

T&D Quality Program Update

Operation Review Forum

November 2, 2021



Quality Update – Tier 1 Metric Targets for 2021

Distribution Construction target 90% (- 11%)

- 79% YTD performance not meeting target

Transmission Construction target 94% (+ 2%)

- 96% YTD performance meeting target

Overhead Detail Inspection target 97% (- 2%)

- 95% YTD performance not meeting target

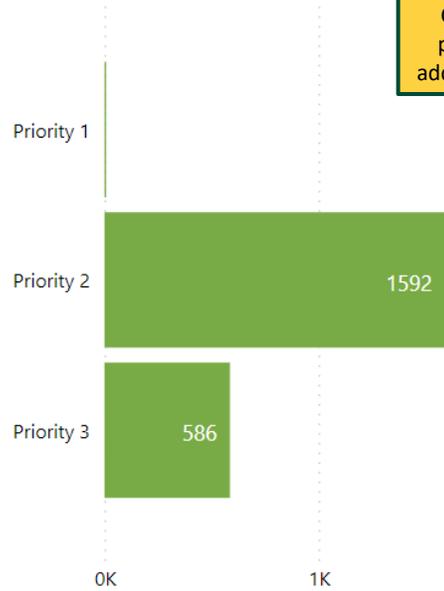
Vegetation Management CCD target 95% (+ 1%)

- 96% YTD performance meeting target

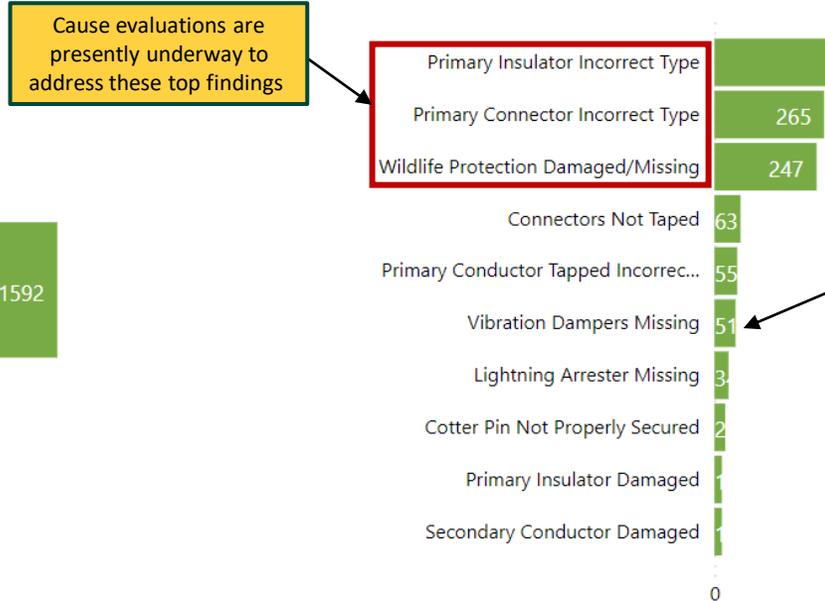
Distribution Construction QC Inspections—YTD 2021 Results Through September

6,259 Total Inspections
 4,950 Pass Total
 1,309 Potential Non-Conformances
 79% P1 & P2 Total CR% -3% from YE 2020

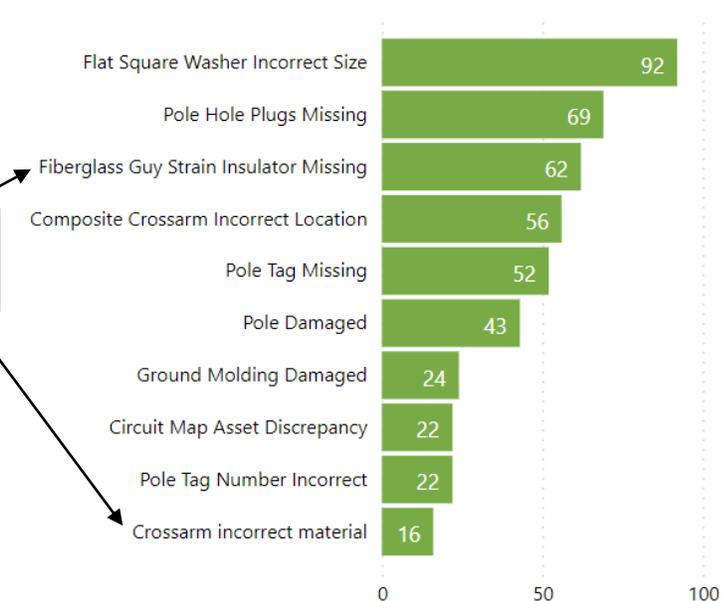
Findings by Priority



Top 10 P1 & P2 Finding Categories



Top 10 P3 Finding Categories



Cause evaluations are presently underway to address these top findings

Known supply chain issues will impact installation of these components (and more)

