

Table 1: Recent performance on progress metrics, last 5 years

#	Progress metric name	Annual performance					Unit(s)	Comments
		2015	2016	2017	2018	2019		
1	Extreme weather prediction accuracy	0	0	0	0	0	Percentage of total PSPS predictions that are false positives (where the utility's situational awareness indicates that the upcoming risk level will exceed the threshold for PSPS, but it eventually does not do so) or false negatives (where the utility's situational awareness indicates that the upcoming risk level will not exceed the threshold for PSPS, but it eventually does do so) 2 days before a potential PSPS event	BVES has not had any false positive or false negative PSPS predictions.
2	Equipment operating load above nameplate capacity	0	0	0	0	0	Number of circuit hours operated above nameplate capacity in HFTD areas	The utility does not have record of any equipment above nameplate capacity.
		0	0	0	0	0	Average % above nameplate capacity when equipment operated above nameplate capacity in HFTD areas	
3	Risk-spend efficiency of resources deployed towards wildfire mitigation efforts	N/A	N/A	N/A	N/A	N/A	Dollars per incremental life saved	BVES does not calculate risk-spend efficiency according to the metrics provided. The utility has a comprehensive Risk Register which uses a proprietary model to determine the Risk Benefit and risk-spend efficiency of each initiative. See Table 2 Metrics 1a. and 1b.
		N/A	N/A	N/A	N/A	N/A	Dollars invested per estimated dollars of rebuilt structures avoided	
		N/A	N/A	N/A	N/A	N/A	Dollars per customer hour of PSPS avoided	
4	Extent of hardening across grid	0	0	0	0	0.38%	Percent of all grid assets in HFTD areas using proven and demonstrated wildfire-resistant equipment	BVES implemented 1 mile of covered wire in 2019
5	Community engagement activity and effectiveness	N/A	N/A	N/A	N/A	N/A	Percent of residents made aware of PSPS and emergency response procedures in advance of events, according to post-event surveys	No post-event surveys have been surveyed.
		100%	100%	100%	100%	100%	Percent of residents agreeing to participate in utility wildfire risk-reduction activities (e.g., allowing access to property for utility hazard tree remediation)	No customers have prevented BVES from conducting necessary wildfire risk-reduction activities.
6	Emergency planning and preparedness	0	0	0	0	0	Number of emergency response deficiencies reported by Cal OES, suppression agencies, and other emergency response personnel when plans tested or activated	

