

T&D Quality Program Update

Operation Review Forum

July 16, 2021



Quality Update – Highlights

Increased Visibility of Conformance Rates for T&D Quality Programs (OE Goal)

- Added Tier 1 Metrics to Dashboard
- Developed additional metrics to analyze and evaluate non-conformance trends

Update Risk Ranking of T&D Quality Programs (OE Goal)

- Transitioned from REAX to Technosylva for structure level risk data for T&D

Tracking Status for Remediating Corrective Action Program (CAP) Findings (OE Goal)

- Identified and received approval of initial CAP Metrics: 1. Request Processing Completion, 2. Evaluation Completion, 3. Corrective Action Completion
- Partnering with the Data Visualization group on the development of CAP dashboard
- 21 CAP requests to date:
 - Completed (5); Open (10); Transferred (6) for Continuous Improvement (CI)
 - Completed evaluation on incorrect primary insulators installed (top QC finding for Distribution Construction). Drafted report, scheduled to meet with Directors on 8/4/21
- Met with Engineering and Distribution to develop action plans to close out past due quality findings
 - Next steps include meeting with ERM to disposition remaining open quality findings by 8/31/21

Quality Program Targets for 2021 (Tier 1 Metrics)

- Distribution Construction target 90% (+/- 5%) –  Not meeting YTD June target
- Transmission Construction target 94% (+/- 4%) –  Meeting YTD June target
- Overhead Detail Inspection target 97% (+/- 1%) –  Not meeting YTD June target
- Vegetation Management CCD target 95% (+/- 4%) –  Meeting YTD June target

Distribution Construction – YTD 2021 Results Through June

4,661
Total Inspections

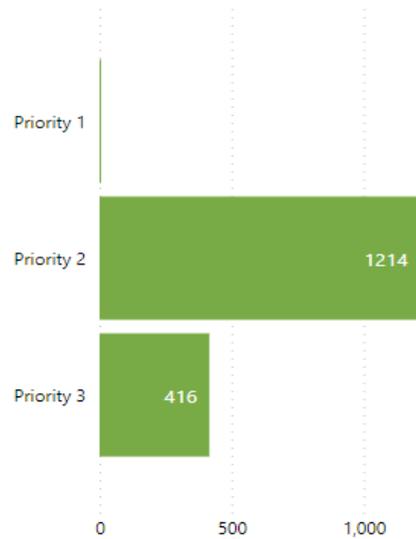
3,666
Pass Total

995
Potential Non-Conformances

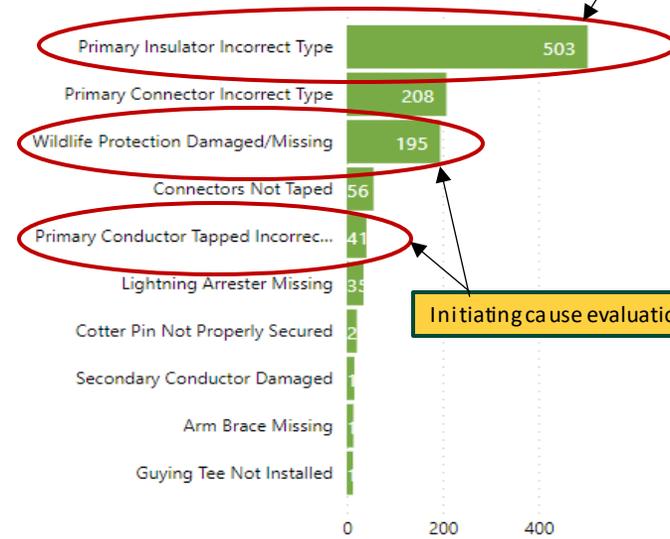
79%
P1 & P2 Total CR%

Ca use evaluation identified material availability issue. Added new controls and exemptions for material availability issues.