Program	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	1,535	454	70%	100.0%	0	0	577	577	327	195	119	128
High	2,945	611	79%	98.0%	1	0	738	739	412	218	229	274
Medium	1,447	215	85%	95.0%	4	0	247	251	101	58	136	158
Low	332	28	92%	95.0%	0	0	30	30	6	6	24	26
Total	6,259	1,308	79%	97.0%	5	0	1,592	1,597	846	477	508	586

This count is representative of 2020/2021 findings only. Remediation plans for prior years past due findings (approximately 900) are underway.

Distribution Construction QC Inspections – YTD 2021 Results Through September

Total

6,259
Total Inspections

4,950
Pass Total

1,309
Potential Non-Conformances

79%
P1 & P2 Total CR%

SCE

936
Total Inspections

836
Pass Total

100
Potential Non-Conformances

89%
P1 & P2 Total CR%

Performance is up:
+3% from YE '20 (86%)

Contractor

5,323
Total Inspections

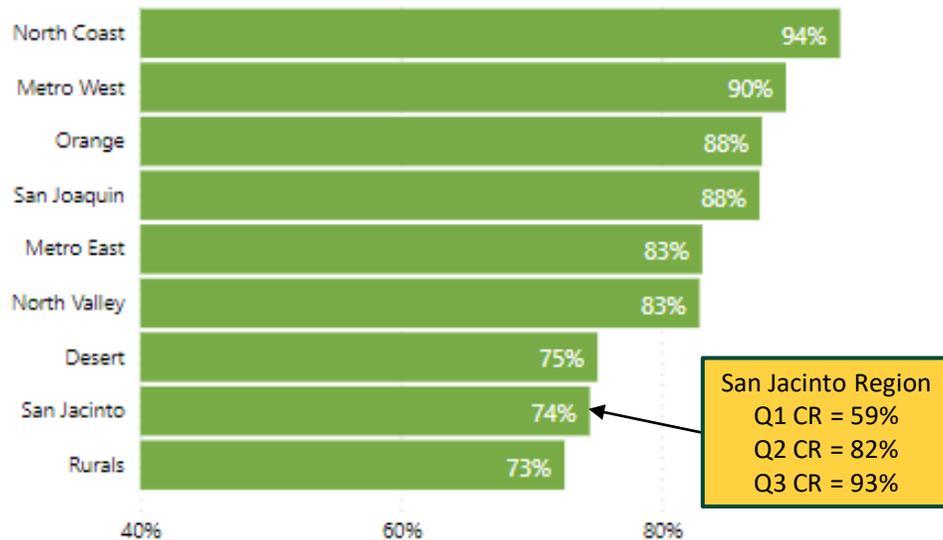
4,114
Pass Total

1,209
Potential Non-Conformances

77%
P1 & P2 Total CR%

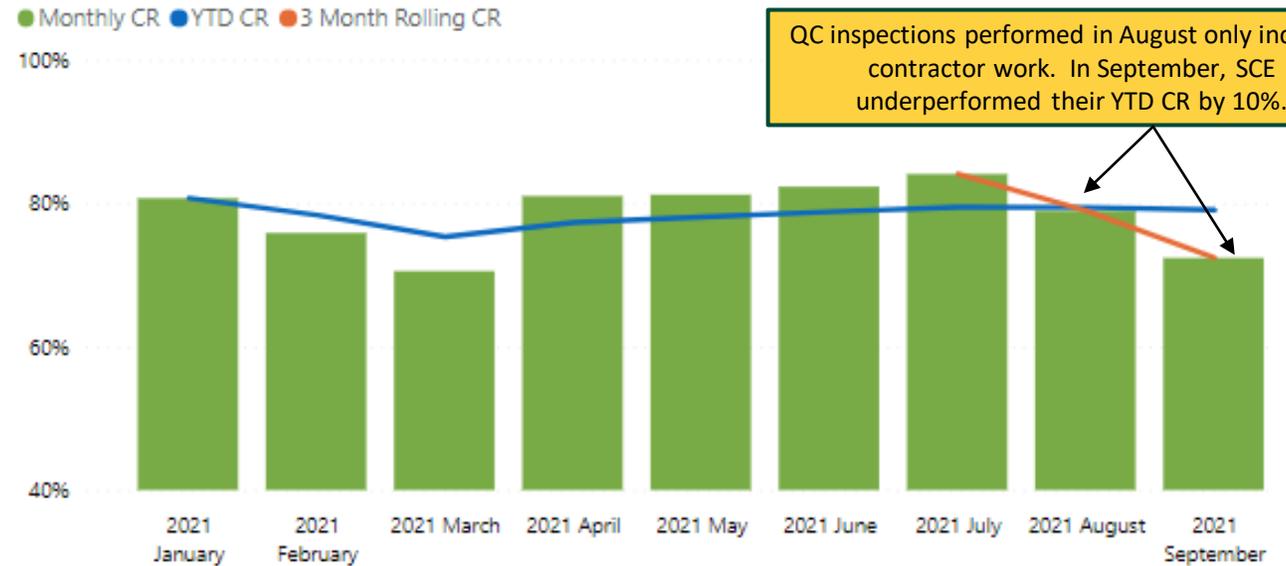
Performance is down:
-4% from YE '20 (81%)

Conformance Rate by Region | District



San Jacinto Region
Q1 CR = 59%
Q2 CR = 82%
Q3 CR = 93%

Conformance Rate Trending



QC inspections performed in August only included contractor work. In September, SCE underperformed their YTD CR by 10%.

Transmission Construction QC Inspections – YTD 2021 Results Through September

Due to Anchor Validation support, Transmission Construction QC inspections were paused in July & August.