Table 2: Recent performance on outcome metrics, last 5 years

Metric type	#	Outcome metric name	Annual performance					Units	Comments
			2015	2016	2017	2018	2019		
1. Risk spend efficiency of WMP programs	1.a.	Average risk spend efficiency of all WMP programs being undertaken by utility	N/A	N/A	N/A	N/A	2.17	Incremental cost per grid-wide 1% reduction in utility ignition risk in HFTD areas	BVES does not calculate risk-spend efficiency according to the metrics provided. The utility has a comprehensive Risk Register which uses a proprietary model to determine the Risk Benefit and risk-spend efficiency of each initiative.
	1.b.	Average risk spend efficiency of wildfire-only WMP programs being undertaken by utility	N/A	N/A	N/A	N/A	2.47	Incremental cost per grid-wide 1% reduction in utility ignition risk in HFTD areas	BVES does not calculate risk-spend efficiency according to the metrics provided. The utility has a comprehensive Risk Register which uses a proprietary model to determine the Risk Benefit and risk-spend efficiency of each initiative.
2. Customer hours of PSPS based on stress test conditions	2.a.	Percent of customers experiencing PSPS given 95th percentile fire weather conditions along entire grid using utility PSPS decision protocols	0%	0%	0%	0%	0%	Percent of all customers	
	2.b.	Percent of customers experiencing PSPS given 99th percentile fire weather conditions along entire grid using utility PSPS decision protocols	0%	0%	0%	0%	0%	Percent of all customers	
3. Electricity cost to ratepayers	3.a.	Increase in electric costs to ratepayer due to wildfires (total)	0	0	0	0	0	Dollar value rates increase attributable to wildfires per year	BVES has not had any wildfires in its service territory
	3.b.	Increase in electric costs to ratepayer due to wildfires (normalized)	0	0	0	0	0	Dollar value rates increase attributable to wildfires per RFW circuit mile per year	
	3.c.	Increase in electric costs to ratepayer due to wildfire mitigation activities (total)	N/A	N/A	N/A	N/A	N/A	Dollar value rates increase attributable to WMPs per year	BVES has not booked its wildfire mitigation costs into rates other than certain related capital projects that are part of its General Rate Case.
4. Actual renewable energy procurement	4.a.	Electricity procured from renewable sources	23%	29%	34%	32%	32%	Percentage of total electricity procured per year	BVES buys its electricity from unspecified power sources defined as: "any purchase not traceable to specific generation sources by any auditable contract trail or equivalent, or to power purchases from a transaction that expressly transferred energy only and not the RECs associated from an RPS-eligible facility." BVES also utilizes RECs to meet its RPS obligation.
5. Impact of utility ignitions based on ignition simulation	5.a.	Potential impact of ignitions (total)	N/A	N/A	N/A	N/A	N/A	Number of people residing in evacuation zones of wildfires simulated for each ignition per year, based on in-house or contractors' fire spread models	BVES has not run a simulation nor used an in-house contractor for fire models.
	5.b.	Potential impact of ignitions (normalized)	N/A	N/A	N/A	N/A	N/A	Number of people residing in evacuation zones of wildfires simulated for each ignition per RFW circuit mile day per year	BVES has not run a simulation nor used an in-house contractor for fire models.
	5.c.	Potential impact of ignitions in HFTD (subtotal)	N/A	N/A	N/A	N/A	N/A	Number of people residing in evacuation zones of wildfires simulated for each ignition in HFTD per year	BVES has not run a simulation nor used an in-house contractor for fire models.
	5.c.i.	Potential impact of ignitions in HFTD Zone 1	N/A	N/A	N/A	N/A	N/A	Number of people residing in evacuation zones of wildfires simulated for each ignition in HFTD Zone 1 per year	BVES has not run a simulation nor used an in-house contractor for fire models.
	5.c.ii.	Potential impact of ignitions in HFTD Tier 2	N/A	N/A	N/A	N/A	N/A	Number of people residing in evacuation zones of wildfires simulated for each ignition in HFTD Tier 2 per year	BVES has not run a simulation nor used an in-house contractor for fire models.
	5.c.iii.	Potential impact of ignitions in HFTD Tier 3	N/A	N/A	N/A	N/A	N/A	Number of people residing in evacuation zones of wildfires simulated for each ignition in HFTD Tier 3 per year	BVES has not run a simulation nor used an in-house contractor for fire models.
	5.d.	Potential impact of ignitions in HFTD (subtotal, normalized)	N/A	N/A	N/A	N/A	N/A	Number of people residing in evacuation zones of wildfires simulated for each ignition in HFTD per RFW circuit mile day per year	BVES has not run a simulation nor used an in-house contractor for fire models.
	5.d.i.	Potential impact of ignitions in HFTD Zone 1 (normalized)	N/A	N/A	N/A	N/A	N/A	Number of people residing in evacuation zones of wildfires simulated for each ignition in HFTD Zone 1 per RFW circuit mile day per year	BVES has not run a simulation nor used an in-house contractor for fire models.
	5.d.ii.	Potential impact of ignitions in HFTD Tier 2 (normalized)	N/A	N/A	N/A	N/A	N/A	Number of people residing in evacuation zones of wildfires simulated for each ignition in HFTD Tier 2 per RFW circuit mile day per year	BVES has not run a simulation nor used an in-house contractor for fire models.
	5.d.iii.	Potential impact of ignitions in HFTD Tier 3 (normalized)	N/A	N/A	N/A	N/A	N/A	Number of people residing in evacuation zones of wildfires simulated for each ignition in HFTD Tier 3 per RFW circuit mile day per year	BVES has not run a simulation nor used an in-house contractor for fire models.
	5.e.	Potential impact of ignitions in non-HFTD (subtotal)	N/A	N/A	N/A	N/A	N/A	Number of people residing in evacuation zones of wildfires simulated for each ignition in non-HFTD per year	BVES has not run a simulation nor used an in-house contractor for fire models.
5.f.	Potential impact of ignitions in non-HFTD (normalized)	N/A	N/A	N/A	N/A	N/A	Number of people residing in evacuation zones of wildfires simulated for each ignition in non-HFTD per RFW circuit mile day per year	BVES has not run a simulation nor used an in-house contractor for fire models.	
6. Public impacted by utility-ignited wildfire evaluation	6.a.	Number of people residing in evacuation zone of utility-ignited wildfire (total)	0	0	0	0	0	Number of people in evacuation zones of utility-ignited wildfire	BVES has not had any utility-ignited wildfires
	6.b.	Number of people residing in evacuation zone of utility-ignited wildfire (normalized)	0	0	0	0	0	Number of people per RFW circuit mile day per year	BVES has not had any utility-ignited wildfires
	6.c.	Impact of evacuations for utility-ignited wildfire (total)	N/A	N/A	N/A	N/A	N/A	Person-hours per year	BVES has not had any utility-ignited wildfires
	6.d.	Impact of evacuations for utility-ignited wildfire (normalized)	N/A	N/A	N/A	N/A	N/A	Person-hours per RFW circuit mile day per year	BVES has not had any utility-ignited wildfires
7. Estimated GHG emissions from utility-ignited wildfire	7.a.	GHG emissions from utility-ignited wildfires (total)	N/A	N/A	N/A	N/A	N/A	Estimated tons of carbon dioxide equivalent emitted per year	BVES has not had any utility-ignited wildfires
	7.b.	GHG emissions from utility-ignited wildfires (normalized)	N/A	N/A	N/A	N/A	N/A	Estimated tons of carbon dioxide equivalent emitted per RFW circuit mile day per year	BVES has not had any utility-ignited wildfires
8. Transportation impacted by PSPS	8.a.	Critical transportation infrastructure impacted due to PSPS	N/A	N/A	N/A	N/A	N/A	Driver and rider-hours lost (in rider-hours per hour multiplied by incremental increase in commute time by hours closed) per year	BVES has not initiated any PSPS events
	8.b.	Major roads impacted due to PSPS (normalized)	N/A	N/A	N/A	N/A	N/A	Driver and rider-hours lost (in rider-hours per hour multiplied by incremental increase in commute time by hours closed) per RFW circuit mile day per year	BVES has not initiated any PSPS events