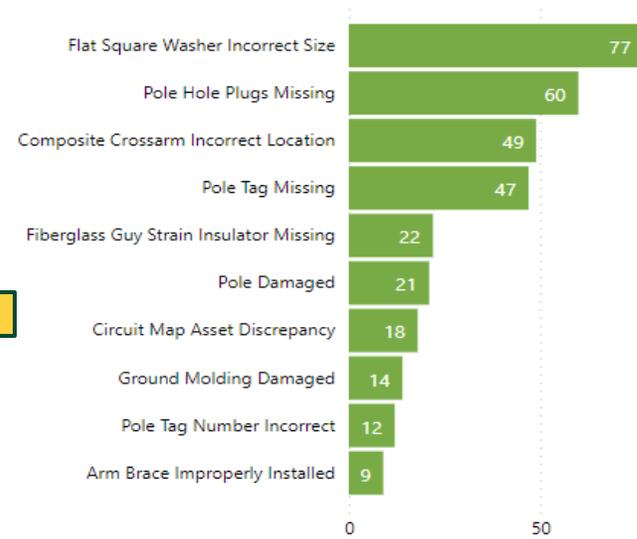
Findings by Priority



Top 10 P1 & P2 Finding Categories



Top 10 P3 Finding Categories



Initiating cause evaluation

Program Name - REAX Score	FLOCS				P1 & P2 Findings						P3 Findings	
	Total QC Inspections	P1 & P2 PNC	P1 & P2 CR	Threshold Limit	P1	P2E	P2	Total P1 & P2	Open	Past Due	FLOC PNC	P3
Distribution Construction (Very High)												
Very High	1,056	335	68%	100.0%	0	0	421	421	325	38	59	63
High	2,074	441	79%	98.0%	1	0	540	541	332	54	164	194
Medium	1,223	192	84%	95.0%	4	0	224	228	156	21	114	135
Low	308	27	91%	95.0%	0	0	29	29	13	1	22	24
Total	4,661	995	79%	97.0%	5	0	1,214	1,219	826	114	359	416

Distribution Construction – YTD 2021 Results Through June

Total	4,661 Total Inspections	3,666 Pass Total	995 Potential Non-Conformances	79% P1 & P2 Total CR% <i>+4% from YTD March</i>
SCE	786 Total Inspections	704 Pass Total	82 Potential Non-Conformances <i>-1% from YTD March</i>	90% P1 & P2 Total CR%
Contractor	3,875 Total Inspections	2,962 Pass Total	913 Potential Non-Conformances	76% P1 & P2 Total CR%

Conformance Rate by Region | District



Q1 avg. 59%, Q2 avg. 82%, and 91% for month of June

Conformance Rate Trending



Transmission Construction – YTD 2021 Results Through June

Exceeding target of 94% (+/- 4%)

