APPENDIX B

REVISED AND ADOPTED GENERAL ORDER 164-D

GENERAL ORDER NO. 164-D

(Supersedes General Order No. 164-C)

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

RULES AND REGULATIONS GOVERNING STATE SAFETY OVERSIGHT OF RAIL FIXED GUIDEWAY SYSTEMS

Adopted September 20, 1996. Effective September 20, 1996.

(D.96-09-081 in R.96-04-021)

Amended September 3, 1997. Effective October 1, 1997.

Resolution No. ST-27

Amended December 2, 1999. Effective December 2, 1999.

Resolution No. ST-44

Adopted February 27, 2003. Effective February 27, 2003.

(D.03-02-048 in R.02-01-009)

Amended [month] [date], [year]. Effective [month] [date], [year].

(D. _____ in R._____)

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IT IS ORDERED that the following rules and regulations governing the safety oversight of Rail Transit Agencies and Rail Fixed Guideway Systems shall hereafter be observed in this State unless otherwise directed by the California Public Utilities Commission (Commission).

1 GENERAL PROVISIONS

1.1 *Authority.* These rules and regulations are authorized by and implement the provisions of 49 U.S.C. 5330, Intermodal Surface Transportation Efficiency Act of 1991, Sec. 3029, Title 49 of the Code of Federal Regulation, Part 659, Rail Fixed Guideway Systems, State Safety Oversight; Final Rule, and Sections 778 and 99152 of the California Public Utilities Code.

1.2 *Applicability.* These rules and regulations are applicable to all Rail Transit Agencies and Rail Fixed Guideway Systems in California.

1.3 *Additional Rules.* The Commission may make such additional rules and regulations or changes to these rules and regulations as are necessary for the purpose of safety.

1.4 *Exemptions or Modifications.* Requests for exemption from, or modification of, these rules and regulations must be filed by Rail Transit Agencies, and shall contain a full statement of the reasons justifying the request and demonstrating that safety is not reduced. Any exemption or modification so granted shall be limited to the particular matter covered by the request. Any exemption or modification shall require Commission approval.

1.5 For the purpose of construing these rules, *may* is permissive and *shall* is mandatory.

2 DEFINITIONS

2.1 *Certifiable Elements List* means a list that contains all facilities, systems, rail at-grade crossings, and other items that are subject to safety certification due to their safety functions.

2.2 *Contractor* means an entity that performs tasks required on behalf of the Commission or Rail Transit Agency (RTA).

2.3 *Corrective Action Plan* means a plan developed by an RTA that describes the actions the RTA will take to minimize, mitigate, control, correct, or eliminate hazards, and the schedule for implementing those actions.

2.4 *Existing Industry Standards* means the currently accepted industry and professional engineering standards and/or guidelines relating to the design, construction, operation, and maintenance of Rail Fixed Guideway Systems such as ANSI, APTA, AREMA, ASCE, ASEE, ASME, FRA, FTA, IEEE, NFPA, and others.

2.5 *FRA* means the Federal Railroad Administration

2.6 *FTA* means the Federal Transit Administration.

2.7 *Hazard* means any real or potential condition (as defined in the RTA's hazard management process) that can cause injury, illness, or death; damage to or loss of a system, equipment or property; or damage to the environment.

2.8 *Hazard Analysis* means any analysis performed to identify hazards for the purpose of their elimination, mitigation, or

control.

2.9 *Individual* means a passenger; employee; contractor; other rail transit facility worker; pedestrian; trespasser; or any person on rail transit-controlled property.

2.10 *Investigation* means the process used to determine the causal and contributing factors of an accident or hazard, so that actions can be identified to prevent recurrence.

2.11 *Mainline* means all tracks used for the purpose of the movement of passengers on rail transit vehicles. Mainline does not include storage tracks, yard tracks or other tracks used for the purpose of storage.

2.12 *Major Projects (Projects)* means new rail systems or extensions, the acquisition and integration of new vehicles and safety critical technologies into existing service or major safety critical redesign projects, excluding functionally and technologically similar replacements.