713
Total Inspections

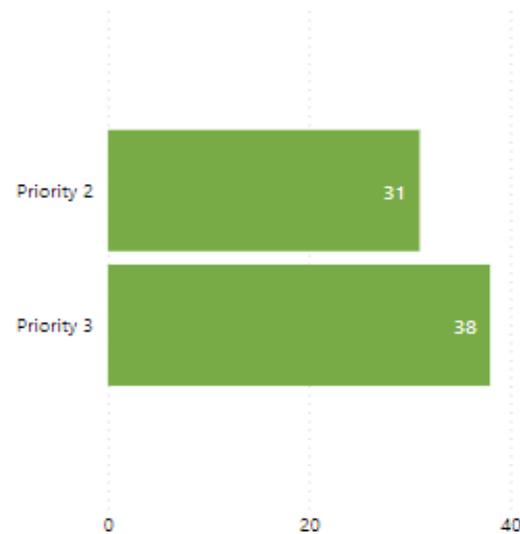
682
Pass Total

31
Potential Non-Conformances

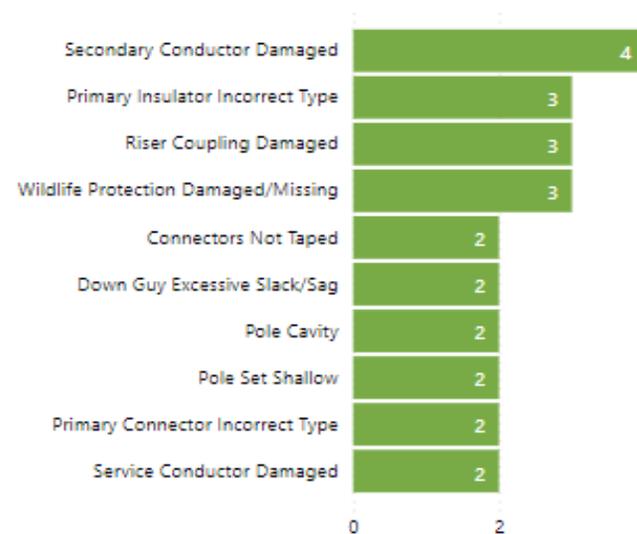
96%
P1 & P2 Total CR%

Exceeding target by 2%

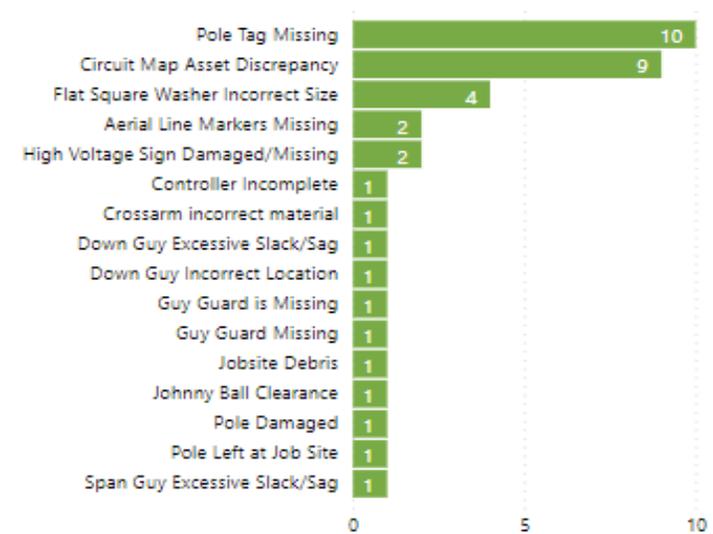
Findings by Priority



Top 10 P1 & P2 Finding Categories



Top 10 P3 Finding Categories



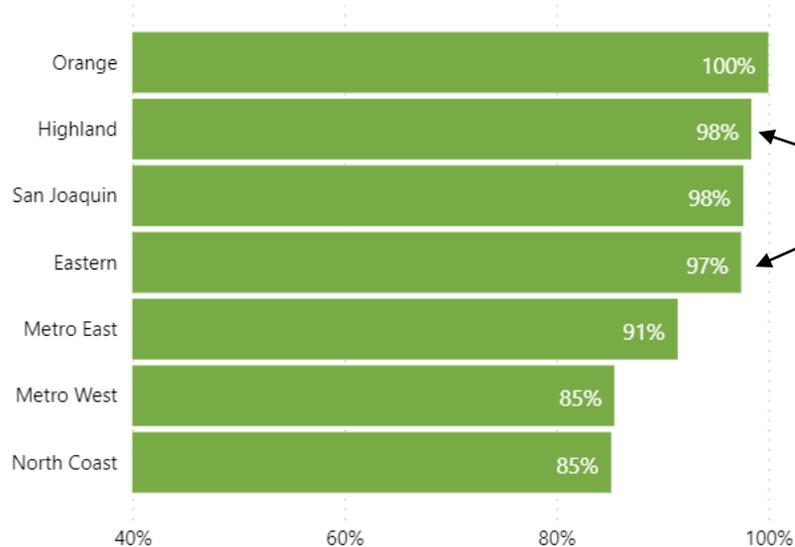
Program	FLOCS				P1 & P2 Findings						P3 Findings	
	Total QC Inspections	P1 & P2 PNC	P1 & P2 CR	Threshold Limit	P1	P2E	P2	Total P1 & P2	Open	Past Due	FLOC PNC	P3
Transmission Construction	713	31	96%	97.0%	0	0	31	31	15	11	36	38
Total	713	31	96%	97.0%	0	0	31	31	15	11	36	38

Transmission Construction QC Inspections – YTD 2021 Results Through September

Total	713 Total Inspections	682 Pass Total	31 Potential Non-Conformances	96% P1 & P2 Total CR%
SCE	184 Total Inspections	178 Pass Total	6 Potential Non-Conformances	97% P1 & P2 Total CR%
Contractor	529 Total Inspections	504 Pass Total	25 Potential Non-Conformances	95% P1 & P2 Total CR%

