ATTACHMENT E

STATE WATER RESOURCES CONTROL BOARD

MONITORING AND REPORTING PROGRAM NO. 2010-XXXX-DWQ

SOUTHERN CALIFORNIA EDISON COMPANY FOR SEGMENTS 4, 5, AND 10 OF THE TEHACHAPI RENEWABLE TRANSMISSION PROJECT, KERN AND LOS ANGELES COUNTIES

I. MONITORING

A. General Requirements

1. The Discharger must comply with the "General Provisions for Monitoring and Reporting," dated September 1, 1994, which is attached to and made part of this Monitoring and Reporting Program (Attachment E-1).

2. The Discharger must comply with General Provision 1.d. in Attachment E-1.

   a. Quality assurance/quality control (QA/QC) procedures must be followed and a QA/QC plan must be included in the Sampling and Analysis Plan (SAP) that is provided to the State Water Resources Control Board (State Water Board).

   b. The Discharger may conduct their own field analysis of pH and specific conductance if the Discharger has sufficient capability (qualified and trained employees, properly calibrated and maintained field instruments, etc.) to adequately perform the field analysis. Capability is determined by the State Water Board.

   c. All monitoring instruments and equipment (including a Discharger's own field instruments for measuring pH and turbidity) must be calibrated and maintained in accordance with manufacturer's specifications to ensure accurate measurements.

   d. With the exception of field analyses conducted by Dischargers for pH and turbidity, all analyses must be sent to and conducted at a laboratory certified for such analysis by the California Department of Public Health.

B. Construction Site Storm Event Water Monitoring

1. During storms and/or within one business day after each half-inch of precipitation from a storm event, the Discharger must visually observe and document observations at discharge locations to Anaverde and Amargosa Creeks.

2. The Discharger must monitor precipitation continuously and keep a record of storm events that produce more than ½ inch of precipitation.
3. The Discharger must visually observe and document observations of the discharge of stored or contained storm water that is discharged subsequent to a storm event. The Discharger is only required to visually observe such discharges if they occur under daylight conditions. Stored or contained storm water that will likely discharge after operating hours due to anticipated precipitation must be observed prior to the discharge to determine whether controls and Best Management Practices (BMPs) are in place and functioning as required.

4. Forty-eight (48) hours prior to each potential storm event as defined below, the Discharger must visually observe and implement appropriate corrective action for: (1) all storm water drainage areas, to identify any spills, leaks, or uncontrolled pollutant sources; (2) all BMPs, to identify whether they have been properly installed and maintained; and (3) any storm water storage and containment areas, to detect leaks and ensure maintenance of adequate freeboard. For the purposes of this Order, a potential storm event is defined as any storm event with a 30% or greater chance of precipitation as predicted by the National Weather Service's nearest weather station for the local climate zone.

5. For the visual observations, the Discharger must look for and document the presence or absence of floating and suspended materials, a sheen on the surface, discolorations, turbidity, odors, and source(s) of any observed pollutants.

6. Within one business day after each storm event that produces precipitation of ½ inch or more, the Discharger must conduct a post-storm event inspection to: (1) identify whether BMPs were adequately designed, implemented, and effective; (2) identify additional BMPs needed, BMPs in need of maintenance; and (3) photograph each discharge location and associated BMPs.

7. The Discharger must analyze samples of storm water discharged from each detention basin and collected within one business day after the initial ½ inch of precipitation from a storm event, and every inch thereafter. If no discharge occurs from a basin, no sample is required, but the absence of discharge must be documented. The Discharger must collect samples of stored or contained stormwater that is discharged subsequent to a storm event producing precipitation of ½ inch or more at the time of discharge according to the following requirements:
   a. The Discharger must analyze the samples for pH and turbidity.
   b. The Discharger is not required to physically collect samples or conduct visual observations during dangerous weather conditions or outside of scheduled site operation hours.
c. The Discharger must perform sampling of storm water discharges from all drainage areas associated with construction activity. The stormwater discharge collected and observed must represent the worst quality stormwater discharge in each drainage area based on visual observation of the water and upstream conditions. For example, if there has been concrete work recently in an area, or drywall scrap is exposed to the rain, a pH sample must be taken of drainage from the relevant work area. Similarly, if muddy water is flowing through some parts of a silt fence, samples must be taken of the muddy water even if most water flowing through the fence is clear.