2.13 *Passenger* means a person who is on board, boarding, or alighting from a rail transit vehicle for the purpose of travel.

2.14 *Person* means any individual.

2.15 *Rail Fixed Guideway System (RFGS)* means any light, heavy, or rapid rail system, monorail, inclined plane, funicular, trolley, cable car, automatic people mover, or automated guideway transit system used for public transit and not regulated by the FRA or not specifically exempted by statute from Commission oversight.

2.16 *Rail Transit Agency* (RTA) means the entity that plans, designs, constructs, and/or operates a RFGS.

2.17 *Rail Transit-Controlled Property* means property that is used

by the RTA and may be owned, leased, or maintained by the RTA.

2.18 *Rail Transit Vehicle* means an RTA's rolling stock, including but not limited to passenger and maintenance vehicles.

2.19 *Safety* means freedom from harm resulting from unintentional acts or circumstances.

2.20 *Safety Certification* is the series of acts or processes that collectively verify the safety readiness of a Project for public use.

2.21 *Safety Certification Plan (SC Plan)* means a Project-specific document developed by an RTA, which ensures that elements critical to safety are planned, designed, constructed, analyzed, tested, inspected, and implemented, and that employees are trained and rules and procedures followed, in compliance with RFGS and regulatory safety requirements.

2.22 *Safety Certification Verification Report (SCVR)* means a Project-specific document that will be the final certificate of compliance verifying that the Project complies with all safety requirements identified by an RTA's SC Plan.

2.23 *Safety Design Criteria* means the organized listing of safety codes, regulations, rules, design procedures, existing industry standards, recommended practices, analyses, handbooks and manuals prepared to provide guidance to Project designers in development of technical specifications that meet minimum safety parameters.

2.24 *Security* means freedom from harm resulting from intentional acts or circumstances.

2.25 *Staff* means Commission employees responsible for safety oversight of RTAs.

2.26 *System Safety Program Plan (SSPP) means* a document adopted by an RTA detailing its safety policies, objectives, responsibilities, and procedures.

2.27 *System Security Plan (Security Plan)* means a document adopted by an RTA detailing its security policies, objectives, responsibilities, and procedures.

3 REQUIREMENTS FOR SYSTEM SAFETY PROGRAM PLANS

3.1 Each new RTA shall submit its initial SSPP to Staff for Commission approval. No new RTA shall begin transit operations prior to Commission approval of its initial SSPP. Each RTA shall annually certify by a letter to Staff that it has reviewed the SSPP to determine whether the plan should be modified or updated. If an RTA determines revisions of the SSPP is necessary, the RTA shall submit the revised SSPP to Staff with a request for approval. If the revised SSPP is acceptable to Staff, Staff shall issue a formal letter to the RTA approving the revised SSPP as consistent with Section 3.2, best industry practices, and in furtherance of the public's interest in system safety and security. If it is not acceptable, Staff shall communicate its rejection to the RTA, and the RTA shall file a formal application seeking approval by the Commission.

3.2 The SSPP shall include, at a minimum:

a. A policy statement signed by the RTA's chief executive that endorses the safety program and describes the

authority that establishes the SSPP.

b. A clear definition of the goals and objectives for the safety program and stated management responsibilities to ensure they are achieved.

c. An overview of the RTA's management structure, including:
   i. An organization chart;
   ii. A description of how the safety function is integrated into the entire RTA organization; and
   iii. The line of authority and responsibility for safety related matters.

d. The process used to control changes to the SSPP, which must at least:
   i. Specify annual assessment for updating the SSPP; and
   ii. Require coordination with the Commission and provide timeframes for submission, revision, and approval.

e. A description of the specific activities required to implement the system safety program, including:
   i. Tasks to be performed by the rail transit safety function, by position and management accountability, specified matrices and/or narrative format; and
   ii. Safety related tasks to be performed by other rail transit departments, by position and management accountability, specified matrices and/or narrative format.

f. A description of the process used by the RTA to implement its hazard management program including activities for:

i. Hazard identification;
ii. Hazard investigation, evaluation and analysis;
iii. Hazard mitigation, control, and elimination;
iv. Hazard tracking; and
v. Requirements for ongoing reporting to the Commission in relation to hazard management activities and status.