681

Total Inspections

651

Pass Total

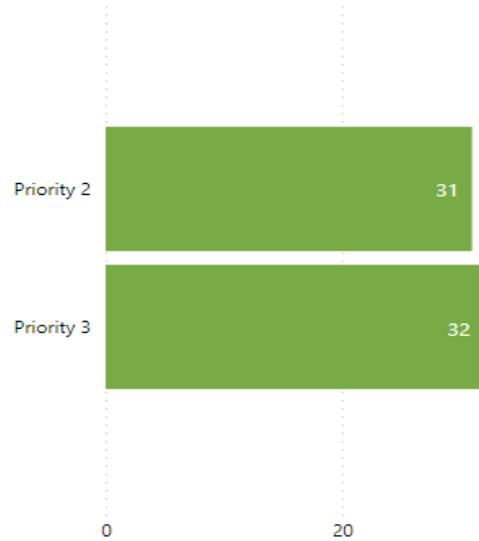
30

Potential Non-Conformances

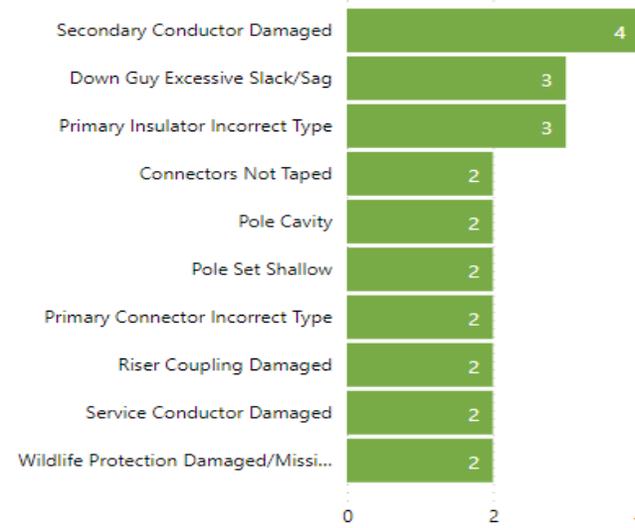
96%

P1 & P2 Total CR%

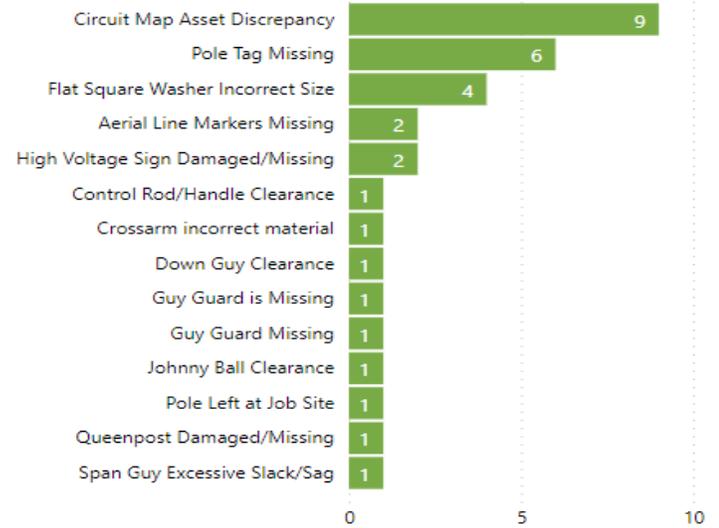
Findings by Priority



Top 10 P1 & P2 Finding Categories



Top 10 P3 Finding Categories

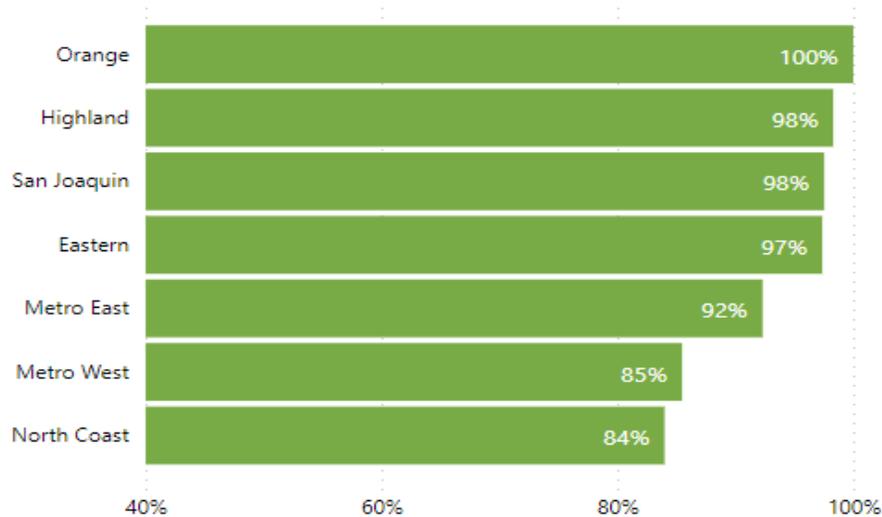


Program Name - REAX Score	FLOCS				P1 & P2 Findings						P3 Findings	
	Total QC Inspections	P1 & P2 PNC	P1 & P2 CR	Threshold Limit	P1	P2E	P2	Total P1 & P2	Open	Past Due	FLOC PNC	P3
Transmission Construction (Very High)												
High	26	1	96%	98.0%	0	0	1	1	1	0	1	1
Medium	268	14	95%	95.0%	0	0	14	14	12	0	22	22
Low	387	15	96%	95.0%	0	0	16	16	8	0	9	9
