# SCE RSAR 2021 Data Request 22-07-15

For each data request, please provide any relevant documentation including:

* Internet address to the document(s)
* Citation including applicable page numbers, tables, charts, heading.
* Screen shots as applicable

## Capital Distribution

1. **Wildfire Covered Conductor Program**. Tables VII-8 through VII-10.
	1. It is understood that labor costs per type of work and work locations, such as rural areas, mountainous terrain, or remote areas may be more expensive than in more accessible areas. This variation in costs should have been available and taken into account when developing cost estimates in the GRC.
	2. How are factors such as terrain, accessibility, and the potential need for contractor work considered and reflected when developing cost estimates?
	3. Do workload projections show that there may be overages in future years? How might this affect future RSAR reporting?
2. **Distribution Substation Plan (DSP) Circuits**. Tables VII-8 through VII-10.
	1. In the variance explanation, rationale #2 sites “Resource Planning and Performance Management Constraints.” What are these constraints, how do they affect the program, and how are they to be overcome?
	2. Good that project costs were well below the engineer’s estimates. Congratulations! How might this affect the program category in 2022?
3. **Distribution Preventative and Breakdown Capital Maintenance**. Tables VII-8 through VII-10.
	1. Did the remediation maintenance work keep up with the increased inspection findings? If not, what are SCE’s plans to catch up? What are the impacts to safety and reliability?
	2. In the variance explanation, rationale #1 says “bundling of enhanced overhead inspections remediations for wildfire prevention with non-wildfire work which led to non-wildfire treatment”. This wording in unclear. Please explain in a different way. Did the bundling of different work types cause inefficiencies?
	3. In the variance explanation, rationale #3 says “more work being completed on premium time.” What is meant by “premium time”? Is this overtime for SCE employees?
4. **Enhanced Overhead Inspections and Remediations.** Tables VII-8 through VII-10.
	1. It appears that a backlog of work orders was addressed in 2021. Is this correct? If so,
		1. Was this work able to be performed by SCE employees or were contractors needed?
		2. If contractors were needed, does this contribute to the increased cost?
	2. Is there still a backlog of work that needs to be addressed? If so:
		1. How does this affect more recent work tags/orders as they come in?
		2. How does this address reliability and safety?
		3. How will this affect future RSAR reporting?
	3. How is this program related to the program in Question #8 below?
5. **Underground Structure Replacements.** Tables VII-8 through VII-10.
	1. The variance explanation says “SCE completed more vault replacements which have significantly higher unit costs compared to shoring projects.”
		1. Does this correspond with mitigating higher safety risks?
		2. Does this mean that future work will be less costly because the more costly work has been completed?
	2. How much of the cost overrun was from completion of higher labor costs versus higher material costs?
	3. How will this impact future RSAR reporting? Will recorded costs be lower?

