APPENDIX H:
Project Need and Description

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PROJECTS

Name	Oro Loma 70 kV Area Reinforcement (Re-scope)
Description	Build a new 70 kV circuit (about 4 miles) from Mercy Springs SW. STA. to Ortiga Substation using the same right-of-way
Type	Reliability
Objectives	Prevent P1 overloads
Project Need Date	2028
Expected In Service Date	May 2032
Interim Solution	Operating solution
Project Cost	$19M - $37.6M
Alternatives Considered	• Reconductoring the Los Banos – Livingston Jct. – Canal 70 kV Line from Santa Nella to Canal Substations and installing additional voltage support at Canal or Ortiga • Energy Storage infeasible due to charging window issues • Grid Enhancing Technologies (GETs) infeasible as the Los Banos – Livingston Jct. -Canal 70 kV Line will be radial following the outage of Mercy Springs SW. STA. – Ortiga 70 kV Line

Name	Walnut 230 kV CB Upgrade
Description	Replace five CBs currently rated 40 kA with new CBs with higher rating of 63 kA
Type	Reliability
Objectives	To eliminate the SCD issues identified by SCE at the Walnut 230 kV substation that projected to exceed 95% of the interrupting capacity rating of five (5) CBs in near-term by 2030
Project Need Date	2030
Expected In Service Date	2030
Interim Solution	None
Project Cost	$11-$15 million
Alternatives Considered	Various options such as installing TRV or CCVT capacitors and de-looping line were considered. None of them offered a more effective solution in terms of SCD reduction or cost.

Name	Ames 115 kV short circuit mitigation
Description	Scope is to upgrade CB's 112 and 122 at Ames 115 kV to 63 KA
Type	Reliability
Objectives	Prevent breaker overstress at Ames 115 kV for CB's 112 and 122 starting Year-5 and beyond.
Project Need Date	2030
Expected In Service Date	2029
Interim Solution	None
Project Cost	$2.5M - $5M
Alternatives Considered	None

Name	DeAnza 115 kV Substation
Description	• New substation that connects Newark to Monta Vista 115 kV lines with Nortech to NRS 115 kV line
Type	Reliability
Objectives	Prevent NERC thermal violations on Monta Vista to Newark 115 kV path
Project Need Date	2030
Expected In Service Date	2031
Interim Solution	None
Project Cost	$130M - $260M
Alternatives Considered	• Re-conductoring Monta Vista – Lawrence and Newark – Lockheed segments, include reconductoring these two 14-mile lines with a higher rating to achieve at least 2,000 Amps

Name	Lincoln-Pleasant Grove line re-conductoring
Description	Reconductor Lincoln-Pleasant Grove to 795ACSS (rating of 1517 Amps for summer emergency
Type	Reliability
Objectives	Prevents P6 overloads
Project Need Date	2027
Expected In Service Date	2034
Interim Solution	Operating solution
Project Cost	$60M-120 M
Alternatives Considered	• Energy Storage- This alternative is not recommended since energy storage there are issues with charging window. • Grid Enhancing Technologies (GETs)- Use of Advanced Power Flow Control devices will not be able to mitigate the issue due to overloads observed in underlying low voltage network.

Name	Los Esteros 230 kV Short Circuit Mitigation
Description	Scope is to build a new GIS bus section and install two (2) 36-ohm bus reactors between existing 230 KV Bus E and new GIS bus section.
Type	Reliability
Objectives	Prevent SC issues at Los Esteros 230 kV for CB's 252, 352, 262, 362, 342, 442, 812, 822 and 832 starting Year-5 and beyond.
Project Need Date	2030
Expected In Service Date	2029
Interim Solution	None
Project Cost	$10M - $20M
Alternatives Considered	Adding reactors to Los Esteros 230/115 kV low-side were considered, however they weren't completely helpful in mitigating the 230 kV issues

Name	**Mariposa 70 kV Voltage Support**
Description	Install a 20 MVar STATCOM device at Mariposa Substation
Type	Reliability
Objectives	Prevent P1 low voltages
Project Need Date	2027
Expected In Service Date	May 2032
Interim Solution	Mariposa UVLS
Project Cost	$31M - $63M
Alternatives Considered	• Energy Storage- This alternative is not recommended since energy storage cannot provide voltage support as cost-effective as the recommended scope. • Other Grid Enhancing Technologies (GETs)- Use of Advanced Power Flow Control devices will not be able to mitigate the low voltage issue.

