



Overloaded Facility	Contingency (All and Worst P6)	Category	Category Description	Loading % (Baseline Scenarios)					Loading % (Sensitivity Scenarios)			ISO Approved Projects & Potential Mitigation Solutions
				2022 Summer Peak	2025 Summer Peak	2030 Summer Peak	2022 Spring Off-Peak	2025 Spring Off-Peak	2025 SP High CEC Forecast	2022 Spring OP Hi Renew & Min Gas Gen	2022 SP Heavy Renewable & Min Gas Gen	
Whilwind 500/230 kV Transformers	All elements in sevice	P0	N-0	<100	<100	<100	<100	<100	<100	102	<100	Congestion management
	One Whilwind 500/230 kV Transformer With RAS	P1	N-0	<100	<100	<100	<100	116	<100	129	119	Whirlwind RAS
	Two Whilwind 500/230 kV Transformers (Worst case) With RAS	P6	T-1/T-1	127	<100	<100	<100	241	<100	277	248	Whirlwind RAS
Neenach — Bailey/Westpac Tap 66 kV	All elements in sevice	P0	N-0	<100	<100	<100	<100	<100	<100	<100	104	Congestion management
Antelope–Neenach 66 kV	Neenach — Bailey/Westpac 66 kV	P1/P2.1	L-1	<100	<100	<100	<100	101	<100	104	101	
Big Creek 2–Big Creek 3 230 kV	Big Creek 1–Rector & Big Creek 8–Big Creek 3 230 kV lines	P6	L-1/L-1	<100	130	130	136	<100	130	136	<100	Reduce Big Creek generation after initial contingency
	Big Creek 1–Rector & Big Creek 8–Big Creek 2 230 kV lines	P6	L-1/L-1	<100	114	114	120	<100	114	120	<100	
Antelope 230/66 kV Transformers	Two Antelope 230/66 kV Transformers	P6	T-1/T-1	<100	124	157	<100	<100	132	<100	<100	Energize spare after initial contingency

Note: The off-peak sensitivity case with heavy renewable output and minimum gas generation commitment is based on the 2022 Spring Off-Peak Case rather than the 2025 Spring Off-Peak Case as indicated in the study plan.

Study Area: **SCE Tehachapi & Big Creek Corridor**

High/Low Voltages



Substation	Contingency (All and Worst P6)	Category	Category Description	Voltage PU (Baseline Scenarios)					Voltage PU (Sensitivity Scenarios)			ISO Approved Projects & Potential Mitigation Solutions
				2022 Summer Peak	2025 Summer Peak	2030 Summer Peak	2022 Spring Off-Peak	2025 Spring Off-Peak	2025 SP High CEC Forecast	2022 Spring OP Hi Renew & Min Gas Gen	2022 SP Heavy Renewable & Min Gas Gen	
Bailey 66 kV sytem	Bailey–Pardee & Bailey–Pastoria 230 kV	P6	L-1/L-1	Diverged	Diverged	Diverged	Diverged	>0.9	Diverged	Diverged	Diverged	Split Antelope–Bailey 66 kV System per existing SCE operating procedure after initial contingency
Bailey 66 kV sytem	Bailey 230/66 kV #2 \$ #3 Tran.	P6	T-1/T-1	Diverged	Diverged	Diverged	Diverged	>0.9	Diverged	Diverged	Diverged	

Note: The off-peak sensitivity case with heavy renewable output and minimum gas generation commitment is based on the 2022 Spring Off-Peak Case rather than the 2025 Spring Off-Peak Case as indicated in the study plan.

Study Area: SCE Tehachapi & Big Creek Corridor

Voltage Deviation



Substation	Contingency (All and Worst P6)	Category	Category Description	Post Cont. Voltage Deviation % (Baseline Scenarios)					Post Cont. Voltage Deviation % (Sensitivity Scenarios)			ISO Approved Projects & Potential Mitigation Solutions
				2022 Summer Peak	2025 Summer Peak	2030 Summer Peak	2022 Spring Off-Peak	2025 Spring Off-Peak	2025 SP High CEC Forecast	2022 Spring OP Hi Renew & Min Gas Gen	2022 SP Heavy Renewable & Min Gas Gen	

No voltage deviation issues were identified

Note: The off-peak sensitivity case with heavy renewable output and minimum gas generation commitment is based on the 2022 Spring Off-Peak Case rather than the 2025 Spring Off-Peak Case as indicated in the study plan.