Total	681	30	96%	96.0%	0	0	31	31	21	0	32	32

Transmission Construction – YTD 2021 Results Through June

Total	681 Total Inspections	651 Pass Total	30 Potential Non-Conformances	96% P1 & P2 Total CR%
SCE	181 Total Inspections	175 Pass Total	6 Potential Non-Conformances	97% P1 & P2 Total CR%
Contractor	500 Total Inspections	476 Pass Total	24 Potential Non-Conformances	95% P1 & P2 Total CR%

Conformance Rate by Grid



Conformance Rate Trending



Overhead Detail Inspection - YTD 2021 Results Through June

4,306
Total Inspections

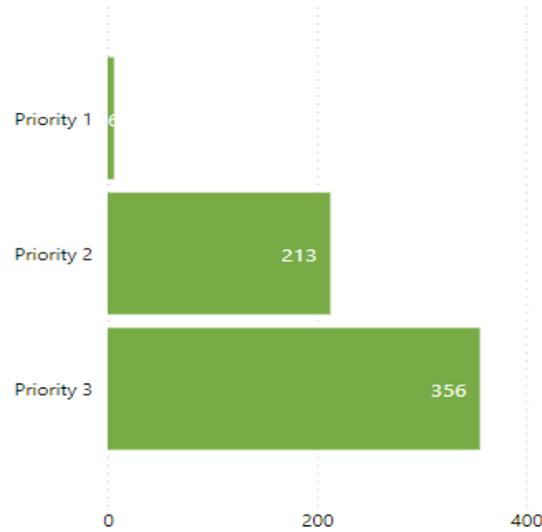
4,101
Pass Total

205
Potential Non-Conformances

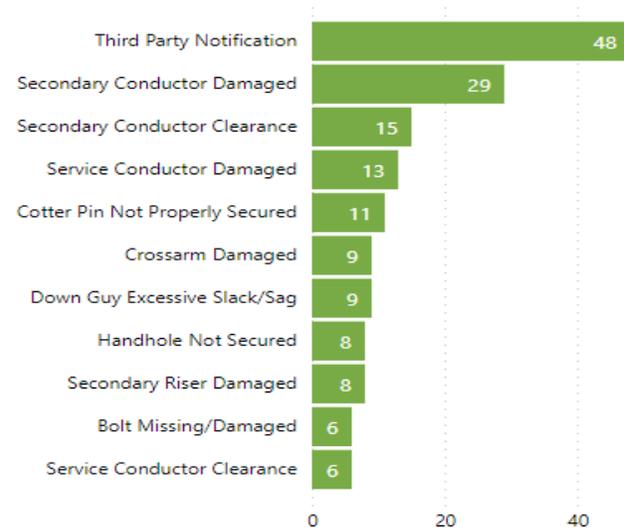
95%
P1 & P2 Total CR%

Tier 1 Target 97% (+/- 1%)