Name	**Metcalf 230 kV Short Circuit Mitigation**
Description	Scope is to build a new GIS bus section and install two (2) 36-ohm bus reactors between existing 230 KV Bus E and new GIS bus section.
Type	Reliability
Objectives	Prevent SC issues on bus and breakers 684, 674,664, 654 starting Year-2 and CB's 222, 392, 292, 312, 372, 262, 382, 212, 582, 592, 252, 272, 322, 352, 362, 382, 232 and 242/2 starting year-10.
Project Need Date	2027
Expected In Service Date	2034
Interim Solution	None
Project Cost	$270M - $405M
Alternatives Considered	• Replacing all breakers which isn't cost effective

Name	Midway 115 kV Bus Upgrade
Description	Expand Midway 115 kV double bus single breaker configured bus from two sections (Sections D and E) to three sections (add new Section F) and relocate existing lines and transformers across new sections.
Type	Reliability
Objectives	Address NERC P2 issues overloading 115 kV lines and to close existing summer setups.
Project Need Date	2027
Expected In Service Date	2033
Interim Solution	Continue to utilize summer setups
Project Cost	$44 M-89 M
Alternatives Considered	• Convert to BAAH that provides similar benefits but has cost.

Name	Monta Vista – Loyola – Los Altos 60 kV Line Reconductoring
Description	Reconductoring of 3.9 circuit miles between the Monta Vista and Loyola substations with a larger conductor to achieve at least 1100 Amps during summer emergency conditions
Type	Reliability
Objectives	Prevents P0 overloads
Project Need Date	2030
Expected In Service Date	2034
Interim Solution	Load management
Project Cost	$32.0M - $64.0M
Alternatives Considered	None

Name	Monta Vista 230/115 kV Transformer Bank Addition
Description	Install a new 230/115 kV transformer bank at the Monta Vista substation, which will have a minimum summer normal rating of 420 MVA and a summer emergency rating of 462 MVA.
Type	Reliability
Objectives	Prevents P6 overload issues on existing Monta Vista 230/115 KV banks
Project Need Date	2035
Expected In Service Date	2032
Interim Solution	None
Project Cost	$52M - $104M
Alternatives Considered	None

Name	Newark 115 kV Short Circuit Mitigation
Description	Scope is to build a new GIS bus section and install two (2) 36-ohm bus reactors between existing 230 KV Bus E and new GIS bus section.
Type	Reliability
Objectives	Prevent breaker overstress at Newark 115 kV for CB's 130, 140, 170, 310, 320, 330, 340, 350, 360, 370, 380, 420, 430, 460, 470/2, 480, 510, 520, 540, 720, 730, 770, 780 starting year-5 and beyond.
Project Need Date	2030
Expected In Service Date	2029
Interim Solution	None
Project Cost	$40M - $60M
Alternatives Considered	Replacing all breakers which isn't cost effective

Name	Newark 230/115 kV Bank Upgrade
Description	Replace the existing Newark #11 Transformer bank with a new bank that has minimum summer normal rating of 560 MVA and a summer emergency rating of 620 MVA
Type	Reliability
Objectives	Prevent P2 and P6 overload issues on existing Newark 230/115 KV bank 11
Project Need Date	2030
Expected In Service Date	2032
Interim Solution	None
Project Cost	$31.3M - $62.6M
Alternatives Considered	None

Name	Nortech 115 kV Short Circuit Mitigation
Description	Upgrade Nortech 115 kV CB's 182 and 192 to 63 kA
Type	Reliability
Objectives	Breaker overstress at Nortech 115 kV for CB's 182 and 192 starting Year-5 and beyond.
Project Need Date	2030
Expected In Service Date	2029
Interim Solution	None
Project Cost	$2.5M - $5M
Alternatives Considered	None

Name	San Jose B 230/115 kV Transformer Bank Addition
Description	Install a parallel 230/115 kV transformer bank at the San Jose B Substation
Type	Reliability
Objectives	Prevents P1 issues
Project Need Date	2035
Expected In Service Date	2030
Interim Solution	None
Project Cost	$34.7M - $69.4M
Alternatives Considered	• Constructing a new 230 kV bus at nearby 115 kV existing substations to accommodate an additional 230/115 kV transformer bank which is not economically feasible • Power flow control devices, were also deemed infeasible, as they would only redirect the flow to other 230 kV substations without addressing the underlying issue