C. Construction Site Monitoring

1. On a daily basis, the Discharger must inspect all public and private roads serving the Project and daily remove, by vacuuming or sweeping, visible accumulations of sediment or other construction activity-related materials that are deposited on the roads. All inspections under this provision must be documented in writing.

2. The Discharger must ensure that inspections and observations at locations where runoff may discharge from the Project site are performed weekly, and at least once each 24-hour period during extended storm events, to identify problems and BMPs that: (1) need maintenance to operate effectively; (2) have failed; or (3) are inadequate to achieve effective control.

3. The Discharger must visually observe construction areas and each drainage area for the presence of (or indication of prior) non-stormwater discharges and their sources to ensure that all BMPs are in place and effective.
   a. One visual observation must be conducted quarterly in each of the following periods: January - March, April - June, July - September, and October - December. Visual observations are only required during daylight hours (sunrise to sunset).
   b. Visual observations must document the presence of evidence of any non-stormwater discharge, pollutant characteristics (floating and suspended material, sheen, discoloration, turbidity, odor, etc.), and source. The Discharger must maintain on-site records indicating the personnel performing the visual observation, the dates and approximate time each drainage area and non-stormwater discharge was observed, and the response taken to eliminate non-stormwater discharges and to reduce or prevent pollutants from contacting non-stormwater discharges.
4. The Discharger may monitor and report run-on from surrounding areas that may contribute to exceedances or excursions from Order requirements (violations).

D. Post-Construction Monitoring

On a semi-annual basis, the Discharger must inspect and document inspections of post-construction treatment controls at the Project site. Maintenance must be provided to address any controls that are not in compliance with requirements. As indicated in condition II.G below, monitoring is in effect until revoked or modified in writing by the Executive Director.

E. Compensatory Mitigation Monitoring (Associated with Fill Discharges)

1. The Discharger must monitor the revegetation of waters of the State and adjacent upland areas which were temporarily impacted at the site. These areas include Features 5-7-S-1, 5-8-S-10, 5-19-S-10, 5-21-S-10, 5-21-S-1, 5-36-S-1, 10-6-S-1, 10-11-S-3, 10-12-S-10, 10-17-S-1, and 10-22-S-1. Impacted areas will be recontoured and revegetated with native seed mixes that were provided to the State Water Board and as specified by the Executive Officer (see II.B. and II.C. below).

2. The Discharger will mitigate for 0.18 acre of permanent and 0.41 acre of temporary discharge of fill to waters of the State and waters of the US, and impacts to federally listed species habitat, through the Desert Tortoise Natural Area mitigation bank. The bank is operated by the Desert Tortoise Preserve Committee. Use of this mitigation bank has been approved through the USFWS BO and approval is expected in the forthcoming CDFG SAA and Incidental Take Permit. Compensatory mitigation for impacts to waters of the State will be at a 3:1 ratio (all ratios are expressed as mitigation to impact) for both temporary and permanent impacts. As a result, the Discharger proposes to purchase 1.02 acre of credit for waters of the State at the mitigation bank.

II. REPORTING

A. Certified Cover Letter

The Discharger must use a cover letter containing the name and telephone number of an individual who can answer questions about the report, the Monitoring and Reporting Program Number, and the Project title as listed in the Order.

B. Required Program Reports

1. The Discharger must submit an as-built report and plan upon its approval of the report and plan within 120 days following the completion of construction. Failure to meet this deadline will require the Discharger to
cease all construction activities until the report is submitted, unless an extension for cause is sought and granted prior to this deadline.

C. Compensatory Mitigation Reporting

Compensatory mitigation will be implemented and monitored in accordance with the mitigation bank’s Implementation Agreement. Compensatory mitigation for temporary and permanent Project impacts will be fulfilled with the acquisition of lands managed by the Desert Tortoise Preserve Committee. All temporary impacts associated with the Project will be restored on-site using native seed mix, as appropriate, to blend with existing vegetation communities adjacent to the site.

1. Initial construction of on-site revegetation of temporary disturbance areas for discharge of fill to waters of the State in the Project area must be completed as set forth in this Order.

2. An as-built report must be submitted to State Water Board staff no later than 120 days following initial construction of the revegetation project. Failure to meet this deadline will require the Discharger to cease all construction activities until the report is submitted, unless an extension for cause is sought and granted prior to this deadline. The as-built report must include photo-documentation of the completed mitigation. The Discharger must prepare site maps with the photo-documentation points clearly marked with Global-Positioning System (GPS) coordinates. Prior to implementing the Project, the Discharger must photographically document the condition of the Project site. Following implementation of the Project, the Discharger must photographically document the immediate post-construction condition of the site and submit to the State Water Board pre-construction photographs, post-construction photographs, and a map with the locations of the photo-documentation points.

