs ongoing inspections of transit agency facilities, operations, and construction to assure compliance with regulations and industry standards. Inspections assure that rail transit agencies follow federal and state laws and regulations, CPUC General Orders, industry

standards and their own established operating procedures. RTSB typically performs more than 150 inspections a year in four areas: (1) track, (2) signal and train control, (3) mechanical (vehicles), and (4) operating practices.

An inspection can either be scheduled in advance (announced) or occasionally RTSB inspectors conduct unscheduled and unannounced inspections. The inspection is conducted and any findings are outlined and discussed with the agency representative before the inspector leaves the property. An inspection report is then generated and sent to the supervisor who reviews, edits, approves and sends out to the transit agency within 10 business days. If the inspection identifies findings that require corrective action, the transit agency must respond within 30 days with completed corrective actions the proposed corrective action plan (CAP), a timeline for implementation and the responsible agency person. Inspectors track responses and field-verify the corrective actions and CAPs. The inspection is considered closed when a follow-up report has been sent to the transit agency accepting the corrective action or CAP. Out of 172 inspections conducted in 2016, 91 currently remain open pending report completion.

INCIDENT INVESTIGATIONS

Transit agencies are required to report incidents and accidents to the CPUC. Typically, RTSB receives more than 250 rail transit incident notifications a year. Due to the significant number of reportable (under GO 164-D) accidents, GO 164-D requires transit agencies to investigate and CPUC staff to review and approve agency accident investigation reports. As of beginning of the year, there are 153 open accident investigations. About 25 percent of those have been completed by staff and are being evaluated by management for potential closure. Most of the remainder are from the 2nd half of 2016, and are in various states of completeness. RTSB tracks accident closures by rail transit agencies and any corrective action plans associated with them. In some cases RTSB conducts supplemental on-site investigations of accidents or conducts on-site follow-up investigations. RTSB tracks all reportable accidents to conclusion. Workload associated with this element is highly variable due the complexity of the investigations, as well as other factors.

National Transportation Safety Board Accident Investigations

RTSB works with the National Transportation Safety Board (NTSB) and the involved transit agencies to complete accident investigations and address accident findings. At present, the only open NTSB investigation that RTSB is involved in is the Angels Flight funicular derailment of September 5, 2013. Angels Flight hired a consultant that developed a Safety Certification Plan to bring the funicular back in service during 2017, which was approved by the Commission on January 9, 2017. Staff will monitor that process to verify completion of all essential elements. At the conclusion of the project, staff will request that NTSB reclassify its open recommendations to CPUC regarding Angels Flight as “Closed with Acceptable Action.”

CORRECTIVE ACTION PLAN TRACKING

RTSB reviews, evaluates and either approves or rejects transit agency Corrective Action Plans resulting from agency internal safety audits, triennial safety and security audits, inspections and

accident investigations. Typically, RTSB reviews between 150 and 200 Corrective Action Plans every year. Corrective Action Plans are developed by rail transit agencies to address findings (e.g., non-compliance with regulations or adopted procedures) resulting from the various types of inspections and investigations. RTSB reviews proposed Corrective Action Plans to determine their adequacy in addressing the findings and either approve or require modification of the Corrective Action Plans. Corrective Action Plans establish the proposed actions and responsible agency personnel that will implement and track the Corrective Action Plans to closure. Routine meetings are held with transit agencies to assess Corrective Action Plans' status and update staff records regarding them. RTSB tracks Corrective Action Plans and closures in a database (RSSIMS), and inspections on MS Excel data spreadsheets. The Corrective Action Plan entry and tracking involves significant data entry and time to review and update Corrective Action Plan records.

RESPONSES TO FEDERAL NOTICES OF PROPOSED RULEMAKINGS (NPRMs)

In 2012, Congress passed the Moving Ahead for Progress in the 21st Century Act (MAP-21), which directed FTA to take a more active role in transit safety, to develop criteria and certify State Safety Oversight Agencies (such as CPUC), and to require rail transit agencies to revise safety plans to incorporate principles of safety management systems. In 2015 and 2016, RTSB staff spent considerable time reviewing and preparing comments in reply to Federal NPRMs pertaining to rail transit safety. Rulemakings pertaining to Transit Asset Management, Rules for State Safety Oversight Agencies, National Public Transportation Safety Plan, Transit Safety Training Program, and Public Transportation Agency Safety Plan have, are or will be undertaken. RTSDB has worked with Legal Division to draft memos for the Commission to authorize staff to submit comments pertaining to various aspects of the proposed rules. FTA has plans to issue additional NPRMs in 2017, and considering the significant impact these new rules have on our program, it is critical that we review each NPRM and determine if we need to submit comments. The Public Agency Transportation Plan rule is the next major rulemaking that has been planned to be issued.