Table 3: Annual evacuations for utility-ignited wildfire, last 5 years

Year	Total days evacuation order in effect	Number of people residing in evacuation zones	Evacuation actuals (total number of people)
2015	0	0	0
2016	0	0	0
2017	0	0	0
2018	0	0	0
2019	0	0	0

Table 4: Spreadsheet columns for lists of events, last 5 years

Column groups	Columns
Identifying information	Type of event
	Date
	Time
Location information	Latitude
	Longitude
	Circuit name
	Land use (rural / urban)
	Enhanced inspections and maintenance conducted according to 2019 WMP at location prior to event (Yes / No)
	Enhanced vegetation management conducted according to 2019 WMP at location prior to event (Yes / No)
Utility facility information	Type of equipment involved
	Facility identification
	Voltage
	Age of involved equipment
	Overhead or underground
	Covered conductor or other
	Other companies' equipment involved (or N/A)
Situational awareness information	Local temperature at time of event
	Local wind speed at time of event
	Nearest weather station by weather station ID
	Last inspection data of involved equipment
	Time-to-expected failure of involved equipment on date of incident (in number of days until the involved equipment was expected to fail)
	Overcapacity history of involved equipment (percent of time equipment operated over nameplate capacity)

Note: BVES is unable to provide this data with the current submission.

Table 7: Map file requirements for recent and modelled conditions of utility service territory, last 5 years

Layer name	Measurements	Units	Attachment Location
Recent weather patterns	Average annual number of fire risk ratings equal to the top 30% of proprietary fire potential index or similar fire risk index	Area, days, square mile resolution	N/A
	Difference between forecast and actual wind when either is projected to be or is at 95th percentile wind conditions	Area, miles per hour, at a square mile resolution or better, noting where measurements are actual or interpolated	
Recent fuel measurements	Average distribution and mass of fuel	Area, tons per square mile, square mile resolution, one layer for each month	N/A
	Average distribution and mass of fuel below 62% live fuel moisture content each month	Area, tons per square mile, square mile resolution, one layer for each month	
	Average distribution and mass of fuel below 5% live fuel moisture content	Area, tons per square mile, square mile resolution, one layer for each month	
Potential impact of ignitions	Date of recent ignitions and potential impact measured in number of people in evacuation zone of modeled fire spread	Point, GPS coordinate, days, number of people, square mile resolution	N/A
Implemented 2019 WMP initiative activity	Location of completed 2019 WMP initiative activity for each activity	Line, quarter mile resolution, one layer per initiative	N/A

Note:
 BVES is unable to provide the data requested in a downloadable GIS shapefile format at this time.

Table 8: Map file requirements for baseline condition of utility service territory projected for 2020

Layer name	Measurements / variables	Units	Appendix location
Current baseline risk maps	Ignition probability per year given 5-year historical average conditions	Line, quarter mile resolution	N/A
	Wildfire consequence to communities	Area, number of people affected, square mile resolution	
Result of stress test as defined in Section 2	Duration of PSPS events and area of the grid affected in customer hours per year	Area, customer hours, square mile resolution	N/A
	Number of ignitions and near misses	Line, circuit mile resolution	

Note:
 BVES is unable to provide the data requested in a downloadable GIS shapefile format at this time.