g. A description of the process used by the RTA to ensure that safety concerns are addressed in modifications to existing systems, vehicles, and equipment that do not require formal safety certification.

h. A description of the safety certification process used to ensure that safety concerns and hazards are adequately addressed prior to initiation of Projects and subsequent Projects to extend, rehabilitate, or modify an existing system, or to replace vehicle and equipment. (Refer to Sections 11 and 12 for Project Requirements for Safety Certification Plan and Requirements for Safety Certification Verification Reports.)

i. A description of the process used to collect, maintain, analyze, and distribute safety data within the RTA, to ensure the safety function receives the necessary information to support implementation of the system safety program.

j. A description of the process used to perform accident notification, investigation, and reporting, including:
i. Notification thresholds for internal and external organizations;

ii. Accident investigation process and references to procedures;

iii. The process used to develop, implement, and track corrective actions that address investigation findings;

iv. Reporting to internal and external organizations; and

v. Ensuring full participation and coordination with the Commission.

k. A description of the process used to develop an approved, coordinated schedule for all emergency management program activities, including:

i. Meetings with external agencies;

ii. Emergency planning responsibilities and requirements;

iii. A process used to evaluate emergency preparedness, including a plan for and the frequency of emergency drills;

iv. After action reports and implementation of findings;

v. Revision and distribution of emergency response procedures;

vi. Familiarization training for public safety organizations; and

vii. Employee training.

l. A description of the process used to ensure that planned and scheduled internal safety reviews are performed to evaluate compliance with the SSPP, including:

i. Identification of the departments and functions subject to review;

ii. Responsibility for scheduling reviews;

iii. The process for conducting reviews, including the development of the checklists and procedures and issuing of findings;

iv. Reporting requirements;

v. Tracking the status of recommendations and corrective action plans; and

vi. The means for ensuring full participation and coordination with the Commission.

m. A description of the process used to develop, maintain, and ensure compliance with rules and procedures having a safety impact, including:

i. Identification of operating and maintenance rules and procedures subject to review;

ii. Techniques used to assess the implementation of operating rules and procedures by employees, such as performance testing;

iii. Techniques used to assess the effectiveness of supervision relating to implementation of operating and maintenance rules; and

iv. A process for documenting results and incorporating them into the hazard management program.

n. A description of the process used for facilities and equipment safety inspections, including:

i. Identification of the facilities and equipment subject to regular safety related inspection and testing;

ii. Techniques used to conduct inspections and testing;

iii. Inspection schedules and procedures; and

iv. Description of how results are entered in the hazard

management process.

o. A description of the maintenance audits and inspections program, including identification of the affected facilities and equipment, maintenance cycles, documentation required, and the process for integrating identified problems into the hazard management process.

p. A description of the training and certification program for employees and contractors, including:

   i. Categories of safety-related work requiring training and certification and the required retraining and recertification period for each category;

   ii. A description of the training/retraining and certification/recertification program for employees and contractors in safety-related positions;

   iii. Process used to maintain and access employee and contractor training records; and

   iv. A process used to assess compliance with training and certification requirements.

q. A description of the configuration management control process, including:

   i. The authority required to make configuration changes;

   ii. A process for making changes; and

   iii. A process and assurances for notifying all involved departments.

r. A description of the safety program for employees and contractors that incorporates the applicable local, state and federal requirements, including:

i. Safety requirements that employees and contractors must follow when working on, or in close proximity to, RTA property; and

ii. Processes for ensuring that employees and contractors know and follow the requirements.

s. A description of the hazardous materials program, including the process used to ensure knowledge of and compliance with program requirements

t. A description of the drug and alcohol program and the process used to ensure knowledge of and compliance with program requirements.

u. A description of the measures, controls, and assurances in place to ensure that safety principles, requirements and representatives are included in the procurement process.