FEDERAL TRANSIT ADMINISTRATION CERTIFICATION AND GRANT FUNDING OF RAIL TRANSIT STATE SAFETY OVERSIGHT AGENCIES (CPUC'S RAIL TRANSIT SAFETY PROGRAM)

In September of 2013, CPUC submitted documentation pursuant to FTA requirements to seek certification of the CPUC rail transit safety oversight program, as well as grant funding made available by Congress for up to 80% of a state's rail transit safety oversight program costs. The CPUC program was one of only two programs nationwide to be initially "certified" based on the existing program.

During 2014 and 2015, RTSB completed an FTA grant application and was approved for grant funding. RTSB has developed internal tracking mechanisms and has worked with IT, HR, Fiscal and the other administrative staff at CPUC to monitor and track eligible expenses to complete reimbursement requests to tap those grant funds. During 2016, RTSB worked with the Administrative Services Division to begin drawing down the grant funds.

A number of internal processes and procedures have been changed and may need to be further modified and tracked differently to assure that only eligible costs are included in the grant reimbursement requests. As we develop and submit reimbursement requests, we will determine adequacy of existing processes and the advisability of making further changes. Tracking eligible costs and staff time, as well as submitting reimbursement requests will present a significant work element for the transit safety program in the future.

RTSB Program Standard Procedures Manual

Federal rulemakings and changing requirements promulgated by FTA will require CPUC General Order updates as discussed above, and a major overhaul of the RTSB Program Standard Procedures Manual. These will require significant commitments in staff resources, although the extent cannot be quantified at this time. Staff will need to revise their inspection and triennial audit processes as well as what data are tracked in order to meet the new requirements. Updates will be necessary to implement by mid-2018.

Meetings

RTSB participates and provides essential input to the Transit Rail Advisory Committee at the national level, to assure that the State's rights are maintained and that California priorities are addressed as the FTA develops a more active role in relation to State Safety Oversight activities. RTSB also participates in the annual meeting of State Safety Oversight Agencies, along with FTA, as part of our participation in rail transit safety as an oversight agency.

BART ORDER INSTITUTING INVESTIGATION

During 2016, CPUC staff received video and other data from the NTSB on the BART double fatality accident on October 19, 2013. Evaluation of tie information and data resulted in staff filing a request for the Commission to open a formal investigation for determining whether BART should be fined or otherwise penalized for actions or inactions that staff believe were either causal or contributory to the accident. Staff developed and filed testimony in the proceeding during February 2017. A final Decision is expected from the Commission in summer 2017.

REVISION TO GENERAL ORDERS

General Order 143: Safety Rules and Regulations Governing Light-Rail Transit

RTSB plans to initiate a General Order 143 revision rulemaking for rail transit operators during 2017. Staff have identified a number of rule revisions that would clarify existing requirements and implement new ones to address deficiencies identified in field inspections and audits. Additionally, General Order 143-B provisions should be amended such that they will apply to "heavy or rapid" rail transit systems such as BART and the LA Metro Red Line subway. Staff have developed a draft rule and staff report to initiate a General Order 143 rulemaking during 2017.

General Order 175-A: Roadway Worker Protection & General Order 172: Use of Personal Electronic Devices by Employees

These two General Orders were promulgated in response to transit accidents resulting in roadway worker fatalities. Under the terms of the Decision adopting General Order 175-A, staff are required to file recommendations to reconcile differences in these General Orders by March of 2017. Staff held an informal workshop with rail transit agencies during January 2017 to discuss whether such changes are advisable. Staff will finalize their recommendations and file them in the relevant proceeding as directed by the assigned Administrative Law Judge.

