

T&D Quality Program Update

Operations Review Forum

April 16, 2021



Quality Update – Highlights

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

- Monthly meetings with key stakeholders to review Quality results : T&D SLT, Distribution Business Line (RPPM, RCM, DM Core Team, etc.), Transmission Business Line, and Vegetation Management
- Business Lines receive monthly emails with Quality results and links to Quality Dashboard

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

- Quality collaborated with ERM and AMSE to update the 2021 Quality Program rankings and sampling targets
- Currently working with AMSE to transition from REAX to Technosylva for structure level risk data

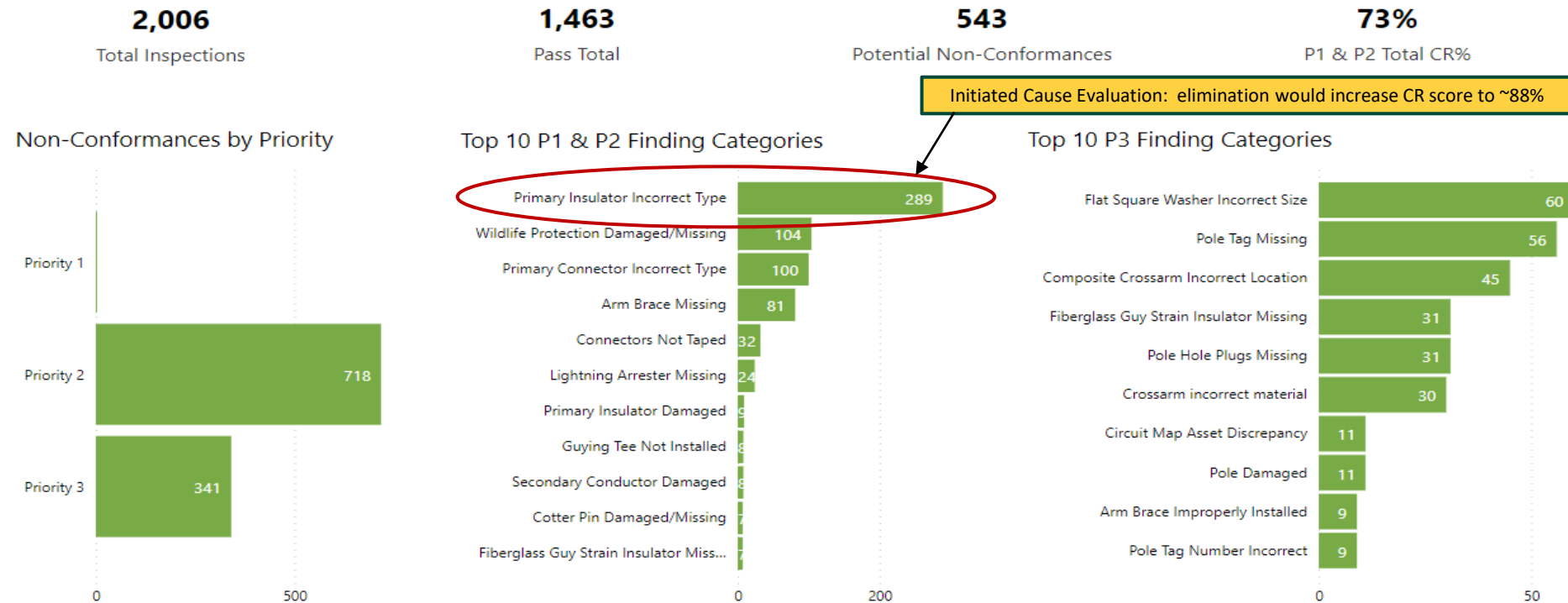
Track Status for Remediating Corrective Action Findings (OE Goal)

- Launched program with article in [T&D E-Wire \(Jan/Feb 2021\)](#) promoting the new T&D Corrective Action Program
- Received 18 requests for evaluation: 4 completed, 9 pending, and 5 transferred for continuous improvement evaluation
 - Initiated Cause Evaluation on top finding for Dist. Construction (elimination would increase score to ~ 88%)