3.3 Staff may perform inspections, investigations, and reviews of the design, construction, operation, maintenance and administration of each RTA to assess whether the actual safety procedures and practices of the RTA comply with its SSPP. RTA shall permit Staff to have access to all facilities, documents, and records, and shall provide reports when requested.

3.4 Each RTA shall undergo an on-site review of the implementation of its SSPP by Staff at least once every three years to verify compliance with and evaluate the effectiveness of the SSPP. Staff may conduct the on-site review with its own personnel or by employing the services of a contractor other than the RTA.

3.5 Following each triennial on-site review, the Commission will issue a resolution based upon the Staff findings and recommendations, including an analysis of the efficacy of the SSPP and the need, if any, for updating the plan.

4 REQUIREMENTS FOR SYSTEM SECURITY PLANS

4.1 Each new RTA shall submit its initial Security Plan to Staff for Commission approval. No new RTA shall begin transit operations prior to Commission approval of its initial Security Plan. Each RTA System Security Plan must be developed and maintained as a separate document and shall not be part of the RTA SSPP. Each RTA shall annually certify, to the Commission by letter to Staff, that it has reviewed the Security Plan to determine whether the plan should be modified or updated. If an RTA determines revision of the Security Plan is necessary, the RTA shall submit the revised Security Plan to Staff with a request for approval. If the revised Security Plan is acceptable to Staff, Staff shall issue a formal letter to the RTA approving the revised Security Plan as consistent with Section 4.3, best industry practices, and in furtherance of the public's interest in system safety and security. If it is not acceptable, Staff shall communicate its rejection to the RTA, and the RTA shall file a formal application seeking approval by the Commission.

4.2 The Security Plan shall address the personal security of passengers, employees, and the general public. FTA's applicable report shall serve as a set of guidelines for

preparation of the Security Plan. Procedural details that the RTA classifies as confidential information to prevent or mitigate breaches of security shall not be revealed in the Security Plan. RTAs should identify all information they deem confidential for security purposes pursuant to Public Utilities Code Section 583.

4.3 At a minimum, the Security Plan shall address the following:

a. Identify the policies, goals, and objectives for the security program endorsed by RTA's chief executive (e.g. Chief Executive Officer, General Manager, President, etc.)

b. The process for managing threats and vulnerabilities during operations, and for Projects, extensions, new vehicles and equipment, including integration with the safety certification process.

c. The controls in place that address the personal security of passengers and employees.

d. The process for conducting internal security reviews to evaluate compliance and measure the effectiveness of the Security Plan.

e. The process for making the Security Plan and accompanying procedures available to the Commission for review and approval.

f. The process for notifying, investigating, and reporting security breaches that meet the accident notification and investigation thresholds in Sections 6 and 7.

4.4 Staff may perform inspections, investigations, and reviews of the design, construction, operation, maintenance and

administration of each RTA to assess whether the actual security procedures and practices of the RTA comply with its Security Plan. RTA shall permit Staff access to all facilities, documents, and records.

4.5 Each RTA shall undergo an on-site review of the implementation of its Security Plan by Staff at least once every three years to verify compliance with and evaluate the effectiveness of the Security Plan. Staff may conduct the on-site review with its own personnel or by employing the services of an organization other than the RTA.

4.6 Following each triennial on-site review, the Commission will issue a decision based upon Staff findings and recommendations, including an analysis of the efficacy of the Security Plan and the need, if any, for updating the plan.

5 REQUIREMENTS FOR INTERNAL SAFETY AND SECURITY AUDITS

5.1 Each RTA shall annually perform planned and scheduled internal safety and security audits to evaluate compliance and measure the effectiveness of its SSPP and Security Plan.

5.2 All of the elements described in Sections 3 and 4, and the RTA's SSPP and Security Plan shall be included in the scope of the activities to be audited by each RTA. This total scope must be completely covered by the internal safety and security audits conducted within a 3-year period, and every 3-year period thereafter.

5.3 Each RTA shall prepare a schedule of internal safety and security audits to be performed during each calendar year.

Each RTA shall submit this schedule, including any subsequent changes, to Staff at least 30 calendar days before any scheduled audits.