General Order 164: Rules and Regulations Governing State Safety Oversight of Rail Fixed Guideway Systems

Some modifications of General Order 164 will be needed to accommodate changes in federal regulations resulting from the Federal Notices of Proposed Rulemakings discussed below. Some changes have already been identified in the State Safety Oversight Program rulemaking, while others will result from the Public Transportation Agency Safety Plan rulemaking. However, in order to determine what modifications of the General Order will be necessary, it will be necessary for FTA to publish the rules first. RTSB staff will be involved in these rulemakings to assure the final rules are comprehensive and enforceable.

DATABASE IMPROVEMENTS

The Rail Safety and Security Information Management System (RSSIMS) database is used by all three rail branches. Office of Rail Safety needs to improve and make wider use of it in the daily work of the transit safety program. During 2017, RTSB will continue to work with the other rail program representatives on the RSSIMS Committee to develop and oversee the work to upgrade the RSSIMS system to allow for bulk uploads and downloads of data, in coordination with the Information Management Services Division.

Currently-tracked Corrective Action Plans and inspection data will be transferred into RSSIMS from MS Excel spreadsheets. As time permits, RTSB will also continue to work on a complete inventory of all rail transit crossings to update our records in RSSIMS. There roughly 1,300 at-grade rail transit crossings in California.

TRAINING

Continue to develop staff expertise in rail transit safety oversight by attending FTA- sponsored training and achieving certification of all staff in the core FTA safety oversight courses. FTA requires four core courses to obtain the Transit Safety and Security Program certification now required for staff involved in the State Safety Oversight Program. As part of the FTA certification and grant program requirements, technical staff of state safety oversight agencies are required to meet training requirements established by the FTA. We are awaiting final approval from FTA of our Technical Training Plan submitted during December 2015. Feedback was received from FTA in late 2016, which largely approved this Plan with some minor changes. The Plan will be finalized during 2017. In addition RTSB will focus on developing writing skills of technical staff.

RAILROAD CROSSINGS AND ENGINEERING BRANCH

California Public Utilities Commission | Safety and Enforcement Division

The mission of Rail Crossings and Engineering Branch (RCEB) is to improve the safety of the public and rail employees by evaluating and recommending appropriate safety measures at highway-rail crossings.

RAIL CROSSINGS APPLICATIONS

RCEB processes approximately 20 formal applications a year. Typically, local highway agencies submit these applications to the CPUC for approval to construct new at-grade or grade-separated crossings.

GENERAL ORDER 88-B APPLICATIONS

General Order 88-B contains the CPUC's rules for altering public highway-rail crossings. General Order 88-B applications are reviewed and processed at the RCEB level and do not require a formal CPUC proceeding. RCEB anticipates that it will receive and process approximately 100 General Order 88-B applications in 2017.

SECTION 130 PROGRAM

CPUC and Caltrans jointly administer Section 130 Program, which funds crossing improvements. California receives about \$15 million from the federal government each year to improve crossings. CPUC conducts data analysis and development of prioritization lists of projects meeting the requirements for the Program. Caltrans receives federal funding and performs the contracting and implementation elements of the Program.

In fiscal year 2016, Caltrans funded 15 projects. RCEB submitted five additional projects to Caltrans. Of those projects, Caltrans funded one project, three are in progress, and CPUC held the remaining project pending resolution of some project/contract issues. RCEB anticipates that its Section 130 workload will likely resemble what it did in 2016.

SECTION 190 PROGRAM

The Section 190 Program allocates \$15 million in annual state funding to assist local agencies in developing projects to grade separate rail crossings. The process involves a formal CPUC proceeding wherein local agencies nominate projects to receive funding. After RCEB ranks the projects in priority order, local agencies may request Section 190 funds. For fiscal years 2016 and 2017, the CPUC received 38 nominations.

Funding for the Section 190 Program needs to be increased. In comparison with the \$15 million allocation, the current cost to construct a grade separation is about \$50 million. In 2017, RCEB will seek legislation to increase funding for the Section 190 Program.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

A broad range of projects are subject to documentation requirements under CEQA prior to the beginning of actual construction. RCEB reviews CEQA documents to identify potential impacts

of proposed projects to rail crossings and corridors during development. RCEB reviews anywhere from several dozen to several hundred proposed projects each month, and issues comment letters when it judges that the projects may affect safety at crossings. In 2016, RCEB sent out 31 comment letters.