Quality Program Targets for 2021 (Tier 1 Metrics)

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

Distribution Construction – YTD 2021 Results Through March



	FLOCS				P1 & P2 Findings					P3 Findings	
Program Name - REAX Score	Total QC Inspections	P1 & P2 PNC	P1 & P2 CR	Threshold Limit	P1	P2E	P2	Total P1 & P2	Open	Past Due	FLOC PNC
<div><div></div><div>Distribution Construction (Very High)</div></div>											
Very High	453	190	58%	100.0%	0	0	264	264	258	0	39
High	980	271	72%	98.0%	1	0	361	362	336	0	129
Medium	434	69	84%	95.0%	1	0	79	80	65	0	75
Low	139	13	91%	95.0%	0	0	14	14	13	0	12
Total	2,006	543	73%	97.0%	2	0	718	720	672	0	255

Distribution Construction – YTD 2021 Results Through March

Total

2,006
Total Inspections

1,463
Pass Total

543
Potential Non-Conformances

73%
P1 & P2 Total CR%

SCE

322
Total Inspections

289
Pass Total

33
Potential Non-Conformances

90%
P1 & P2 Total CR%

Contractor

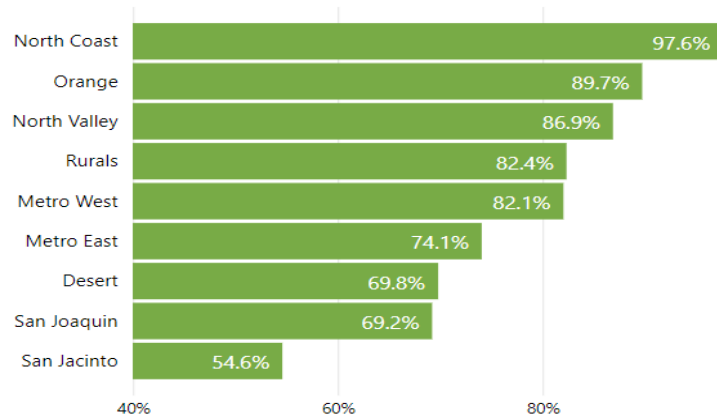
1,684
Total Inspections

1,174