5.4 Each RTA shall perform each internal safety and security audit in accordance with written checklists by personnel technically qualified to verify compliance and judge the effectiveness of the SSPP activity or Security Plan activity being audited. Each RTA shall provide the checklists to Staff prior to the audit. The auditors may be organizationally assigned to the unit responsible for management of the activity being audited, but they must be independent from the first line of supervision responsible for performance of the activity being audited.

5.5 Each RTA shall document the internal safety and security audit in an annual report that covers the audits performed during each calendar year.

a. The annual report shall state the results of each audit in terms of the adequacy and effectiveness of the SSPP and the Security Plan. It shall include the status of subsequent findings and corrective actions.

b. Prior to the 15th of February each year, the RTA shall submit to Staff the annual report for the internal safety and security audits performed during the preceding year for initial evaluation.

c. The annual report must be accompanied by a formal letter of certification signed by the RTA's chief executive indicating that the RTA is in compliance with its SSPP and Security Plan. If the RTA determines that

findings from its internal safety and security audits indicate that the RTA is not in compliance with its SSPP or Security Plan, the chief executive must identify the activities the RTA will take to achieve compliance.

d. Staff shall perform an initial evaluation of the RTA's Internal Safety and Security Audit Annual Report and indicate whether Staff would recommend its approval or its rejection to the Commission. If Staff would recommend rejection, Staff shall identify the areas in the report that, in Staff's determination, require correction. The RTA shall have the option to revise the report and resubmit to Staff. If the RTA does not agree with the rejection, RTA shall meet and confer with Staff in an effort to resolve the disagreement. If no resolution is achieved through negotiation, the RTA shall apply to the Commission for approval pursuant to the application procedure under the Commission's Rules of Practice and Procedure. If Staff recommends approval, it shall issue a formal letter approving the report as consistent with the plans approved under Sections 3 and 4.

6 REQUIREMENTS FOR HAZARD MANAGEMENT PROCESS

Each RTA SSPP's discussion of the hazard management process shall include a process to identify and resolve hazards during operations, including any hazards resulting from system extensions and modifications, operational changes or other

changes within the rail transit environment. The hazard management process must, at a minimum:

a. Define the approach to hazard management and the implementation of an integrated system-wide hazard resolution process.
b. Specify the sources of, and mechanisms to support the on-going identification of hazards.
c. Define the process by which identified hazards are evaluated and prioritized for elimination or control.
d. Identify the mechanism used to track to resolution the identified hazard(s).
e. Define minimum thresholds for the notification and reporting of hazard(s) to the Commission.
f. Specify the process for reporting of hazard resolution activities to the Commission.

7 REQUIREMENTS FOR REPORTING ACCIDENTS

7.1 Each RTA shall submit immediately reportable incident reports to the Commission in the manner directed by Staff. An immediately reportable incident is one that meets or exceeds the thresholds established in Section 7.2. The RTA shall notify the Staff representative or designee within two hours of any immediately reportable incident involving a rail transit vehicle or taking place on a rail transit-controlled property. Notification shall be by telephone to the designated contact person.

7.2 Each RTA shall immediately notify Staff of incidents where one of the following occurs:

a. A fatality at the scene, or where an individual is confirmed dead within 30 calendar days of a rail transit-related incident;
b. Injury to two or more individuals requiring immediate medical attention away from the scene;
c. Property damage to rail transit vehicles, non-rail transit vehicles, other rail transit property or facilities, and non-transit property that equals or exceeds $25,000;
d. A collision at an at-grade crossing;
e. A mainline derailment;
f. A collision with an individual on a rail right-of-way;
g. A collision between a rail transit vehicle and a second rail transit vehicle, or a rail transit non-revenue vehicle;
h. An evacuation due to life safety reasons

7.3 The Rail Transit Agency shall provide as part of the notification:

a. The time and date of the incident;
b. The location of the incident, including CPUC grade crossing number if applicable;
c. The number of fatalities or injuries;
d. The rail transit vehicles involved in the incident, if any;
e. The factor from Section 7.2 that makes the incident immediately reportable; and
f. The emergency response organizations at the scene of the incident.