Name	Saratoga-Vasona 230 kV Line Reconductoring
Description	Reconductoring of 3.4 miles of 230 kV line to achieve at least 3000 Amps during summer emergency conditions
Type	Reliability
Objectives	Prevent P6 overload issues on Saratoga-Vasona 230 kV line
Project Need Date	2030
Expected In Service Date	2034
Interim Solution	None
Project Cost	$89M - $178M
Alternatives Considered	• None

Name	South Oakland Reinforcement (Phase 2)
Description	• New 1.5-mile 115 kV double circuit line from the San Leandro substation to pole 005/046 on the Grant-Oakland J line, with a summer emergency rating of at least 3428 Amps. This double circuit will connect with the San Leandro-Moraga 115 kV line #3 at the San Leandro substation and with the Oakland J-Grant 115 kV line on the opposite side. This new connection will create the Moraga-Grant and San Leandro-Edes 115 kV lines. • Reconductoring Edes Tap #1 and Edes Tap #2 (approximately 0.05 miles each) to achieve a summer emergency rating of at least 3428 Amps.
Type	Reliability
Objectives	• Prevents overloads on East Shore-Grant 115 kV lines when supply from either the Moraga or East Shore side is lost.
Project Need Date	2030
Expected In Service Date	2034
Interim Solution	Operating solutions
Project Cost	$43M - $87M
Alternatives Considered	• New 230 kV supply sourced from East Shore, • Additional 115 kV reinforcements and the reconductoring of the lines identified with overloads.

Name	Tesla – Trimble – Metcalf 230 kV Corridor Expansion
Description	• Move Tesla-LLNL 115 kV to its own pole line and reconductor original line using 1113 ACSS bundled conductor • Reconductor Tesla-Newark #2 up to Sunol Jct using 1113 ACSS bundled conductor, or greater and remove cross ties. • Reconductor Los Esteros-Metcalf (from Metcalf to Sunol Jct) using 1113 ACSS bundled conductor, or greater and remove cross ties. • Build two lines from Los Esteros-Metcalf tower line into Trimble establishing the new Tesla-Trimble and Metcalf-Trimble 230 kV lines
Type	Reliability
Objectives	Prevent NERC thermal violations in categories P1, P2, P3, and P6 in Southbay 230 kV and 115 kV network
Project Need Date	2030
Expected In Service Date	2034
Interim Solution	Operating solutions
Project Cost	$712M - $1424M
Alternatives Considered	• New 230 kV AC circuit from Tesla to Newark • DC transmission line with injection at Newark 115 kV and Newark 230 kV

Name	Trimble 115 kV Short Circuit Mitigation
Description	Replace Trimble 115 kV CB's 312, 322, 332, 372, 382 and 342
Type	Reliability
Objectives	Breaker overstress at Trimble 115 kV for CB's 312, 322, 332, 372, 382 and 342 starting Year-10.
Project Need Date	2035
Expected In Service Date	2034
Interim Solution	None
Project Cost	$7.8M - $15.6M
Alternatives Considered	None

Name	Lugo 230 kV CB Upgrade
Description	
Type	
Objectives	
Project Need Date	
Expected In Service Date	
Interim Solution	
Project Cost	
Alternatives Considered	

Name	Devers 230 kV SCD Upgrade
Description	
Type	
Objectives	
Project Need Date	
Expected In Service Date	
Interim Solution	
Project Cost	
Alternatives Considered	

Name	Lugo 500 kV Reactive Power Reinforcement
Description	Consists of a ±300 Mvar STATCOM (Static Synchronous Compensator) combined with 3x 200 Mvar switchable capacitor banks located at or near by the Lugo 500 kV substation, providing a total of (+900 to –300) Mvar of steady-state and dynamic reactive power support to the SCE 500 kV bulk system. The scope of this project may need to be revisited in the next planning cycle if the proposed Trout–Canyon–Lugo 500-kV line is approved by the ISO Board during the current cycle.
Type	Reliability
Objectives	To address the low-voltage conditions identified on multiple 500 kV buses of the SCE bulk system under Categories P0, P1, and P7 contingencies in the near-term and the long-term planning scenarios. In addition, the P7 contingency of Vincent – Mesa 500 kV and Vincent – Rio Hondo 230 kV lines could potentially result in post-transient voltage instability in the SCE main area in the long term summer off-peak case.
Project Need Date	2032
Expected In Service Date	2032
Interim Solution	None
Project Cost	$370-$450 million
Alternatives Considered	Various alternatives installing voltage-support facilities at different locations were investigated, including steady-state and dynamic reactive power support, at the El Dorado, Mohave, Devers, Lugo, and Vincent 500 kV substations