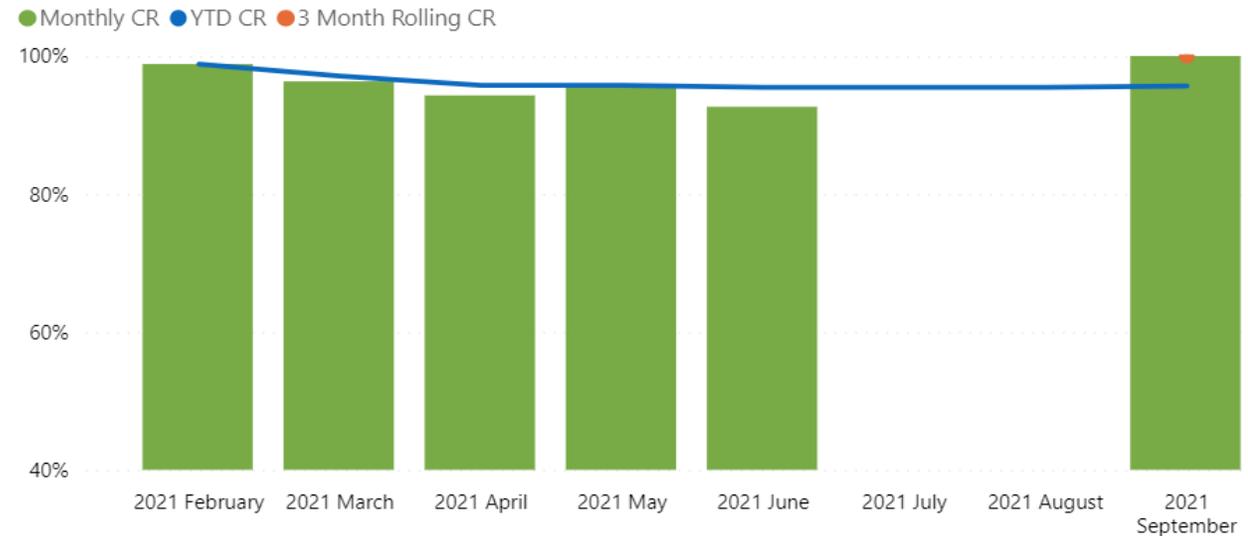
Both SCE and Contractors are performing above the program target of 94%.

Conformance Rate by Grid



Exceptional performance- 67% of all QC transmission construction inspections occurred in the Highland (35%) and Eastern Grids (27%)