3. The Discharger will monitor the revegetation sites described in I.E.1 above, on an annual basis. The area disturbed must be reestablished to a uniform vegetative cover equivalent to 80 percent coverage of the preconstruction vegetative conditions. Where preconstruction vegetation covers less than 100 percent of the surface, such as in arid areas, the 80 percent coverage criteria is adjusted as follows: if the preconstruction vegetation covers 50 percent of the ground surface, 80 percent of 50 percent (0.80 X 0.50 = 0.40) would require 40 percent total uniform surface coverage. Where no vegetation is present prior to construction, the site is returned to its original line and grade and/or compacted to achieve stabilization. Vegetative cover requirements do not apply to areas where equivalent stabilization measures have been employed. These measures include, but are not limited to, the use of such BMPs as
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blankets, reinforces channel liners, soil cement, fiber matrices, geotextiles, or other erosion restrain soil coverings or treatments.

4. The Discharger will qualitatively monitor the revegetation sites described in I.E.1 above, on an annual basis. Waters of the State, including surrounding upland areas, that are being restored, must not exhibit signs of erosion or down-cutting of the banks.

5. If a natural disaster occurs (e.g., large storm event, fire, etc.) which results in severe damage to revegetation sites, the Discharger shall notify State Water Board staff within 48 hours. State Water Board staff will coordinate with the Discharger to discuss options to address damaged revegetation sites and revise the revegetation plans to account for the unforeseen circumstance.

6. The Discharger must provide Annual Reports for the revegetation monitoring no later than July 15 of each year following completion of the initial construction of the revegetation areas. The Annual Report will include: (1) the preconstruction qualitative data for percent cover of native and nonnative vegetation, and height of shrub species at each revegetation site; (2) current qualitative data for percent cover of vegetation; (3) a discussion of the success of the revegetation project in facilitating stable soils; (4) qualitative comparisons of current revegetation site conditions with preconstruction conditions and previous revegetation monitoring results; (5) a qualitative assessment of onsite erosion; (6) a summary of the field memos, providing a summary of the revegetation effort and documenting any supplemental or other remedial actions designed to improve the revegetation sites; (7) photographs taken from established photo-points that accurately depict site conditions; the location of the photo point shall be plotted on an aerial photograph of the project area.

7. By no later than five years from the date that the as-built plans for the revegetation areas are submitted to the State Water Board, a report must be prepared that documents whether the sites meet the final performance criteria (II.C.3 &4. above). If the criteria are not met, the report must identify and propose remedial measures to be undertaken, including extension of monitoring until the criteria are met, and a schedule for completion of remedial measures.

E. Storm Water Pollution Prevention Plan Annual Report

1. The Discharger must prepare and provide a SWPPP Annual Report no later than July 15 of each year.
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2. The SWPPP Annual Report must include a summary and evaluation of all sampling and analysis results, original laboratory reports, a summary of all corrective actions taken during the compliance year, and identification of any recommended compliance activities or corrective actions that were not implemented.

3. The SWPPP Annual Report must include all records and reports of visual observations and sample collection exceptions, the analytical method, method reporting unit, and method detection limit of each analytical parameter. Analytical results that are less than the method detection limit must be reported as "less than the method detection limit."

F. Records

1. The Discharger must maintain records on-site of all visual observations, personnel performing the observations, observation dates, weather condition, locations observed, and corrective actions taken in response to the observations.

2. All inspections and observations pursuant to Section I.C. above must be documented in writing and must include:
   a. Inspector's name, title, and signature.
   b. Inspection date and date the inspection report was written.
   c. Weather information: estimate of beginning of storm event, duration of event, time elapsed since last storm, and approximate amount of rainfall (inches).
   d. A list and description of BMPs evaluated and any deficiencies noted. If there are no deficiencies, the report must indicate (under penalty of perjury) that the Project is in compliance with Waste Discharge Requirements (WDRs).
   e. Report the presence of noticeable odors or any visible sheen on the surface of any discharges.
   f. Corrective actions required, including any changes necessary to comply with requirements, and implementation dates for completing corrective actions.
   g. Photographs taken during the inspection.