7.4 An RTA that shares track with the general railroad system

and is subject to the FRA incident notification requirements, shall, within two hours, notify Staff of any incident requiring notification to the FRA.

7.5 Each RTA shall submit written accident reports on forms prescribed by Staff. Each RTA shall submit such written reports within 30 calendar days after the last day of the month in which the accident occurred. Each RTA shall file written reports for all immediately reportable accidents.

7.6 Each RTA shall file a monthly accident corrective action summary report. Each RTA shall file this report on a form prescribed by Staff within 30 calendar days from the last day of the month covered. Each RTA shall file the monthly summary report whether or not any reportable accident occurred during the month.

8 REQUIREMENTS FOR INVESTIGATING ACCIDENTS

8.1 Each RTA shall investigate, on behalf of the Commission, all reportable accidents involving a rail transit vehicle or taking place on rail transit-controlled property. Staff may also perform a separate, independent investigation of any such accident.

8.2 The accident investigations performed by each RTA shall be conducted in accordance with written procedures. Each RTA Accident Investigation Procedure, including any changes, shall be submitted to Staff for review.

8.3 When investigating accidents that require immediate notification per 7.2, the RTA shall:

a. Notify Staff when additional investigation is conducted

by an investigation team or panel performing interviews, questioning witnesses, or conducting inspections, measurements, examinations, or tests, etc. as part of the investigation beyond the initial on scene investigation;

b. Provide for Staff's participation to the fullest extent possible in accident investigations, and make all information related to the accident investigation, including data from event recorders, available to Staff for review;

c. Document in a written report each item investigated, the investigation findings, the most probable cause of the accident, contributing causes, and recommendations for corrective action to prevent a recurrence of the accident;

d. Prepare a corrective action plan as a part of the investigation report or in a separate document. (For corrective action plan detail refer to Section 9.)

e. Submit its final investigation report within 60 calendar days of the occurrence of the accident. If the investigation takes longer than 60 calendar days to complete, the RTA shall submit interim status reports every 30 calendar days. If the final investigative report is acceptable to Staff, Staff shall issue a formal letter to the RTA approving the report as consistent with best industry investigation procedures and in furtherance of the public's interest in system safety and security. If it not acceptable, Staff shall identify the areas in the

report to be corrected. If the RTA does not agree with the rejection, the Staff shall either conduct its own investigation, or communicate its disagreement with the findings of the accident investigation to the RTA and meet and confer with the RTA in an effort to make mutually agreeable findings. If such agreement is not reached, the RTA's report and a statement of the reasons why Staff disagrees shall be filed with the Commission.

8.4 No Investigation report or recommendation of the Commission, nor any investigation report of an RTA filed with the Commission, shall be admissible as evidence in any action for damages based on or arising out of matters covered therein, pursuant to Public Utilities Code section 315.

9 REQUIREMENTS FOR CORRECTIVE ACTION PLANS

9.1 Rail Transit Agencies shall develop corrective action plans for the following:

a. Results from investigations, in which identified causal and contributing factors are determined by RTA or Staff as requiring corrective actions.

b. Recommendations contained in the Staff triennial safety and security review reports as adopted by the Commission.

9.2 Each RTA shall submit an investigation corrective action plan to Staff within 60 calendar days of the occurrence of the accident as part of the investigation report or in a

separate document. If the corrective action plan implementation takes longer than 60 calendar days to complete, the RTA shall submit interim status reports every 30 calendar days. The corrective action plan shall identify the action to be taken with an accompanying implementation schedule, and the individual or department responsible for the implementation.

9.3 Each RTA shall submit a corrective action plan based on the recommendations contained in the Staff triennial safety and security review reports as adopted by the Commission. The corrective action plan shall identify the action to be taken with an accompanying implementation schedule, and the individual or department responsible for the implementation. Each RTA shall submit to Staff corrective action plan interim status reports according to the Commission Resolution.