Pass Total

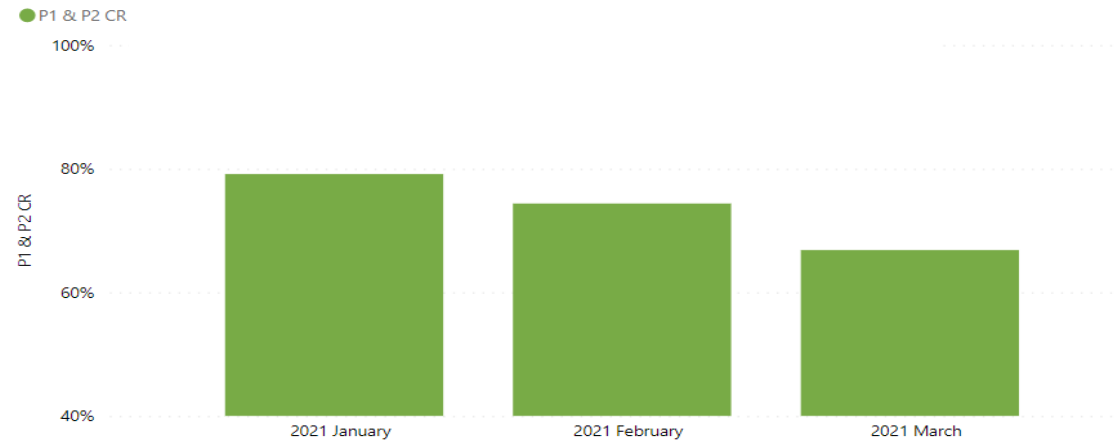
510
Potential Non-Conformances

70%
P1 & P2 Total CR%

Conformance Rate by Region | District



Conformance Rate Trending



Transmission Construction – YTD 2021 Results Through March

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

277
Total Inspections

270
Pass Total

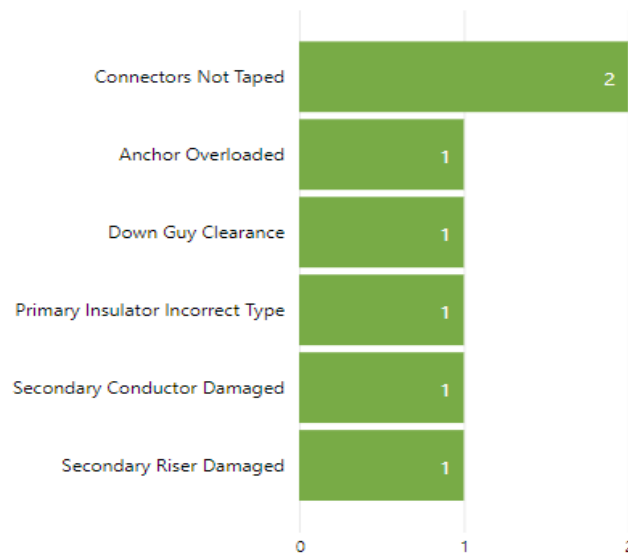
7
Potential Non-Conformances

97%
P1 & P2 Total CR%

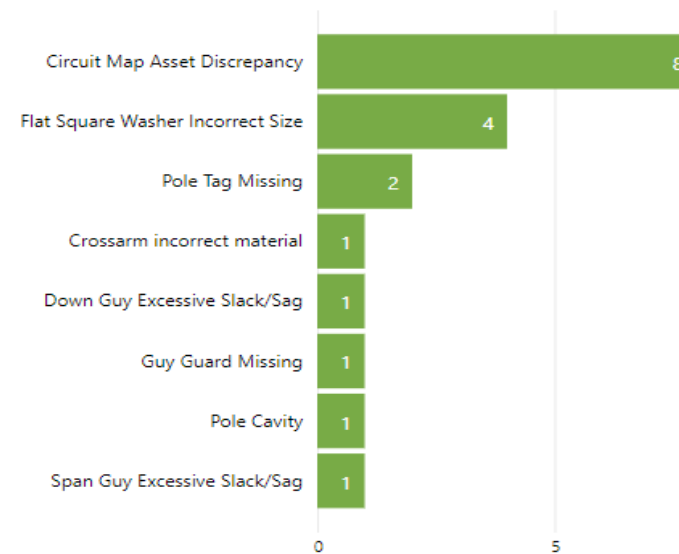
Non-Conformances by Priority



Top 10 P1 & P2 Finding Categories



Top 10 P3 Finding Categories

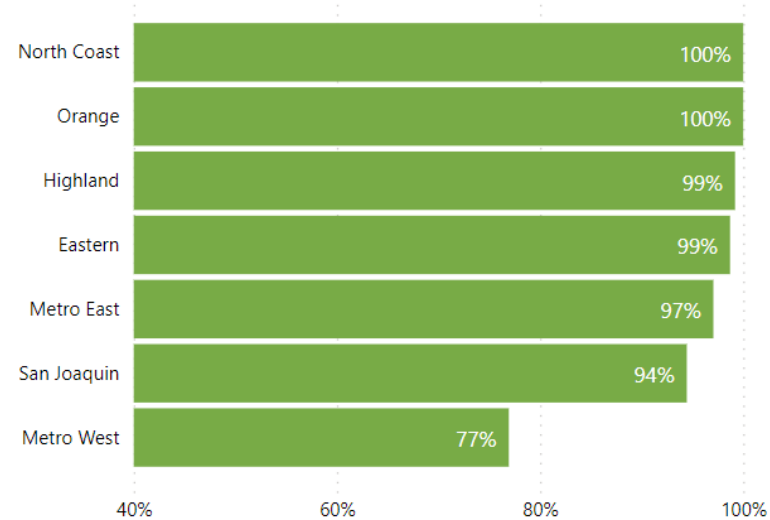


Program Name - REAX Score	FLOCS				P1 & P2 Findings						P3 Findings	
	Total QC Inspections	P1 & P2 PNC	P1 & P2 CR	Threshold Limit	P1	P2E	P2	Total P1 & P2	Open	Past Due	FLOC PNC	P3
Transmission Construction (Very High)												
Low	164	4	97.6%	95.0%	0	0	4	4	4	0	5	6
Medium	97	2	97.9%	95.0%	0	0	2	2	2	0	13	13
High	16	1	93.8%	98.0%	0	0	1	1	1	0	0	0
Total	277	7	97.5%		0	0	7	7	7	0	18	19

