

Wildfire Risk Governance Committee

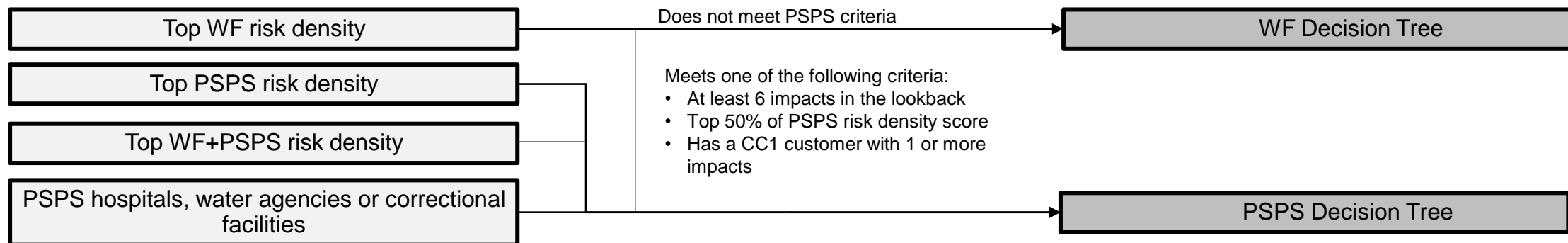
System Hardening Project Approvals

October 1st, 2021

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Incremental Circuits for 2023: Wildfire vs. PSPS Decision Tree



Area	WF Tree	PSPS Tree
Low Tree Strike Potential (1-5 Trees/Span)	Review by veg team for UG/OH recommendation	Recommend UG
Comparisons Needed / End States	1. Remote grid/line removal 2. UG (fall-in tree risk, ingress/egress) 3. OH hardening	1. Remote grid/line removal 2. UG 3. Permanent Interconnection Hub 4. Fixed Power Solutions 5. No solution provided at this time – revisit at later date *After remote grid/line removal opportunities have been identified, UG is the default unless UG is not constructible
Economic Considerations	RSE comparisons	In addition to RSE comparisons, compute a \$/risk buydown or \$/customer “check” that can be an additional factor ¹ .
Expected UG Outcomes	Modified criteria may produce ~60-80% UG	Criteria may produce >80% UG in HFTD
Scoping Process		
Scoping Granularity	Circuit segments and adjacent segments	Circuit level and specific customer impact locations
Scope Of Solutions	Very surgical, focus on highest risk areas	May need to start earlier on circuit to provide uninterruptible source

1. “Check” to be based on some combination of the following: 1) survey of expected \$/risk units based on a survey of potential PSPS mitigation projects 2) cost of battery alternative

Incremental Circuits for 2023: Proposed Criteria Changes for WF Decision Tree

	Area	Current Criteria	Proposed Criteria	Expected Impact in UG
Risk	Ingress/egress	Wrapped pole + OH	No, UG preferred	5-10% Increase
	Tree strike potential	<ul style="list-style-type: none"> 0-5 trees/span, recommend OH >5 trees/span, UG preferred Granularity: circuit span and broader 	<ul style="list-style-type: none"> Lower or eliminate tree strike potential criteria <ul style="list-style-type: none"> For 1-5 trees/span, review by vegetation team to understand risk based on tree species, health or condition, environmental conditions / slope, trunk/branch failures, lean of tree Granularity: entire isolation zone 	20-40% Increase
	PSPS Criteria	8 events or 1200 customers	Add additional PSPS decision making tree <ul style="list-style-type: none"> WF-only density circuits: <ul style="list-style-type: none"> Stays in WF circuit unless meets one of the following PSPS criteria: <ul style="list-style-type: none"> >=6 events, gets moved to PSPS decision tree Top 50% of PSPS risk density score Has a CC1 customer with 1 or more impacts All other circuits identified: PSPS decision tree 	N/A
Execution	Time-to-construct UG	2 years or more to do UG, recommend OH	Remove time-to-construct UG from decision tree.	<1% Increase
	Tags threshold	>25% structures need replacement, recommend OH because faster	Remove Tag threshold from decision tree. EC tags managed separately and executed early by maintenance if required.	<1% Increase
Economic	Unit Cost assumptions ¹	\$3.9M/mi UG \$1.8M/mi OH	2022: \$3.50M/mi UG \$1.3M/mi OH (cost difference 2.7x) 2023: \$3.00M/mi UG \$1.2M/mi OH (cost difference 2.5x) 2024: \$2.75M/mi UG \$1.2M/mi OH (cost difference 2.3x)	N/A
	Scoping Alternatives developed	<ul style="list-style-type: none"> OH vs. Hybrid for all locations UG only if it is a preferred option 	<ul style="list-style-type: none"> OH vs. UG vs. Hybrid for all locations Continue to use EASOP alternatives analysis 	N/A
	UG/OH EASOP RSE comparison	<ul style="list-style-type: none"> RSE comparisons based on WF risk alone Based on 1-year risk buydown Within 100% RSE: recommend UG or Hybrid 	<ul style="list-style-type: none"> RSEs include additional risk reduction based other impacts (including PSPS, Reliability, EPSS, public safety) Continue showing 1-year risk buydown Include lifetime risk buydown benefits Within 100% RSE: recommend UG or Hybrid 	<5% Increase

Notes:

1. Reviewed these figures with WRGSC and have added the forecasted GRC figures to the appendix