NATIONAL COMMITTEE ON UNIFORM TRAFFIC CONTROL DEVICES

RCEB has developed a strong relationship with the Federal Highway Administration (FHWA) through its joint administration (with Caltrans) of the Section 130 program, as well as participation in the National Committee on Uniform Traffic Control Devices (NCUTCD) highway-rail committee. Two RCEB staff members are voting members of the NCUTCD. RCEB participates by attending the meetings and analyzing proposed changes, offering comments, identifying unintended consequences, proposing further changes, participating in committee exchanges on technical matters and ultimately voting on proposed changes. The participation is mutually beneficial to both FHWA and the State of California. RCEB will attend two NCUTCD meetings in 2017.

RAILROAD SIGNAL PREEMPTION

In 2016, RCEB developed preemption guidelines and sent them to Caltrans for comments. Caltrans plans to reply to RCEB in early 2017 regarding the guidelines. After RCEB finalizes its preemption guidelines, it will post the guidelines on the CPUC website for the local highway authorities to review and use when considering preemption. RCEB also requested lists of preemptive crossings from Union Pacific and BNSF that they operate. RCEB will review the lists and notify the affected highway authorizes of its new preemption guidelines.

In conformance with an FRA Safety Advisory, RCEB plans to notify all local highway authorities that they should conduct joint inspections with the railroads of all their highway traffic signal preemption interconnections and to correct all deficiencies found as a result of those inspections.

EMERGENCY NOTIFICATION SYSTEM

All railroads were required to post Emergency Notification System (ENS) signs at all their at-grade crossings by September 1, 2015. RCEB is investigating which railroads, including rail transit systems, are responsible for the ENS signs at crossings in shared rail corridors. Once RCEB determines the responsible railroads, the data will be included in the RSSIMS database.

In 2016, RCEB provided lists to UPRR and BNSF of potential shared corridor crossings in which they operate. The goal of RCEB was to determine which rail operator was responsible for the installation and maintenance of the ENS signs. UPRR and BNSF are reviewing the lists of such crossings. In early 2017, RCEB plans to meet with UPRR and BNSF to discuss the shared corridor crossings and the responsibility for ENS signage. Once the lists are completed and verified, RCEB will send similar lists to the transit agencies to ensure that all the shared corridor crossings have ENS signs.

SPECIAL PROJECTS

Revise General Orders 75-D and 88-B

RCEB staff spends most of their time implementing General Orders 75-D and 88-B. RCEB staff needs to revise these General Orders to reflect the latest trends and issues affecting crossing safety, such as pedestrian safety and railroad preemption, and to remedy gaps and deficiencies with current laws and regulations.

Establish a Citation Program

RCEB currently has no means available to enforce its mandates and compliance with CPUC General Orders at the staff level. A good starting point would be for the CPUC to seek legislation for RCEB to issue citations to applicants who do not carry out CPUC specific orders defined in its Decisions and Resolutions. Currently the CPUC has limited jurisdiction over the local highway authorities who request CPUC authority to modify or construct highway-rail crossings. RCEB plans to work with the CPUC Legal Division on developing a legislative proposal.

General Order 145

GO 145 provides process by which railroad crossings can be exempted from California Vehicle Code requirements under Section 22452 mandating that certain types of vehicles stop prior to entering the crossing. Section 4.5 of the GO requires that the CPUC publish a list of exempt crossings and update the list annually. The list shall be provided to each railroad corporation, passenger stage corporation, and some petroleum carriers.

It appears that the last time the CPUC published the list was in 1977. RCEB only has a hardcopy of the 1977 list. In 2016, RCEB transferred the old hardcopy list to an Excel spreadsheet. Staff reviewed the list and verified which crossings were still exempt.

In 2017, RCEB will share with the local highway authorities the results of its exempt crossing review. If a local highway authority believes that RCEB's evaluations are in error, RCEB will review those crossings on a case-by-case basis. After the interested parties review and agree with RCEB's findings, RCEB will update the RSSIMS database with the current information, post the list on the CPUC's website, and update it accordingly.