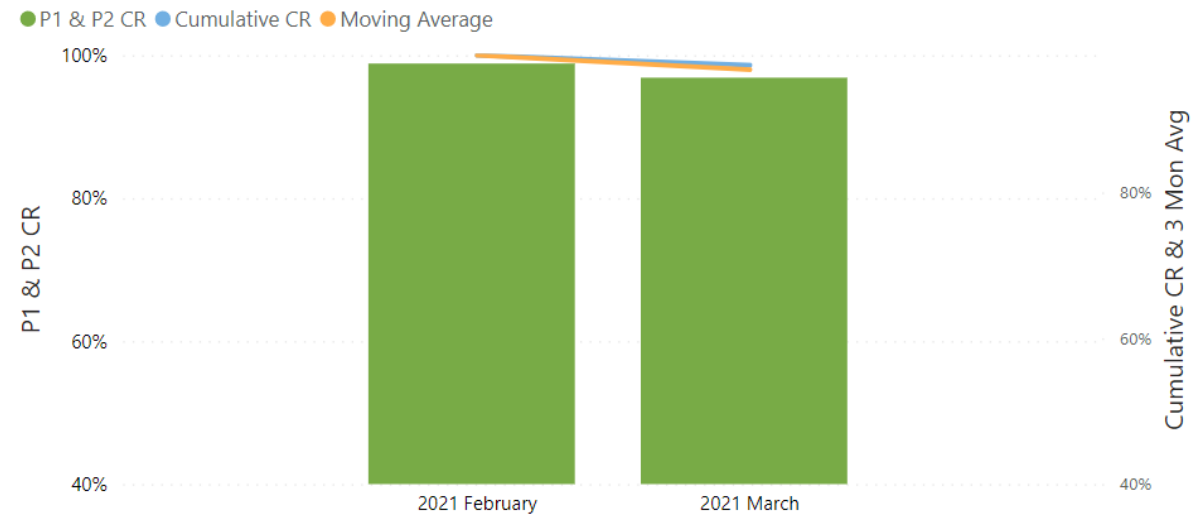
Transmission Construction – YTD 2021 Results Through March

Total	277 Total Inspections	270 Pass Total	7 Potential Non-Conformances	97% P1 & P2 Total CR%
SCE	91 Total Inspections	90 Pass Total	1 Potential Non-Conformances	99% P1 & P2 Total CR%
Contractor	186 Total Inspections	180 Pass Total	6 Potential Non-Conformances	97% P1 & P2 Total CR%