Conformance Rate Trending



Overhead Detail QC Inspections – YTD 2021 Results Through September

5,704
Total Inspections

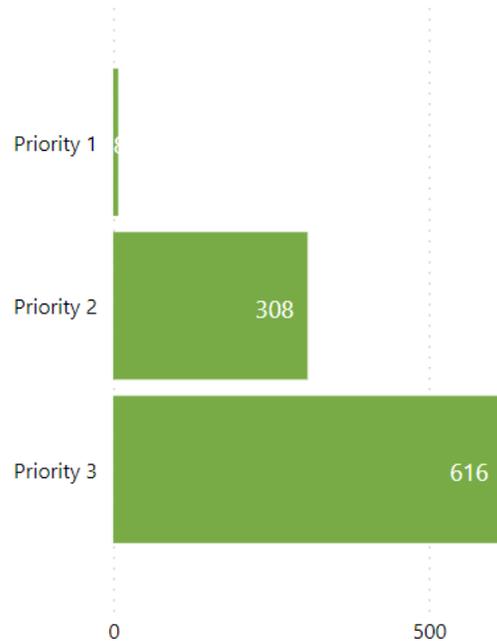
5,413
Pass Total

291
Potential Non-Conformances

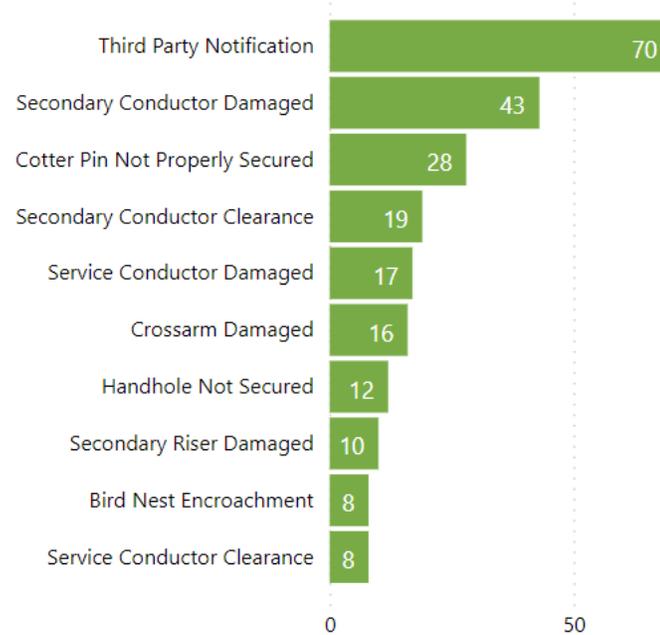
95%
P1 & P2 Total CR%

Tier 1 Target 97%

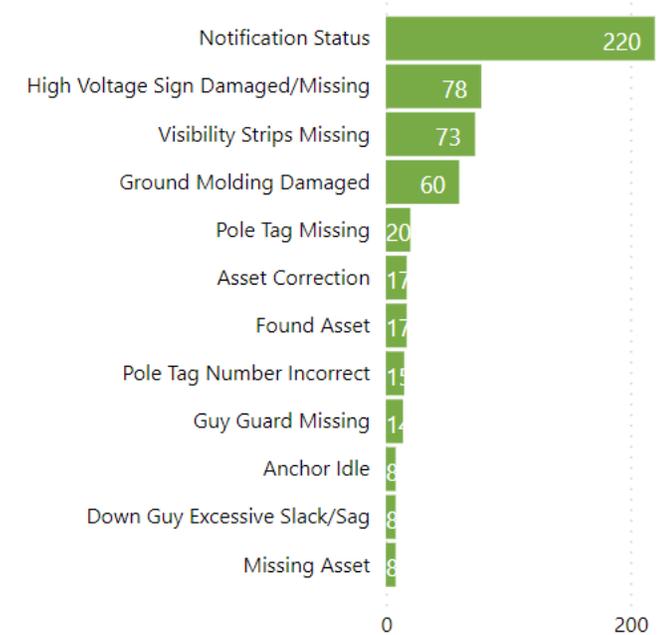
Findings by Priority



Top 10 P1 & P2 Finding Categories



Top 10 P3 Finding Categories



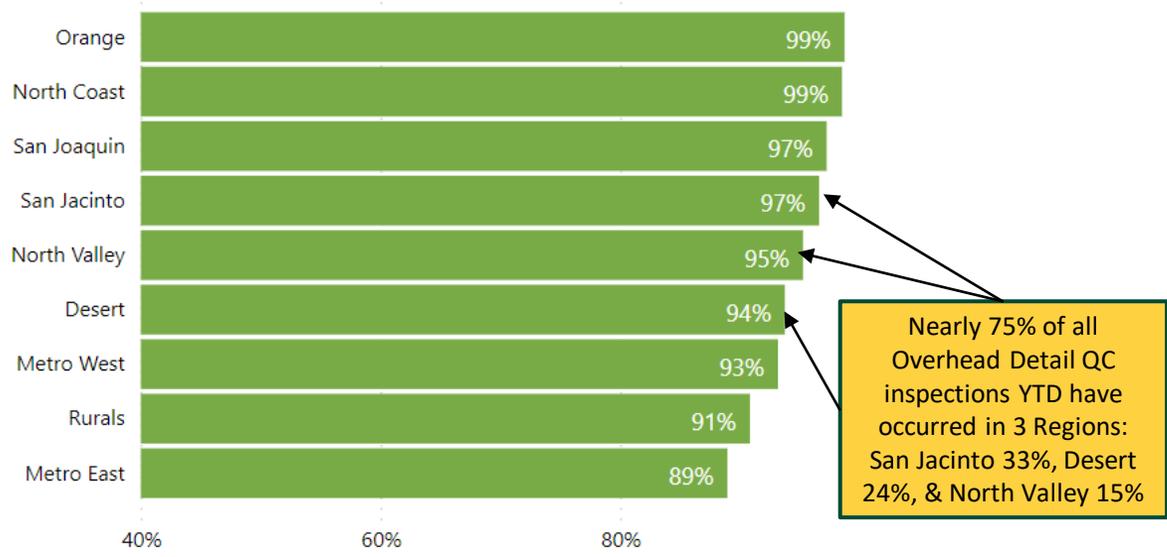
Program	Total QC Inspections	FLOCS			P1 & P2 Findings						P3 Findings		
		P1 & P2 PNC	P1 & P2 CR	Threshold Limit	P1	P2E	P2	Total P1 & P2	Open	Past Due	FLOC PNC	P3	
ODI													
Very High	1,966	78	96%	98.0%	2	0	80	82	32	13	156	168	
High	2,148	102	95%	95.0%	1	0	107	108	73	8	238	261	
Medium	1,315	85	94%	95.0%	4	0	90	94	9	5	109	132	
Low	485	31	94%	90.0%	1	0	31	32	5	2	51	55	
Total	5,914	296	95%	94.5%	8	0	308	316	119	28	554	616	