Study Area: SCE Tehachapi & Big Creek Corridor

Transient Stability



Contingency	Category	Category Description	Fault Duration (cycles)	Transient Stability Performance					Potential Mitigation Solutions
				2025 Summer Peak	2030 Summer Peak	2022 Spring Off- Peak	2025 SP High CEC Forecast	2022 Spring OP Hi Renew & Min Gas Gen	
Pardee-Pastoria-Warne, 3-PH Fault @ Pardee, Normal Clearing	P1	Single contingency	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Antelope-Magunden No. 1 or 2, 3-PH Fault @ Magunden, Normal Clearing	P1	Single contingency	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Big Creek 1 - Rector & Rector-Vestal No. 1 , 1-PH Fault @ Big Creek 1, Delayed Clearing	P4.2	Two overlapping events	15	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Big Creek 3-Rector No. 1 & Rector-Vestal No. 2, 1-PH Fault @ Big Creek 1, Delayed Clearing	P4.2	Single contingency	15	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Big Creek 4-Springville & Magunden-Springville No. 2, 1-PH Fault @ Big Creek 4, Delayed Clearing	P4.2	Stuck Breaker	15	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Magunden-Pastoria No. 1 & Bailey-Pastoria, 1-PH Fault @ Pastoria, Delayed Clearing	P4.2	Stuck Breaker	15	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Magunden-Pastoria No. 2 & Pardee-Pastoria, 1-PH Fault @ Pastoria, Delayed Clearing	P4.2	Stuck Breaker	15	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Magunden-Pastoria No. 3 & Pardee-Pastoria-Warne, 1-PH Fault @ Pastoria, Delayed Clearing	P4.2	Stuck Breaker	15	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Pardee-Pastoria & Pardee-Vincent No. 2, 1-PH Fault @ Pardee, Delayed Clearing	P4.2	Stuck Breaker	15	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Bailey-Pardee & Pardee-Vincent No. 1, 1-PH Fault @ Pardee, Delayed Clearing	P4.2	Stuck Breaker	15	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Pardee-Pastoria-Warne & Pardee-Santa Clara, 1-PH Fault @ Pardee, Delayed Clearing	P4.2	Stuck Breaker	15	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Springville, 1-PH Fault @ Springville, Delayed Clearing	P5	Non-Redundant Bus Diff Relay Failure	30	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Big Creek 1, 1-PH Fault @ Big Creek 1, Delayed Clearing	P5	Non-Redundant Bus Diff Relay Failure	30	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation

Study Area: SCE Tehachapi & Big Creek Corridor

Transient Stability



Contingency	Category	Category Description	Fault Duration (cycles)	Transient Stability Performance					Potential Mitigation Solutions
				2025 Summer Peak	2030 Summer Peak	2022 Spring Off-Peak	2025 SP High CEC Forecast	2022 Spring OP Hi Renew & Min Gas Gen	
Big Creek 2, 1-PH Fault @ Big Creek 2, Delayed Clearing	P5	Non-Redundant Bus Diff Relay Failure	30	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Big Creek 4, 1-PH Fault @ Big Creek 4, Delayed Clearing	P5	Non-Redundant Bus Diff Relay Failure	30	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Big Creek 8, 1-PH Fault @ Big Creek 8, Delayed Clearing	P5	Non-Redundant Bus Diff Relay Failure	30	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Big Creek 1-Rector & Big Creek 3-Rector No. 1, 3-PH Fault @ Big Creek 1, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Big Creek 1-Rector & Big Creek 3-Rector No. 1 w/RAS, 3-PH Fault @ Big Creek 1, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Big Creek 1-Rector & Big Creek 3-Rector No. 2, 3-PH Fault @ Rector, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Big Creek 1-Rector & Big Creek 3-Rector No. 2 w/RAS, 3-PH Fault @ Rector, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Big Creek 3-Rector No. 2 & Big Creek 4-Springville, 3-PH Fault @ Big Creek 3, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Big Creek 3-Rector No. 2 & Big Creek 4-Springville w/Big Creek RAS Modification, 3-PH Fault @ Big Creek 3, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Big Creek 4-Springville & Rector-Springville, 3-PH Fault @ Big Creek 4, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Big Creek Generators go out of synchronism	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Big Creek RAS
Big Creek 4-Springville & Rector-Springville, 3-PH Fault @ Big Creek 4, Normal Clearing, with RAS	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Rector-Vestal No. 1 & Rector-Vestal No. 2, 3-PH Fault @ Rector, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Rector-Vestal No. 1 & Rector-Vestal No. 2 w/RAS, 3-PH Fault @ Rector, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation

Study Area: SCE Tehachapi & Big Creek Corridor

Transient Stability



Contingency	Category	Category Description	Fault Duration (cycles)	Transient Stability Performance					Potential Mitigation Solutions
				2025 Summer Peak	2030 Summer Peak	2022 Spring Off-Peak	2025 SP High CEC Forecast	2022 Spring OP Hi Renew & Min Gas Gen	
Magunden-Springville No. 1 & Magunden-Springville No. 2, 3-PH Fault @ Magunden, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Magunden-Vestal No. 1 & Magunden-Vestal No. 2, 3-PH Fault @ Magunden, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Big Creek 1-Rector & Big Creek 3-Big Creek 8, 3-PH Fault @ Rector, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Magunden-Vestal No. 1 & Rector-Springville, 3-PH Fault @ Rector, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Magunden-Vestal No. 2 & Rector-Springville, 3-PH Fault @ Rector, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Rector-Vestal No. 1 & Magunden-Springville No. 1, 3-PH Fault @ Rector, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Rector-Vestal No. 2 & Magunden-Springville No. 1, 3-PH Fault @ Rector, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Magunden-Vestal No. 1 & Magunden-Springville No. 1, 3-PH Fault @ Rector, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Magunden-Vestal No. 2 & Magunden-Springville No. 1, 3-PH Fault @ Rector, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Rector-Vestal No. 1 & Rector-Springville, 3-PH Fault @ Rector, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Rector-Vestal No. 2 & Rector-Springville, 3-PH Fault @ Pardee, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Bailey–Pastoria & Bailey–Pardee 230 kV, 3-PH Fault @ Pardee, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	local 66kV instability	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Split Antelope–Bailey 66 kV System per existing SCE operating procedure after initial contingency
Magunden-Pastoria No. 1 & Magunden-Pastoria No. 2, 3-PH Fault @ Magunden, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation

Study Area: SCE Tehachapi & Big Creek Corridor

Transient Stability



Contingency	Category	Category Description	Fault Duration (cycles)	Transient Stability Performance					Potential Mitigation Solutions
				2025 Summer Peak	2030 Summer Peak	2022 Spring Off-Peak	2025 SP High CEC Forecast	2022 Spring OP Hi Renew & Min Gas Gen	
Magunden-Pastoria No. 1 & Magunden-Pastoria No. 3, 3-PH Fault @ Magunden, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Magunden-Pastoria No. 2 & Magunden-Pastoria No. 3, 3-PH Fault @ Magunden, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Bailey-Pastoria & Pardee-Pastoria, 3-PH Fault @ Bailey, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Bailey-Pastoria & Pardee-Pastoria-Warne* , 3-PH Fault @ Bailey, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Pardee-Pastoria & Pardee-Pastoria-Warne*, 3-PH Fault @ Pardee, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Pardee-Pastoria & Bailey-Pardee, 3-PH Fault @ Pardee, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Pardee-Pastoria-Warne & Bailey-Pardee*, 3-PH Fault @ Pardee, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Antelope-Magunden No. 1 & Antelope-Magunden No. 2, 3-PH Fault @ Magunden, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Antelope-Magunden No. 1 & Pardee-Pastoria-Warne*, 3-PH Fault @ Magunden, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Antelope-Magunden No. 2 & Pardee-Pastoria-Warne*, 3-PH Fault @ Magunden, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Antelope-Pardee & Pardee-Pastoria-Warne*, 3-PH Fault @ Pardee, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Bailey-Pastoria & Bailey-Pardee, 3-PH Fault @ Pardee, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Big Creek 1 -Rector and Big Creek 2-Big Creek 8, 3-PH Fault @ Rector, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation

Study Area: SCE Tehachapi & Big Creek Corridor

Transient Stability



Contingency	Category	Category Description	Fault Duration (cycles)	Transient Stability Performance					Potential Mitigation Solutions
				2025 Summer Peak	2030 Summer Peak	2022 Spring Off-Peak	2025 SP High CEC Forecast	2022 Spring OP Hi Renew & Min Gas Gen	
Antelope-Pardee & Bailey-Pastoria , 3-PH Fault @ Pardee, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Bailey-Pardee & Pastoria-Edmonston, 3-PH Fault @ Pardee, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Bailey-Pastoria & Pastoria-Edmonston, 3-PH Fault @ Pastoria, Normal Clearing	P6.1	Two overlapping events	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation
Big Creek 3-Rector No. 2 & Rector-Springville, 1-PH Fault @ Big Creek 3, Normal Clearing	P7.1	DCTL	5	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	Stable/WECC criteria met	No violation

Note: The off-peak sensitivity case with heavy renewable output and minimum gas generation commitment is based on the 2022 Spring Off-Peak Case rather than the 2025 Spring Off-Peak Case as indicated in the study plan.

Study Area: SCE Tehachapi & Big Creek Corridor



Single Contingency Load Drop

Worst Contingency	Category	Category Description	Amount of Load Drop (MW)								Potential Mitigation Solutions
			Select..	Select..	Select..	Select..	Select..	Select..	Select..	Select..	

No single contingency resulted in total load drop of more than 250 MW

Note: The off-peak sensitivity case with heavy renewable output and minimum gas generation commitment is based on the 2022 Spring Off-Peak Case rather than the 2025 Spring Off-Peak Case as indicated in the study plan.

Study Area: SCE Tehachapi & Big Creek Corridor



Single Source Substation with more than 100 MW Load

Substation	Load Served (MW)								Potential Mitigation Solutions
	Select..	Select..	Select..	Select..	Select..	Select..	Select..	Select..	

No single source substation with more than 100 MW

Note: The off-peak sensitivity case with heavy renewable output and minimum gas generation commitment is based on the 2022 Spring Off-Peak Case rather than the 2025 Spring Off-Peak Case as indicated in the study plan.