3. Records of all storm water monitoring information and copies of all reports (including Annual Reports) required by this Order must be retained for a period of at least five years from the date of the sample, measurement, report, or application. This period may be extended when requested by
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the State Water Board. Records must be retained on-site while construction is ongoing. The records must include:

a. The date, place, time of facility inspections, sampling, visual observation, and/or measurement, including precipitation;

b. The individual(s) who performed the facility inspections, sampling, visual observations, and or measurement;

c. The date and approximate time of analyses;

d. The individual(s) and company who performed the analysis;

e. A summary of all analytical results from the last five years, the method detection limits and reporting units, and the analytical techniques or methods used;

f. Quality assurance/quality control records and results;

g. Non-stormwater discharge inspections and visual observations and stormwater discharge visual observation records; and

h. Visual observation and sample collection exception records.

G. Expiration

This Monitoring and Reporting Program is in effect until revoked or modified in writing by the Executive Director.

Ordered by:

___________________________________ Date:____________________________

Attachments:

E-1. General Provisions for Monitoring and Reporting
ATTACHMENT E-1

STATE WATER RESOURCES CONTROL BOARD
GENERAL PROVISIONS
FOR MONITORING AND REPORTING

1. SAMPLING AND ANALYSIS

a. All analyses shall be performed in accordance with the current edition(s) of the following documents:
   
i. Standard Methods for the Examination of Water and Wastewater
   Methods for Chemical Analysis of Water and Wastes, U.S.
   Environmental Protection Agency (USEPA).

b. All analyses shall be performed in a laboratory certified to perform such analyses by the California Department of Public Health or a laboratory approved by the Executive Director. Specific methods of analysis must be identified on each laboratory report.

c. Any modifications to the above methods to eliminate known interferences shall be reported with the sample results. The methods used shall also be reported. If methods other than USEPA-approved methods or Standard Methods are used, the exact methodology must be submitted for review and must be approved by the Executive Director prior to use.

d. The discharger shall establish chain-of-custody procedures to insure that specific individuals are responsible for sample integrity from commencement of sample collection through delivery to an approved laboratory. Sample collection, storage, and analysis shall be conducted in accordance with an approved Sampling and Analysis Plan (SAP). The most recent version of the approved SAP shall be kept at the Project site.

e. The discharger shall calibrate and perform maintenance procedures on all monitoring instruments and equipment to ensure accuracy of measurements, or shall insure that both activities will be conducted. The calibration of any wastewater flow measuring device shall be recorded and maintained in the permanent log book described in 2.b, below.

f. A grab sample is defined as an individual sample collected in fewer than 15 minutes.

g. A composite sample is defined as a combination of no fewer than eight individual samples obtained over the specified sampling period at equal intervals. The volume of each individual sample shall be proportional to the discharge flow rate at the time of sampling. The sampling period shall equal the discharge period, or 24 hours, whichever period is shorter.
2. OPERATIONAL REQUIREMENTS

a. Sample Results

The discharger shall maintain all sampling and analytical results including, but not limited to: strip charts; date, exact place, and time of sampling; date analyses were performed; sample collector's name; analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of five years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the State Water Board.

b. Operational Log

An operation and maintenance log shall be maintained at the facility. All monitoring and reporting data shall be recorded in a permanent log book.

3. REPORTING

a. For every item where the requirements are not met, the discharger shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time, and shall submit a timetable for correction.

b. All sampling and analytical results shall be made available to the State Water Board upon request. Results shall be retained for a minimum of five years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the State Water Board.

c. The discharger shall provide a brief summary of any operational problems and maintenance activities to the State Water Board with each monitoring report. Any modifications or additions to, or any major maintenance conducted on, or any major problems occurring to the wastewater conveyance system, treatment facilities, or disposal facilities shall be included in this summary.

d. Monitoring reports shall be signed by:

   i. In the case of a corporation, by a principal executive officer at least of the level of vice-president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates;

   ii. In the case of a partnership, by a general partner;

   iii. In the case of a sole proprietorship, by the proprietor; or
iv. In the case of a municipal, state or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.

e. Monitoring reports are to include the following:

   i. Name and telephone number of individual who can answer questions about the report.

   ii. The Monitoring and Reporting Program Number.

   iii. WDID Number.

f. Modifications

   This Monitoring and Reporting Program may be modified at the discretion of the Executive Officer.

4. NONCOMPLIANCE

Pursuant to Water Code section 13268, any person failing or refusing to furnish technical or monitoring reports, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in an amount of up to one thousand dollars ($1,000.00) for each day of violation.