Overhead Detail QC Inspection – YTD 2021 Results Through September

Total	5,704 Total Inspections	5,413 Pass Total	291 Potential Non-Conformances	95% P1 & P2 Total CR%
SCE	2,665 Total Inspections	2,520 Pass Total	145 Potential Non-Conformances	95% P1 & P2 Total CR%
Contractor	3,039 Total Inspections	2,893 Pass Total	146 Potential Non-Conformances	95% P1 & P2 Total CR%

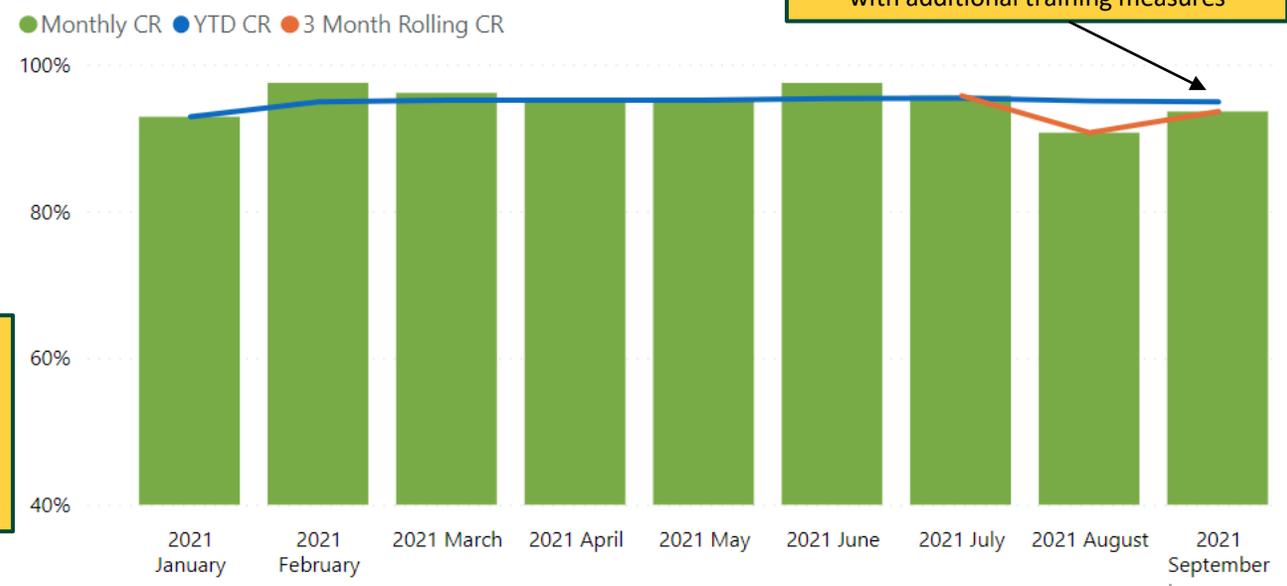
Both SCE and Contractors are performing below the target of 97%.