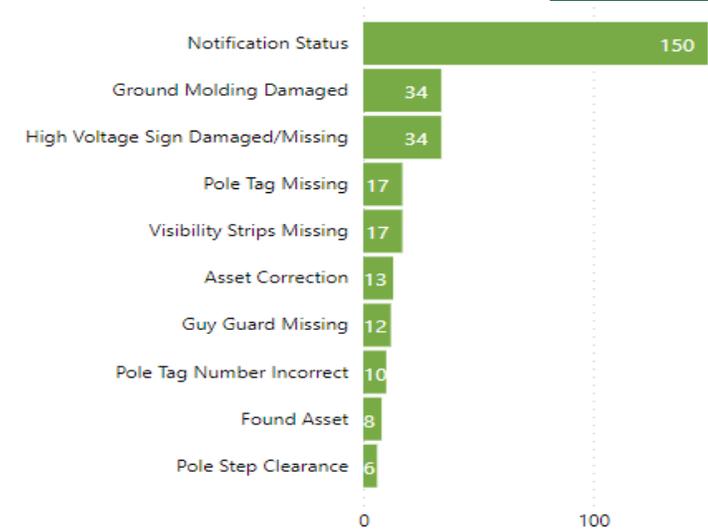
Findings by Priority



Top 10 P1 & P2 Finding Categories



Top 10 P3 Finding Categories



Program Name - REAX Score	FLOCS				P1 & P2 Findings						P3 Findings	
	Total QC Inspections	P1 & P2 PNC	P1 & P2 CR	Threshold Limit	P1	P2E	P2	Total P1 & P2	Open	Past Due	FLOC PNC	P3
ODI (High)												
Very High	1,311	53	96%	98.0%	2	0	55	57	30	0	75	82
High	1,265	44	97%	95.0%	0	0	44	44	26	10	88	93
Medium	1,262	80	94%	95.0%	4	0	84	88	13	5	106	128
Low	468	28	94%	90.0%	0	0	30	30	5	1	49	53
Total	4,306	205	95%	94.5%	6	0	213	219	74	16	318	356