Name	Mesa - Laguna Bell 230 kV #2 Upgrade
Description	Reconductor 4.9 miles of Mesa – Laguna Bell 230 kV #2 line with ACCC Fort Worth - 2B, which has normal and emergency ratings of 1354 MVA and 1785 MVA.
Type	Reliability
Objectives	Ensure reliability in the south-of-Mesa load pocket by increasing transmission energy storage charging capability. This will allow storage resources to be fully charged and available for deployment to offset local capacity deficiency, ensuring reliable service for every hour of the 2035 summer peak day under a worst P6 contingency
Project Need Date	2032
Expected In Service Date	2032
Interim Solution	None
Project Cost	$41-$56 million
Alternatives Considered	• SCE Option 1 consists of building two new 230 kV lines between Mesa and Del Amo, with estimated cost range of $2,034–5,100 million • SCE Option 4 involves adding new Serrano–Mesa and Mesa–Lighthipe 500 kV lines connected to a new Lighthipe 500/230 kV substation, with estimate cost range of $3,414–4,820 million. • Metro- Ventura Alternative B involves developing an underground HVDC system from Pardee to Metro Area along with the Pardee 500 kV conversion in the 15-year long-term planning horizon, • Metro- Ventura Alternative C involves building a submarine HVDC from Ormond Beach to Metro Area along with the Pardee 500 kV conversion in the 15-year long-term planning horizon.

Name	Etiwanda and Mira Loma 230 kV SCD Upgrade
Description	Expand the Mira Loma 230 kV switchrack by extending the 230 kV switchrack and adding two (2) Breaker and a Half (BAAH) positions (No. 17 and No. 18), and along with relocating the Miro Loma – Vista and Mira Loma – Rancho Vista 230 kV lines
Type	Reliability
Objectives	To eliminate the SCD issues identified by SCE at the Mira Loma 230 kV substation that is projected to exceed 95% of the interrupting capacity rating of seven (7) circuit breakers (CBs) at Mira Loma Section A (West) 230 kV and fifteen (15) CBs at Mira Loma Section B (East) 230 kV by 2027. And four (4) of the fifteen CBs at Mira Loma B are expected to exceed 100%. In addition, the entire Etiwanda 230 kV switchrack is anticipated to exceed 100% of its interrupting capability by 2035, even after accounting for the additional margin achieved through the Etiwanda 230 kV Bus SCD Mitigation project approved during the 2023 – 2024 Transmission Plan. The project adds new bay positions to accommodate the queued generation resources, and also provides operation flexibility to operate Rancho Vista–Vista 230 kV No. 1 and No. 2 lines.
Project Need Date	2027
Expected In Service Date	2031
Interim Solution	None
Project Cost	$40-$55 million
Alternatives Considered	• Alternative 1: Reconfiguring the substation topology by swapping the Mira Loma–Vista No. 2 and the Mira Loma–Rancho Vista No. 1 230 kV lines, to create a single Rancho Vista–Vista 230 kV transmission line by opening CBs at bay position #17 • Alternative 2: Reconfigure the substation topology to create two (2) Rancho Vista–Vista 230 kV lines through the switchrack by swapping Mira Loma–Chino No. 3 and Mira Loma–Vista No. 1 230 kV lines. This option adds an additional line position by installing two circuit breakers • Alternative 3: Reconfigure the substation topology to create two (2) Rancho Vista–Vista 230 kV lines through the switchrack by swapping Mira Loma–Chino No. 3 and Mira Loma–Vista No. 1 230 kV lines, and relocate the Mira Loma–Walnut 230 kV line from the west section to the east section of the bus. This upgrade adds one Breaker-and-a-Half (BAAH) position