Table 9: Fuel density and moisture, last 5 years

Fuel measurement	2015	2016	2017	2018	2019	5-year historical average	Unit(s)	Comments
Live fuel moisture content	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dead fuel moisture content	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Live fuel density	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dead fuel density	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Other	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note:

BVES uses a contracted meteorologist that integrates data from the NFDRS, National Weather Service, and local real-time data from BVES' distributed weather stations (to account for local micro-climates) to ultimately assess relative local fire danger and risk. Reports are given weekly normally, and more often -- up to several times a day -- during heightened threat conditions. Operations personnel and leadership receive automated real-time alerts from BVES' weather stations when local winds exceed thresholds.

The utility is unable to report fuel density and moisture data at this time. The utility's contracted meteorologist incorporates fuel conditions when developing relative local fire danger and risk using the NFDRS.

Table 10: Directional vision for evolution of risk drivers

Rank order 1-15	Incident type by ignition probability driver	Detailed risk driver	Change in risk impact by end-2022	Change in risk impact by year 10	Comments
2	Contact from object	All types of object contact	Moderately Decrease Risk	Significantly Decrease Risk	Significant due to aggregation of below efforts.
9		Animal contact	Significantly Decrease Risk	Moderately Decrease Risk	Installing raptor protection.
15		Balloon contact	Moderately Decrease Risk	Moderately Decrease Risk	Installing covered conductor.
1		Vegetation contact	Moderately Decrease Risk	Moderately Decrease Risk	Installing raptor protection.
11		Vehicle contact	Moderately Decrease Risk	Moderately Decrease Risk	Installing covered conductor.
3	Equipment / facility failure	All types	Moderately Decrease Risk	Significantly Decrease Risk	Installing raptor protection.
13		Capacitor bank failure	Limited or no impact	Limited or no impact	Installing covered conductor.
4		Conductor failure—all	Moderately Decrease Risk	Moderately Decrease Risk	BVES higher standard for clearance.
5		Conductor failure—wires down	Moderately Decrease Risk	Moderately Decrease Risk	BVES hardening evacuation routes.
6		Fuse failure—all	Moderately Decrease Risk	Moderately Decrease Risk	Aggregation of each below
7		Fuse failure—conventional blown fuse	Limited or no impact	Limited or no impact	BVES only has 25 capacitor banks in entire service area.
10		Lightning arrestor failure	Moderately Decrease Risk	Moderately Decrease Risk	Covered wire installation.
14		Switch failure	Moderately Decrease Risk	Significantly Decrease Risk	Installing covered conductor.
12		Transformer failure	Significantly Decrease Risk	Limited or no impact	10-year is "Limited or no impact" since fuse replacement expected to complete before that.
8	Wire-to-wire contact / contamination	Significantly Decrease Risk	Limited or no impact	10-year is "Limited or no impact" since fuse replacement expected to complete before that.	
N/A	Other	Moderately Decrease Risk	Moderately Decrease Risk	Upgrading Lightning arrestors.	

Table 11: Stress test estimate of PSPS required to manage wildfire ignition probability of current baseline system

PSPS characteristic	95 th percentile wind conditions	99 th percentile wind conditions	Unit(s)
Frequency of PSPS events (total)	N/A	N/A	Number of instances where utility operating protocol requires de-
Scope of PSPS events (total)	N/A	N/A	Circuit-events, measured in number of
Duration of PSPS events (total)	N/A	N/A	Customer hours per year
Other	N/A	N/A	N/A

Note: BVES is unable to provide this data with the current submission. The utility has not had use for PSPS does not foresee the need for PSPS events in the future.

Table 12: Stress test modelled ignitions and near misses assuming 95th and 99th percentile conditions over the 3-year plan term

Stress test output	95th	95th			99th	99th			Unit(s)	Comments
	Observed	Expectation			Observed	Expectation				
	2019	2020	2021	2022	2019	2020	2021	2022		
Number of ignitions (total)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Number of ignitions	
Number of near misses (total)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Number of near misses	

Note: BVES is unable to provide this data with the current submission.

Table 13: Stress test modelled use of PSPS assuming 95th and 99th percentile conditions over the 3-year plan term

PSPS characteristics	95th Observed	95th Expectation			99th Observed	99th Expectation			Unit(s)	Comments
	2019	2020	2021	2022	2019	2020	2021	2022		
Frequency of PSPS events (total)	0	N/A	N/A	N/A	0	N/A	N/A	N/A	Number of instances where utility operating protocol requires de-energization of a circuit or portion thereof in order to reduce ignition probability, per year	BVES has not had any use of PSPS
Scope of PSPS events (total)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Circuit-events, measured in number of events multiplied by number of circuits targeted for de-energization per year	BVES has not had any use of PSPS
Duration of PSPS events (total)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Customer hours per year	BVES has not had any use of PSPS
Other	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	BVES has not had any use of PSPS

Note: BVES is unable to provide this data with the current submission. The utility has not had use for PSPS does not foresee the need for PSPS events in the future.