9.4 Each RTA shall submit each corrective action plan to Staff with a request for review and approval. If the corrective action plan is acceptable to Staff, Staff shall issue a formal letter to the RTA approving the corrective action plan as consistent with Sections 9.1 and 9.2, best industry practices, and in furtherance of the public's interest in system safety and security. If it is unacceptable to Staff, Staff shall identify the areas in the plan that, in its determination, require correction, and communicate that information to the RTA. If the RTA does not agree with the rejection, RTA shall meet and confer with Staff in an effort to resolve this disagreement. If no resolution is achieved through negotiation, the RTA shall apply to the Commission

for approval pursuant to the application procedure under the Commission's Rules of Practice and Procedure.

9.5 If the National Transportation Safety Board (NTSB) investigates an accident involving an RTA, Staff and the RTA shall meet to address NTSB's findings and determine the appropriate corrective actions to be taken based on those findings and all other information available on the incident.

9.6 Each RTA shall submit to Staff verification that the corrective action(s) has been implemented as described in the corrective action plan, or that a proposed alternate action(s) has been implemented with the agreement of Staff.

10 REQUIREMENTS FOR AT-GRADE RAIL CROSSINGS

10.1 The procedures described in this section apply to the construction of all at-grade crossings established after the effective date of this General Order.

10.2 In the initial phase, the RTA shall consult with Staff during the process of developing a Draft Environmental Impact Report (DEIR) for projects that require such a document to be prepared. For other proposed crossings, where a DEIR is not required, the RTA shall consult with Staff prior to initiating preliminary engineering. The purpose of this consultation is for the RTA to provide its reasons and supporting evidence, why the at-grade crossing is not a good candidate for closure or grade separation. Staff shall provide feedback by a letter to RTA. The following information is to be provided to Staff as part of the consultation:

a. Current and projected railroad operations. If the if crossing is planned to be used by other types of trains such as freight

trains, the number, type and speed(s) of trains shall be provided;

b. Current and projected highway usage – number, type (cars, trucks, buses, pedestrians, bicyclists, etc.), and speed of vehicles;

c. Existing and projected facilities that generate traffic in the area, such as shopping centers, major industries, schools, entertainment venues, or emergency services (hospitals, fire stations, police departments, etc.);

d. Preliminary drawings and/or aerial photographs, or site maps of the crossing and vicinity – include information on nearby roads to determine if they can accommodate additional vehicular traffic if existing intersections are eliminated.

10.3 In the second phase, the RTA shall request Commission authorization for every crossing during the preliminary engineering phase of the project. At its option, the RTA may choose either of the following processes to request Commission approval:

i. Filing a Rail Crossing Hazard Analysis Report (RCHAR) as outlined below, or

ii. Filing a formal application in accordance with the Commission's Rules of Practice and Procedure.

10.4 If the RTA chooses option (i) in Section 10.3, it shall submit to Staff an RCHAR listing every at-grade rail crossing. The RCHAR shall include the following:

a. Detailed engineering drawings for each at-grade crossing

b. Proposed rail operations

c. Updates of data provided during consultation (see Section 10.2)

d. Analysis of identified hazards at each proposed at-grade crossing, such as:
   - Queuing on tracks
   - Pedestrian movements
   - Turning movements
   - Sightlines

e. Identification of hazard mitigation measures, such as:
   - Crossing warning devices
   - Active and passive signs
   - Median islands
   - Fencing

10.5 After an RCHAR that meets the requirements of Section 10.4 is submitted, Staff shall schedule field diagnostic review meetings, with all affected agencies, within 60 days after receiving the RCHAR, to assess the safety aspects of the proposed at-grade crossing design(s). Within 90 days after the field diagnostic reviews are completed, Staff shall provide preliminary recommendations to the RTA pertaining to the design of each at-grade crossing.

10.6 If the RTA accepts Staff's preliminary recommendations, then those recommendations will be considered to be final and the RTA shall submit plans incorporating the changes for approval by Commission Resolution.

10.7 If the RTA does not accept Staff's preliminary recommendations, then the RTA can request a meeting with Staff to discuss the design of the at-grade crossings. Within 30 days after this meeting, Staff

shall provide their final recommendations to the RTA. If the RTA accepts Staff's final recommendations, the RTA shall submit final plans incorporating the changes for approval by Commission Resolution.