Name	Penasquitos – Mira Sorrento 69 kV #2 line
Description	Build a new ~4.5 miles underground 69 kV line between Penasquitos and Mira Sorrento substations with a minimum continuous rating of 136 MVA.
Type	Reliability
Objectives	Increase the load serving capability of the Penasquitos load pocket by mitigating Category P0 and P1 thermal overloads of TL6959 Penasquitos – Mira Sorrento, TL6943 Torrey Pines – University of California Metering and TL666 Penasquitos – Doublet Tap – Dunhill Tap – Torrey Pines 69 kV lines.
Project Need Date	2031
Expected In Service Date	2031
Interim Solution	None
Project Cost	$114.8 million
Alternatives Considered	• Reconductor TL6959 Penasquitos – Mira Sorrento, TL6943 Torrey Pines – University of California Metering and TL666 Penasquitos – Doublet Tap – Dunhill Tap – Torrey Pines 69 kV line with a continuous rating of 204 MVA and an estimated cost of $121M. This alternative could face construction challenges since the load pocket serves critical loads. • Advanced flow control devices are not an effective alternative to mitigate the multiple Category P0 and P1 thermal overloads. Additionally, there is no space to expand the substations to add flow control devices. • Energy storage could solve the thermal overloads identified in the 2035 peak load scenario but not in 2040 due to charging limitations. Moreover, there is no space to expand the substations nor land in the vicinity of them where energy storage could be installed.

Name	TL600B Reconductor
Description	Reconductor ~0.7 miles of TL600B Clairemont – Clairemont Tap 69 kV line to increase its normal rating to 85 MVA.
Type	Reliability
Objectives	Increase the load serving capability of Clairemont substation by mitigating a Category P1 thermal overload of TL600B Clairemont – Clairemont Tap 69 kV line.
Project Need Date	2031
Expected In Service Date	2031
Interim Solution	None
Project Cost	$7.5 million
Alternatives Considered	• Advanced conductors were evaluated for the overhead segment of the 69 kV transmission line. Typically, 69 kV reconductor projects in SDG&E area often lie within an aged wood-pole infrastructure that require a detailed structural analysis to determine if an advanced conductor alternative would be feasible. SDG&E will need to provide its analysis in the next planning cycle and seek approval from the ISO on the final scope of the project. • Advanced flow control devices are not applicable since Clairemont substation is only fed from two 69 kV sources. Therefore, the power flow cannot be controlled during a Category P1 contingency. • Energy storage is not feasible as there is no available land in the vicinity that could be used to install additional energy storage.

Name	TL623C Reconductor
Description	Reconductor the remaining limiting underground and overhead segments of TL623C San Ysidro – Otay Tap 69 kV line to increase its normal rating to 136 MVA.
Type	Reliability
Objectives	Increase the load serving capability of San Ysidro substation by mitigating a Category P1 thermal overload of TL623C San Ysidro – Otay Tap 69 kV line.
Project Need Date	2032
Expected In Service Date	2032
Interim Solution	None
Project Cost	$5.4 million
Alternatives Considered	• Advanced conductors were evaluated for the overhead segments of the 69 kV transmission line. Typically, 69 kV reconductor projects in SDG&E area often lie within an aged wood-pole infrastructure that require a detailed structural analysis to determine if an advanced conductor alternative would be feasible. SDG&E will need to provide its analysis in the next planning cycle and seek approval from the ISO on the final scope of the project. • Advanced flow control devices are not applicable since San Ysidro substation is only fed from two 69 kV sources. Therefore, the power flow cannot be controlled during a Category P1 contingency. • Energy storage could solve the thermal overload identified in the 2035 peak load scenario but not in 2040 due to charging limitations. Furthermore, there are no bay positions available at San Ysidro substation to connect the energy storage. The cost of expanding the substation if land were available would be higher than the proposed project.

Name	TL690B Reconductor and TL697 Reconductor
Description	Reconductor ~1.2 miles of TL690B Oceanside – Oceanside Tap and ~0.1 miles of TL697 San Luis Rey – Oceanside 500 Al underground conductor to increase their normal rating to 60 MVA.
Type	Reliability
Objectives	Increase the load serving capability of Oceanside substation by mitigating Category P1 thermal overloads of TL690B Oceanside – Oceanside Tap and TL697 San Luis Rey – Oceanside 69 kV lines.
Project Need Date	2031
Expected In Service Date	2031
Interim Solution	None
Project Cost	$33 million
Alternatives Considered	• Advanced flow control devices are not applicable since Oceanside substation is only fed from two 69 kV sources. Therefore, the power flow cannot be controlled during a Category P1 contingency. • Energy storage is not feasible due to charging limitations. Furthermore, there are no bay positions available at Oceanside substation to connect the energy storage nor land in the vicinity of the substation where energy storage could be installed.

