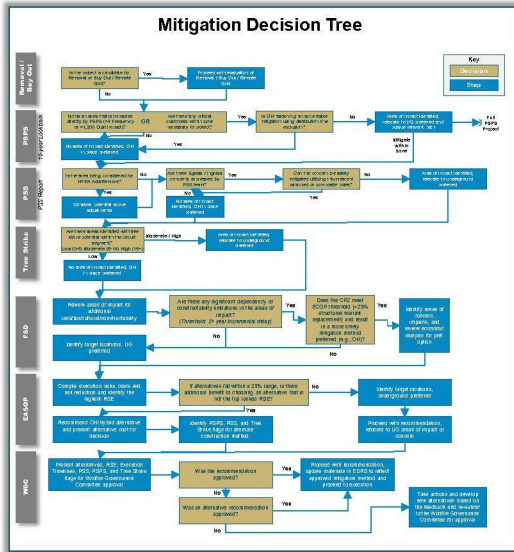


Wildfire Risk Governance Committee
System Hardening Project Approvals

CONFIDENTIAL - FOR INTERNAL DISCUSSION



	Key Questions	Outcome		
PPSP	Is this an area that is impacted directly by PPS (>8 Frequency or >1,200 Cust Impact)?	Y	N	9 events, UG Preferred
	Are there any critical customers within zone necessary to protect?	Y	N	
	Is OH hardening an acceptable mitigation using distribution line exclusion?	Y	N	
PSS	Is the area being considered for HFRA Add/Remove?	Y	N	N/A
	Ingress/Egress concerns identified by PSS professionals cannot be mitigated by utilizing intumescent wrapped or composite poles.	Y	N	
Tree Strike	Moderate (6-14) or high (15+) strike tree potential areas in the segment.	Y	N	
FSD	Are there any significant dependency or constructability limitations in the areas of impact? (Threshold: 2+ year incremental delay)	Y	N	
	Does the CPZ meet ECOP threshold (>25% structures warrant replacement) and result in a more timely mitigation method preferred (e.g., OH)?	Y	N	
EASOP	If alternatives fall within a 100% range, is there additional benefit to choosing an alternative that is not the top ranked RSE?	Y	N	PSPS and Ingress/Egress
				Hybrid 1 Preferred

Confidential

CONFIDENTIAL – FOR INTERNAL DISCUSSION

Inform: CWSP TOP 50 – PM# 35217268 Bucks Creek 1101 CB

Bucks Creek 1101 (4.73 miles)		No System Hardening	Overhead Hardening	Hybrid 1	Hybrid 2
Project Scope Risk Reduced After Mitigation		-	4.73	9.14	8.95
Project Scope Residual Risk Value		9.55	3.63	0.41	0.61
Overall Miles Installed		4.73 Existing OH	4.73	5.42	4.73
OH System Hardening Cost	\$2.8M/risk-mile	-	\$13.2M	\$0.13M (0.48 mi)	\$6.0M (2.18 mi)
UG System Hardening Cost	\$4.4M/risk-mile	-	-	\$21.9M (4.94 mi)	\$9.0M (1.84 mi)
Line Removal Cost	\$0.11M/risk-mile	-	-	-	\$75k (0.71 mi)
Total Capital Cost (AACE Class 5)			\$13.2M	\$22M	\$15.1M
Average O&M Cost (per year)			\$212k	\$86k	\$122k
NPV @ 6.8% discount rate			(-\$16.4M)	(-\$23.7M)	(-\$17M)
Primary Filter	\$ NPV per unit of risk (RSE)	-	(-\$2.8M) – 3 rd	(-\$2.6M) – 2 nd	(-\$1.9M) – 1 st
	PSS Preference (Ingress/egress/fire history)	-	Non-satisfactory	Preferred	Non-satisfactory
Secondary Filter	Strike Tree Potential	Moderate Fall-In Risk	Low Fall-In Tree Risk	Low Fall-In Tree Risk	Low Fall-In Tree Risk
	Ingress / Egress	Moderate	Non-satisfactory	Preferred	Non-satisfactory
	PSPS Mitigation (5 customers)	45 / 45 (0%)	45 / 45 (0%)	45 / 45 (0%)	45 / 45 (0%)
	Execution timeline (2021, 2022, 2022+)	-	2021	2022+	2022+
	Other (Operational Considerations, etc.)	-	-	-	-
				Recommended	

Supporting Detail for Recommended Alternative (EDRS Link 2021-03744):

- Public Safety Specialist:** Fuel types are consistent with moderate to heavy brush and mixed conifer, however the general area has been heavily fire scared and the fire scar areas are intermixed with a significant amount of standing and down dead fuel.
- Strike Tree Potential:** 105 total strike potential trees in the CPZ, Moderate (6-15) tree strike potential.
- Egress Considerations:** This project crosses HWY 70 near the Bucks Creek Powerhouse and then parallels the highway for a roughly 2-mile stretch, and then runs along Storrie Rd. paralleling the Feather River on the canyon opposite side of Highway 70. HWY 70 is a main thoroughfare for ingress/egress for emergency responders and to the few residents who live in that direct area; it is also a major route for commerce both by vehicle and railroad. If Highway 70 was closed in this area it would make ingress and egress difficult if not impossible for responders and citizens and economically be a substantial hit to commerce. There are no alternative routes within the Feather River Canyon.
- PSPS Mitigation:** No mitigation potential due to limited scope of this hardening project; no critical / essential customers in this segment. Cannot achieve PSPS reduction due to required overhead conductor over the water crossing near the substation.
- Execution Timeline (Land/Bio/Cultural/Constructability):** Work required during the dry season (May 15 – Oct 15) and/or biomonitoring, and potential Heli restrictions (Feb 2 – July 15) due to owl activity centers. CALTRANS ROW, easement restrictions, and 1 culturally sensitive areas in Hybrid 1. Butte work further down HWY 70 is undergrounding line consistent with the Hybrid 1 alternative.