Conformance Rate by Grid



Conformance Rate Trending



Overhead Detail Inspection - YTD 2021 Results Through March

2,711
Total Inspections

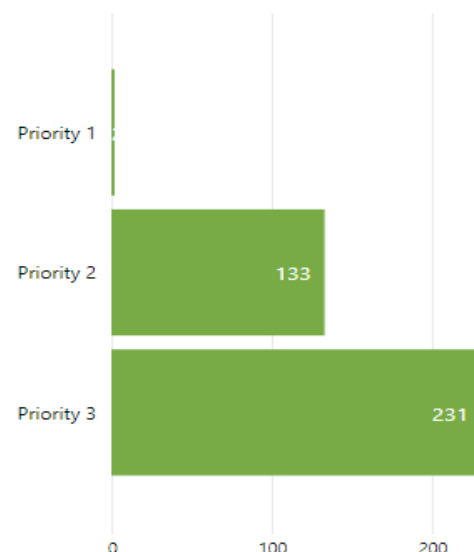
2,584
Pass Total

127
Potential Non-Conformances

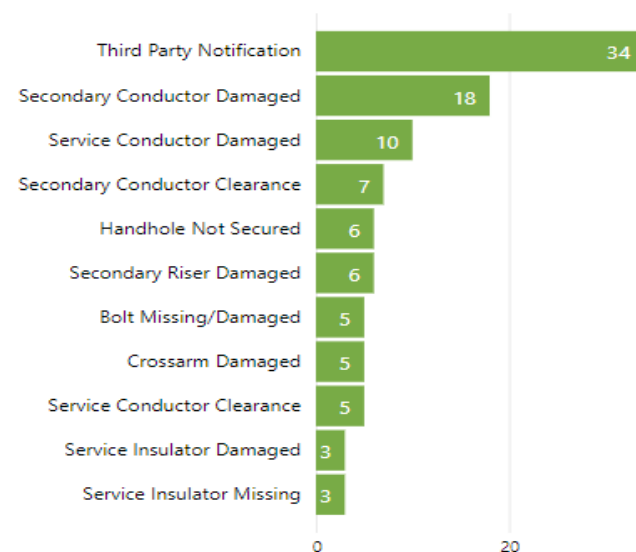
95%
P1 & P2 Total CR%

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

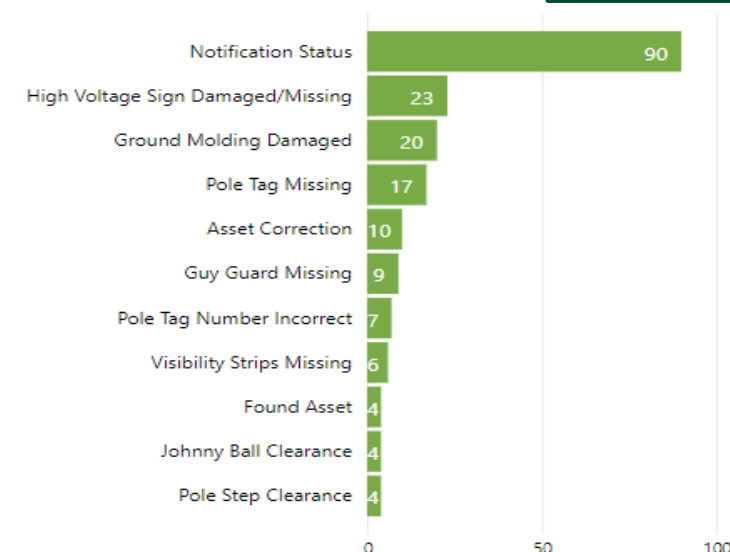
Non-Conformances by Priority



Top 10 P1 & P2 Finding Categories

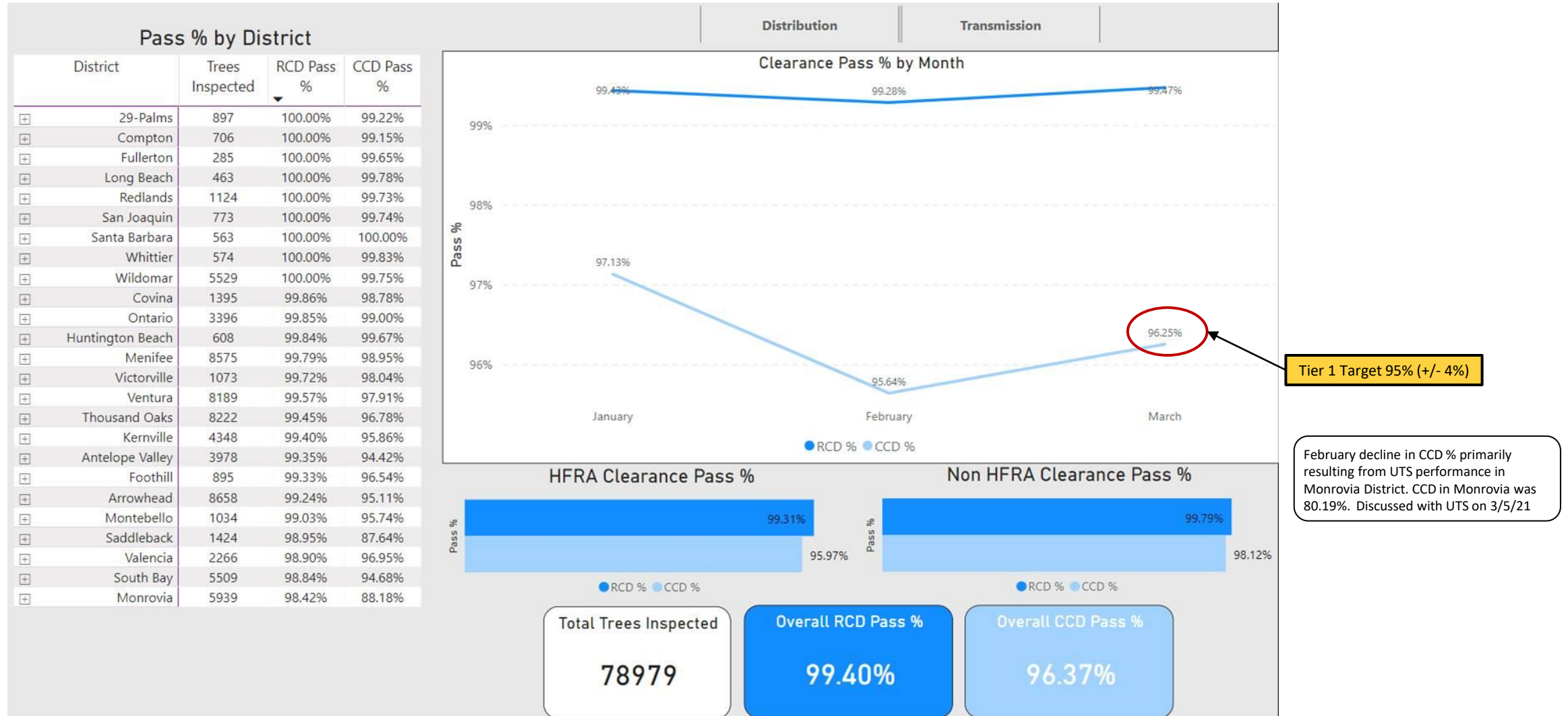


Top 10 P3 Finding Categories



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)												
Low	948	42	95.6%	90.0%	0	0	43	43	32	0	79	85
Medium	840	62	92.6%	95.0%	2	0	67	69	14	0	66	79
High	891	22	97.5%	95.0%	0	0	22	22	14	0	63	66
Very High	32	1	96.9%	98.0%	0	0	1	1	0	0	1	1
Total	2,711	127	95.3%		2	0	133	135	60	0	209	231

Vegetation Management T&D – YTD 2021 Results Through March



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

Compliance Zone		HFRA	D	Compliance Zone		HFRA	Non-HFRA
T	RCD = Regulation Clearance Distance	10'		RCD = Regulation Clearance Distance	4'	18"	
	CCD = Compliance Clearance Distance (RCD x 1.5)			CCD = Compliance Clearance Distance (RCD x 1.5)		6'	3'

Appendix

Action to Improve Program Operations and Performance

Increase Visibility of Conformance Rates

- Holding monthly meetings with stakeholders to review QC performance results and dashboard
 - Distribution meetings include RPPM, RCM, SLT Performance meeting, DM Core Team
 - Transmission SLT Performance meeting
 - Vegetation contractors

Quality Program Ranking Update

- Rankings for all Quality programs using updated program ranking methodology was reviewed with ERM and AMSE
- Updating QC program scoping targets for 2021 based on updated program rankings and conformance rates
- Working with AMSE to update REAX with Technosylva for structure-level risk categories

Corrective Action Program (CAP)

- Launched program with article in [T&D E-Wire \(Jan/Feb 2021\)](#) promoting the new CAP program
- Received 18 requests for evaluation: 4 requests have been completed, 9 are pending, and 5 have been transferred for continuous improvement evaluation
- A total of 9 corrective actions have been created and issued through the critical action item tracker for remediation
- New CAP request was submitted for top finding under the QC of Distribution Construction program - incorrect installation of insulators
 - Issue represents 50% of the distribution construction QC program findings from October to March
 - Pending CAP assessment