San Diego Station Pedestrian Crossings

In January 2017, the San Diego Association of Governments (SANDAG) submitted five applications to the CPUC requesting approval to construct multiple grade separated rail crossings along the proposed San Diego Metropolitan Transit System Mid-Coast light rail corridor extension. RCEB supports the construction of the grade separated rail crossings as well as the proposed design submitted in SANDAG's applications where the design physically separates vehicles and pedestrians from the proposed light rail transit tracks.

However, other aspects of the design submitted in the applications would require pedestrians to cross the new light rail tracks at-grade with those tracks which SANDAG did not address in its application. As a result, RCEB protested four of the five applications. RCEB believes that

SANDAG must obtain Commission authority prior to construction of the at-grade pedestrian crossings. The Commission decision regarding the RCEB protests may impact other transit agencies operating in the state.

Crossing Maintenance Program

California established the Grade Crossing Protection Maintenance Fund to pay to the railroads the local roadway authority's (city or county) share of the cost of maintaining automatic warning devices at highway-rail crossings installed or upgraded after October 1, 1965. CPUC verifies the claims and forwards them to Caltrans for payment. RCEB will start processing and evaluating new claims in March 2017 for the following fiscal year.

Autonomous Vehicles

Major car manufacturers are proposing to make autonomous vehicles available to the public within the next five years. CPUC needs to review how passive and active equipment at highway rail and transit crossings will need to be changed to accommodate these vehicles. This may require the hiring of additional staff. The Federal Highway Administration (FHWA) is already beginning to study this matter which may eventually lead to new regulations. RCEB plans to work with the FHWA and other agencies in addressing the safety issues. RCEB believes that the use of such vehicles will transform how grade crossings are designed and constructed in the future.

CONTRACTS

STOP / YIELD Signs

The CPUC is the lead agency for coordinating the installation of STOP and YIELD signs at the approximately 2,500 passive railroad crossings in California ("passive crossings" have no active warning devices, such as gates and signals). CPUC and Caltrans coordinated with the FHWA to use Section 130 funds for the project.

In September 2016, CPUC selected a contractor for the first phase of a project involving these crossings, including inventory review and sightline analysis. In 2017, RCEB will select another contractor to assist in analyzing the results of the first phase. RCEB will then notify relevant cities, counties, Caltrans Districts, and railroads of its findings and recommendations. RCEB must complete this project by May 15, 2019 when the CPUC-Caltrans contract and funding expires.

Section 130 Program Contracts: Crossings Inventory

California has approximately 13,000 public and private rail and rail transit crossings. RCEB collects and maintains rail crossing inventory data for the state, which is entered into RSSIMS. The Section 130 Program allows for a percentage of the funds to be utilized in related database and inventory improvements. RCEB selected a contractor to conduct field inventory of 1,556 active crossing locations in 2016. RCEB staff will conduct a variety of oversight tasks. RCEB expects the inventory project to be completed by April 2017. RCEB anticipates beginning work on the RFP for phase two of the inventory project in January 2017.

There are approximately four thousand active crossings left to inventory. The existing funding is not sufficient to complete all of the remaining crossings in Phase Two. RCEB plans to separate the project into three or four phases depending on actual costs and available budget over the next five years.

Section 130 Program Contracts: Preliminary Engineering Services

The preliminary engineering contract is a new effort, which RCEB identified as a critical in order to develop sufficient projects for funding within the Section 130 Program time requirements. The Section 130 program directly funds actual construction. However, before these projects can commence, the affected agency must perform a preliminary engineering analysis, which frequently involves investigating right-of-way, utility conflicts, and geometric design constraints. Currently, RCEB negotiates with these agencies to use their resources to perform the analyses. This has been one of the most significant hurdles in developing projects as many agencies are on constrained budgets and do not have funding readily available.

RCEB and Caltrans have worked for the last ten years on ways to fund the preliminary engineering. FHWA does not allow CPUC or Caltrans to give funds directly to local or railroad agencies for preliminary engineering under the Section 130 Program. However, RCEB and Caltrans believe that they may be able use up to 10% of Section 130 funding to facilitate this endeavor. If FHWA approves the project, CPUC and Caltrans would establish a contractor to conduct the preliminary engineering analysis for some crossing improvement projects. As this is a new effort, RCEB anticipates it will take longer to go through the RFP development and bid process for this project than other projects in which RCEB is involved.

This Completes SED's 2017 Annual Work Plan