Conformance Rate by Region | District



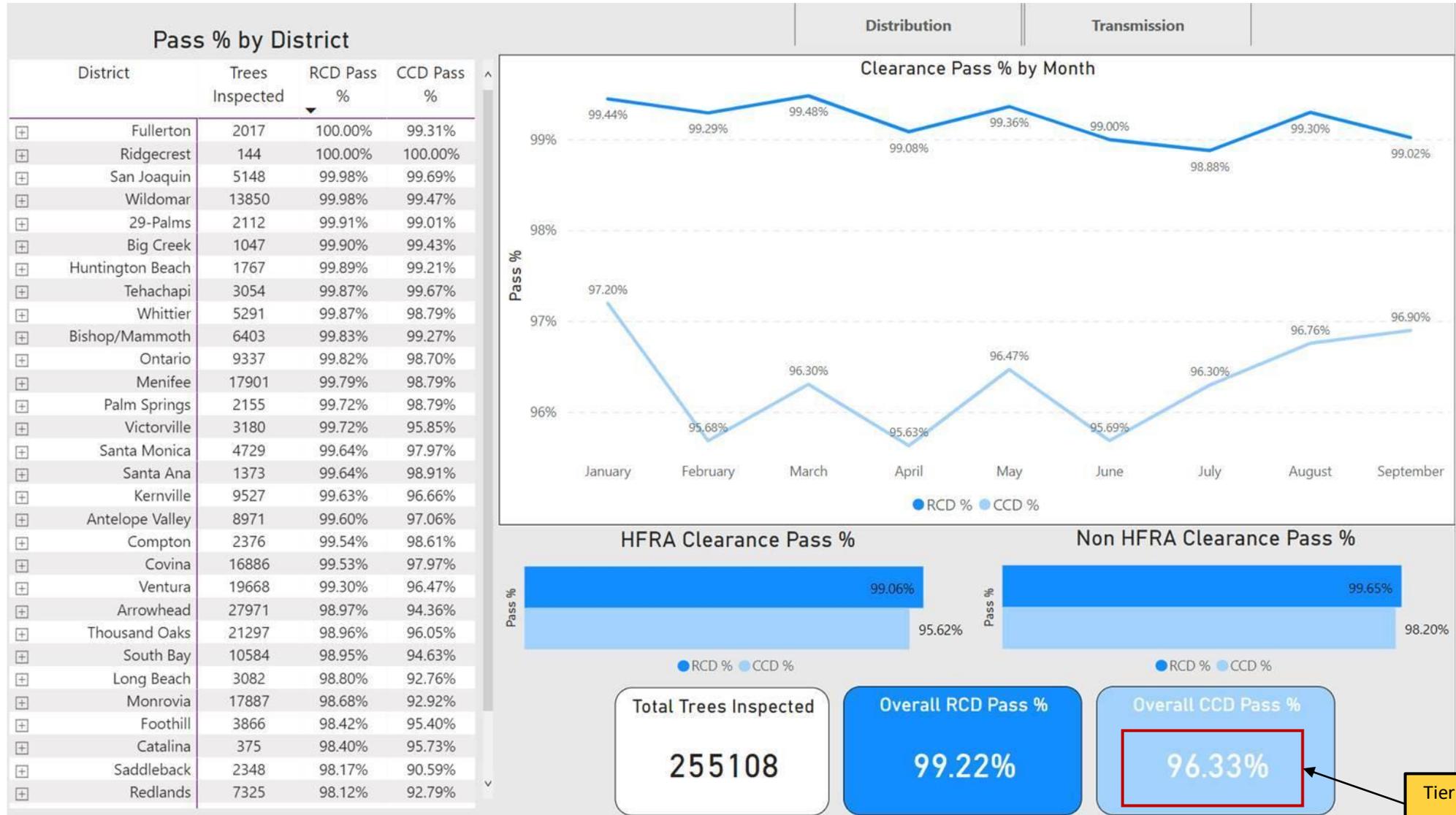
Nearly 75% of all Overhead Detail QC inspections YTD have occurred in 3 Regions: San Jacinto 33%, Desert 24%, & North Valley 15%

Conformance Rate Trending



After two months of decline in Q3, the Program has made some improvements with additional training measures

Vegetation Management Inspections – YTD 2021 Results Through September



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

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



Additional Highlights

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

- Tier 1 Metrics have been added to the Quality Dashboard
- A trending procedure has been developed to flag adverse trends proactively
- Presenting monthly results to three additional Core Teams each month- PRS, OS, and PTLC

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)

- Initial CAP dashboard has been developed in partnership with the Data Visualization team
 - Testing and validation phase is near completion, with a release date scheduled for mid-November
- 21 CAP requests have been submitted to date:
 - Completed (11); Open (8); Transferred (2) for Continuous Improvement (CI)

Past Due Distribution Construction QC Findings

- Collaborative meetings with T&D Apparatus Engineering and Enterprise Risk resulted in an overall remediation proposal for approximately 1,600 past due findings
 - For the 333 findings identified as high consequence and having a short turn around for remediation, additional details are being provided to support addressing the findings in an appropriate manner
 - All other findings will be addressed, once the prior subset has been allocated for action