Vegetation Management T&D – YTD 2021 Results Through June

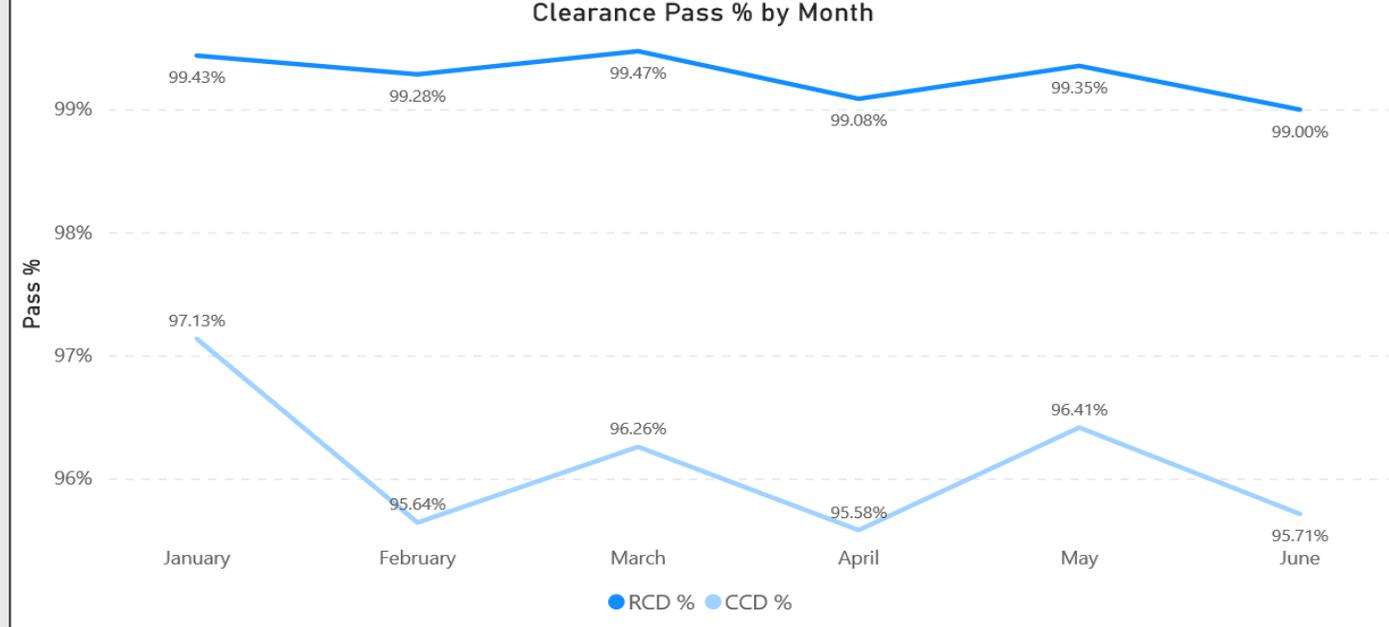
Pass % by District

District	Trees Inspected	RCD Pass %	CCD Pass %
29-Palms	897	100.00%	99.22%
Fullerton	1193	100.00%	98.99%
Ridgecrest	144	100.00%	100.00%
San Joaquin	1272	100.00%	99.69%
Wildomar	9582	99.99%	99.75%
Long Beach	1309	99.92%	97.10%
Victorville	2268	99.87%	96.43%
Whittier	3594	99.86%	98.91%
Bishop/Mammoth	5742	99.84%	99.44%
Huntington Beach	608	99.84%	99.67%
Ontario	8410	99.81%	98.60%
Menifee	10835	99.81%	99.01%
Tehachapi	1113	99.73%	99.28%
Kernville	8991	99.63%	96.57%
Antelope Valley	4561	99.43%	95.07%
Montebello	1595	99.37%	96.61%
Compton	1107	99.37%	97.92%
Covina	8470	99.36%	97.53%
Foothill	895	99.33%	96.54%
Ventura	15162	99.28%	96.27%
Thousand Oaks	17583	99.22%	96.37%
Arrowhead	19697	99.17%	94.68%
South Bay	8544	99.04%	95.05%
Valencia	3993	98.67%	94.09%
Monrovia	12032	98.63%	91.56%
Santa Monica	606	98.51%	93.40%
Redlands	4868	98.27%	92.50%
Saddleback	2141	98.13%	90.28%
Santa Barbara	4190	97.68%	91.07%

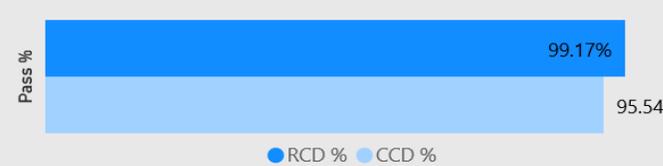
Distribution

Transmission

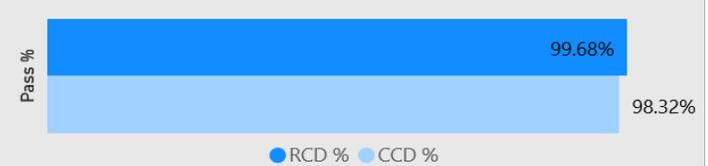
Clearance Pass % by Month



HFRA Clearance Pass %



Non HFRA Clearance Pass %



Total Trees Inspected

166031

Overall RCD Pass %

99.27%

Overall CCD Pass %

96.12%

Tier 1 Target 95% (+/- 4%)

NOTE: RCD & CCD results indicate tree condition clearance at time of QC, not at time of trim

AQL RCD = 100%
AQL CCD = 95%

	Compliance Zone	HFRA
T	RCD = Regulation Clearance Distance	10'
	CCD = Compliance Clearance Distance (RCD x 1.5)	15'

	Compliance Zone	HFRA	Non-HFRA
D	RCD = Regulation Clearance Distance	4'	18"
	CCD = Compliance Clearance Distance (RCD x 1.5)	6'	3'

Appendix

Energy for What's AheadSM



Distribution Construction – San Jacinto YTD 2021 Results Through June

Conformance Rate Trending

● Monthly CR ● YTD CR ● 3 Month Rolling CR