Name	Drum - Higgins 115 kV Line Reconductoring
Description	Drum – Higgins 115kV line (approximately 30 mile) to a minimum SN rating of 1714 Amps (341 MVA, 954ACSS).
Type	Policy
Objectives	Prevents P1 and P7 overloads on Drum – Higgins 115kV line on-peak deliverability assessment for 2035 baseline, sensitivity and 2040 baseline portfolios
Project Need Date	2035
Expected In Service Date	2034
Interim Solution	None
Project Cost	$154M - $308M
Alternatives Considered	• Remapping portfolio energy storage resources Most of the resources behind the Drum – Higgins 115kV line are geothermal resources and cannot be remapped to other substations. Hence this alternative is not feasible.

Name	East Shore 230 kV Area Reinforcement
Description	Looping Pittsburg-San Mateo 230kV Line into East Shore 230 kV substation and then reconductoring the remaining sections of the Pittsburg-East Shore 230kV Lines #1 and #2
Type	Policy
Objectives	Prevent NERC P0, P1 and P7 issues on Pittsburg – San Mateo 230 kV and Pittsburg – Eastshore 230 kV lines in the on-peak deliverability assessment for 2035 baseline, sensitivity and 2040 baseline portfolios
Project Need Date	2035
Expected In Service Date	2030
Interim Solution	None
Project Cost	$129M - $257M
Alternatives Considered	• Remapping portfolio energy storage resources Most of the energy storage resources behind the Pittsburg-San Mateo 230 kV line and Pittsburg-East Shore 230 kV line are in-development resources and cannot be remapped to other substations. Hence this alternative is not feasible.

Name	Oleum Area Reinforcement
Description	• Reconductoring the entire Oleum-Martinez 115 kV line (approximately 10.49 mile) with minimum SN rating of 1714 Amps (341 MVA, 954ACSS). • Reconductoring the Martinez-Sobrante 115 kV line from Martinez PP-Alhambra (approximately 2.42 mile) with minimum SN rating of 1714 Amps (341 MVA, 954ACSS).
Type	Policy
Objectives	Prevents P7 overloads on Oleum-Martinez 115kV line and Martinez-Noth Tower 115kv
Project Need Date	2035
Expected In Service Date	2033
Interim Solution	None
Project Cost	$83M - $144M
Alternatives Considered	• Remapping portfolio energy storage resources Most of the energy storage resources behind the Oleum-Martinez 115kV line and Martinez-Noth Tower 115kv (Nrth twr to Alhamtp1 115kV) line are in-development resources and cannot be remapped to other substations. Hence this alternative is not feasible.

Name	**Trout Canyon – Lugo 500 kV Line**
Description	Build a new 500 kV transmission line from Trout Canyon 500 kV substation to Lugo 500 kV substation, approximately 180 miles, with 70% series compensation
Type	Policy
Objectives	The project would mitigate the identified GLW-VEA area constraint, Lugo – Victorville 500 kV constraint, Eldorado – McCullough 500 kV constraint, Victorville – McCullough 500 kV constraint and Sloan Canyon – Eldorado 500 kV constraint in base case and sensitivity portfolios.
Project Need Date	2035
Expected In Service Date	2035
Interim Solution	Lugo – Victorville RAS, Sloan Canyon RAS and Desert View RAS, and congestion management
Project Cost	$1,270 - $1,800 million
Alternatives Considered	The alternative considered comprises of **Sagebrush interconnection project**, **Marketplace – Adelanto AC-DC conversion project** and **Sloan Canyon – Eldorado 500 kV No.2 line**. This alternative cannot mitigate the Victorville – McCullough 500 kV line overloads. Additional major transmission solutions would be needed with this alternative. Besides, the Sloan Canyon RAS would still be required to mitigate multiple P7 contingency overloads on VEA 138 kV lines and transformer and would curtail around 970 MW resources.

Name	Gates - Los Banos #3 500 kV line Series Compensation
Description	Add 70% series compensation on the Gates – Los Banos #3 500 kV line
Type	Economic-driven
Objectives	Balances flows among the three 500 kV lines of Path 15 and helps to reduce congestion on the Path 15 corridor.
Project Need Date	2035
Expected In Service Date	2035
Interim Solution	None
Project Cost	$150 million
Alternatives Considered	None