10.8 If the RTA and Staff cannot reach agreement on the design of specific at-grade crossings, then the RTA may file a formal application with the Commission for those crossings, in accordance with Section 10.3 (ii), where agreement was not reached

10.9 Nothing in this GO shall preclude the RTA from filing a formal application in accordance with Section 10.3 (ii) at any point in the process.

11 REQUIREMENTS FOR SAFETY CERTIFICATION PLAN

11.1 Each RTA shall be responsible for Safety Certification of all Projects that initiate preliminary engineering after February 27, 2003. The RTA shall ensure that all entities involved in design, construction, operation, and maintenance of all Projects shall comply with the requirements of the Safety Certification process.

11.2 Each RTA shall prepare a Project specific Safety Certification Plan (SC Plan) for each of its Projects. Applicable FTA guidelines shall be used as a reference.

11.3 Each RTA shall submit the SC Plan to Staff for review and Commission approval during the preliminary engineering phase. The RTA shall revise and expand the SC Plan as the Project progresses, as necessary. The RTA shall file any revision of the SC Plan with Staff. Within 45 calendar days, Staff shall approve or reject the proposed revisions.

11.4 The SC Plan shall address safety certification management including organizational authority and responsibilities, safety certification activities, processes and procedures, documentation requirements and responsibilities, and reporting requirements.

11.5 The SC Plan shall describe the controls used to maintain effective communications and liaison with Staff throughout the life of the Project. It shall also include procedures to obtain and adequately address Staff's written comments on safety and security design reviews conducted throughout Project development lifecycle.

11.6 The SC Plan shall identify the process used to verify and document conformance with safety and security requirements during design, construction, testing, and operational readiness. The SC Plan shall include the following:

a. The hazard management process to conduct safety hazard analyses and safety hazard resolution. The document shall include a list of hazard analyses to be performed. Each RTA shall submit hazard analyses to Staff upon request.

b. A list of all safety and security design criteria that will be used in the planning, design, and construction of Projects.

c. Certifiable elements and sub-elements list.

d. Safety certification audits conducted in accordance with written checklists to verify compliance and judge the effectiveness of the SC Plan.

e. Format of Conformance checklists, and a list of the actual checklists as they become available: the actual checklists shall be submitted upon request.

f. Safety Certification milestones.

g. Procedure for updates.

12 REQUIREMENTS FOR SAFETY CERTIFICATION VERIFICATION REPORT

12.1 Each RTA shall submit a Safety Certification Verification Report to verify Project compliance with the SC Plan.

12.2 Each RTA shall submit the SCVR to Staff at least 21 calendar days prior to the start of service. The SCVR shall certify that: (a) all requirements of the SC Plan have been completed except for listed open items, if any, (b) that all safety hazards have been adequately mitigated, and (c) adequate restrictions/workarounds are in place to ensure the safety of operations until open items are closed. Staff shall respond to the SCVR within 9 calendar days of filing by indicating that it approves the SCVR, or identifying areas that are not acceptable to Staff. Staff shall give its approval of the SCVR by issuing a formal letter to the RTA so stating. The Staff's approval letter will not bind the Commission, but shall constitute provisional Commission approval. The Project shall not be placed in service until the SCVR is provisionally approved by Staff in this manner.

12.3 The SCVR shall include a:

a. Letter of Intent to Operate;

b. Final Project Verification of Safety; and

c. Remaining Open Items List, if any, with appropriate workarounds.

13 COMMISSION APPROVAL

13.1 Where formal Commission approval is required by this General Order, requests for Commission approval, shall be made by letter to Staff unless otherwise specified. Staff shall prepare a resolution on the request for Commission consideration at a public meeting.

13.2 All protests, comments, and appeals of initial Staff or Director determinations shall be submitted to the Commission pursuant to the Commission Rules of Practice and Procedure.

Dated _____, at San Francisco, California.

PUBLIC UTILITIES COMMISSION
STATE OF CALIFORNIA