## O&M Distribution

1. **Distribution Routing Vegetation Management**. Tables VII-5 through VII-7.
	1. Understood that SB 247 increased labor costs from what was authorized when the 2021 GRC was submitted in 2019. Still, an overexpenditure of 231% seems extreme based solely on this rationale. Where there are any other factors that contributed to the overexpenditure?
	2. Did the implementation of SB 63, which amended Public Resources Code 4291 regarding vegetation management factor into the increased costs?
	3. Was more vegetation cleared than originally planned?
2. **Infrared Inspection Program**. Tables VII-5 through VII-7.
	1. This program is comprised of the Infrared Inspection Program (Infrared Inspections and Non-RAMP). What are the non-RAMP inspections? Where do the Corona Scans fit?
	2. The activity description says the work performs infrared inspections on both distribution and transmission circuits in the HFRA, plus corona inspections on the transmission circuits. Describe infrared and corona inspections and why they are not applicable to distribution circuits.
	3. The variance explanation says the infrared and corona inspections for the distribution system were separated into different categories and SCE settled on 1,000 mile/year for this program. Please explain the following:
		1. Does the 1,000 miles/year only include infrared inspections?
		2. Does the 1,000 miles/year include both transmission and distribution circuits?
	4. What is the difference in cost between infrared and corona inspections? The variance explanation sites corona inspections moving to its own program as the reason for the 85% underexpenditure. Does this mean that infrared inspections for both distribution and transmission circuits only made up 15% of the programs costs, while corona inspections on transmission circuits made up 85% of costs?
	5. I do not see a separate category in the 2021 RSAR for Corona Inspections. The variance explanation says the infrared and corona inspections were separated into their own programs and developed independently. Does the Corona Inspection program appear in the RSAR. If so, where? If not, why not?
	6. How does the underexpenditure impact safety?
3. **Enhanced Overhead Inspections and Remediations**. Tables VII-5 through VII-7.
	1. When was the AOC implemented?
	2. Why was the AOC expanded in 2021?
	3. What did the AOC cover before and after the expansion?
	4. What were the reasons for this change in the inspection process?
	5. What is the result of these inspections? Are repair tags/orders issued to address any identified problems?
	6. Describe how this new AOC process has impacted remediation and maintenance activities.
	7. How will this affect future RSAR reporting?
	8. How is this program related to the program in Question #4 above?
4. **Dead, Dying, and Diseased Tree Removal**. Tables VII-5 through VII-7.
	1. Explain the reason for the multiple contractor safety stand-downs. Were there more safety stand-downs than originally planned? If so, was it the result of increased safety incidents? Did safety improve afterward?
	2. Describe the new environmental processes. Were they put in place by SCE, CPUC, statute, or other sources?
	3. How will the increased safety stand-downs and new environmental processes impact the removal of dead, dying, and diseased trees in the future?
	4. How will future RSARs be impacted? Will there continue to be underexpenditures, or will the work ramp up?
	5. How does the slow down in this work impact safety and reliability?

## Capital Transmission

1. **Transmission Capital Maintenance**. Tables VIII-14 through VIII-16.
	1. Describe the resource constrains. Are these related to capital, labor, or other type of resource constraints?
	2. Why were there delays in the start for the required assessments?
	3. How did the delay in assessments affect the delay in remediation work?
	4. Explain the relationship between this work and the ongoing maintenance spend on small civil and transmission grid maintenance activities. Why would this work delay Transmission Capital Maintenance work?
2. **Substation Transformer Bank Replacement**. Tables VIII-14 through VIII-16.
	1. Explain what is meant by outage constraints and why they resulted in project deferrals.
	2. Understood that there were material delays due to supply chain issues. What materials were delayed?
	3. What was the nature of the general construction constraints and delays? Is it a result of skilled labor shortage?
	4. How do these delays affect the safety of substation transformers?
	5. How will these delays affect work in 2022 and onward? Will work increase resulting in an overexpenditure over authorized costs in future RSARS?
	6. How do these delays impact safety and reliability?
3. **Transmission Line Rating Remediation (TLRR).** Tables VIII-14 through VIII-16.
	1. Describe what is meant by a “line clearance discrepancy,” the danger or operational issues it poses, and the remediation.
	2. How do these delays impact safety and reliability?
4. **Protection of Grid Infrastructure Assets**. Tables VIII-14 through VIII-16.
	1. Describe the relationship between work re-prioritization in 2019 and 2020 and the deferral of work in 2021 and 2022. Why wasn’t this anticipated in the 2021 GRC, which was submitted in 2019?
	2. How was the work prioritized? What changes were made?
	3. How does the deferral of this work impact safety and reliability?

## Capital Other

1. **Substation Switchrack Rebuild**. Tables X-25 through X-27.
	1. Describe the unforeseen project scope changes. What was the nature of the scope changes? Why were the scopes changed?
	2. Understood that there are material shortages and supply chain issues. What materials and supplies are impacted?
	3. Do not the statement in the variance explanation hat says customer requests defer installation dates. Is this referring to SCE ratepaying customers? Or is it referring to SCE as a customer of the vendors?
	4. Do these delays in 2021 mean that work will ramp up in 2022, resulting in an overexpenditure for that year?
	5. How do the delays impact safety and reliability?
2. **Grid Mod Cybersecurity**. Tables X-25 through X-27.
	1. Describe the delays in the grid mod programs and how they caused the specific Cybersecurity work to be delayed.
	2. What outer years has this work been shifted to? How will this affect future RSAR reporting?
	3. How do these delays affect safety and reliability?