



# **Office of Ratepayer Advocates' Recommendation to Consolidate SCE Proposed Transmission Projects**

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# Outline

- Summary of ORA's Recommendation
- SCE's four proposed projects:
  - SCE A. 07-01-031: Valley – Ivyglen Project (VIG)
  - SCE A. 09-09-022: Alberhill System Project (ASP)
  - SCE A. 15-04-013: Riverside Transmission Reliability Project (RTRP)
  - SCE A. 15-12-007: Circle City Substation and Mira Loma – Jefferson Line Project (CCP)
- ORA's Recommended Project Consolidation Options





## Summary of ORA's Recommendation

- Option 1: Consolidate VIG and ASP; Consolidate RTRP and CCP.
  - RTRP and 18 miles of transmission lines would be eliminated so cost and environmental impact would be mitigated.
  - Power supply quality and reliability would be improved.
- Option 2: Consolidate VIG, ASP, CCP, and RTRP.
  - RTRP and 18 miles of transmission lines would be eliminated so cost and environmental impact would be mitigated.
  - Power supply quality and reliability would be improved.
- Option 3: Construct the 220 kV Circle City Substation, and eliminate SCE's proposed VIG, ASP, and RTRP.
  - The RTRP, the Alberhill Substation, and the 18 miles of transmission lines would be eliminated.
  - Power supply quality and reliability would be improved.



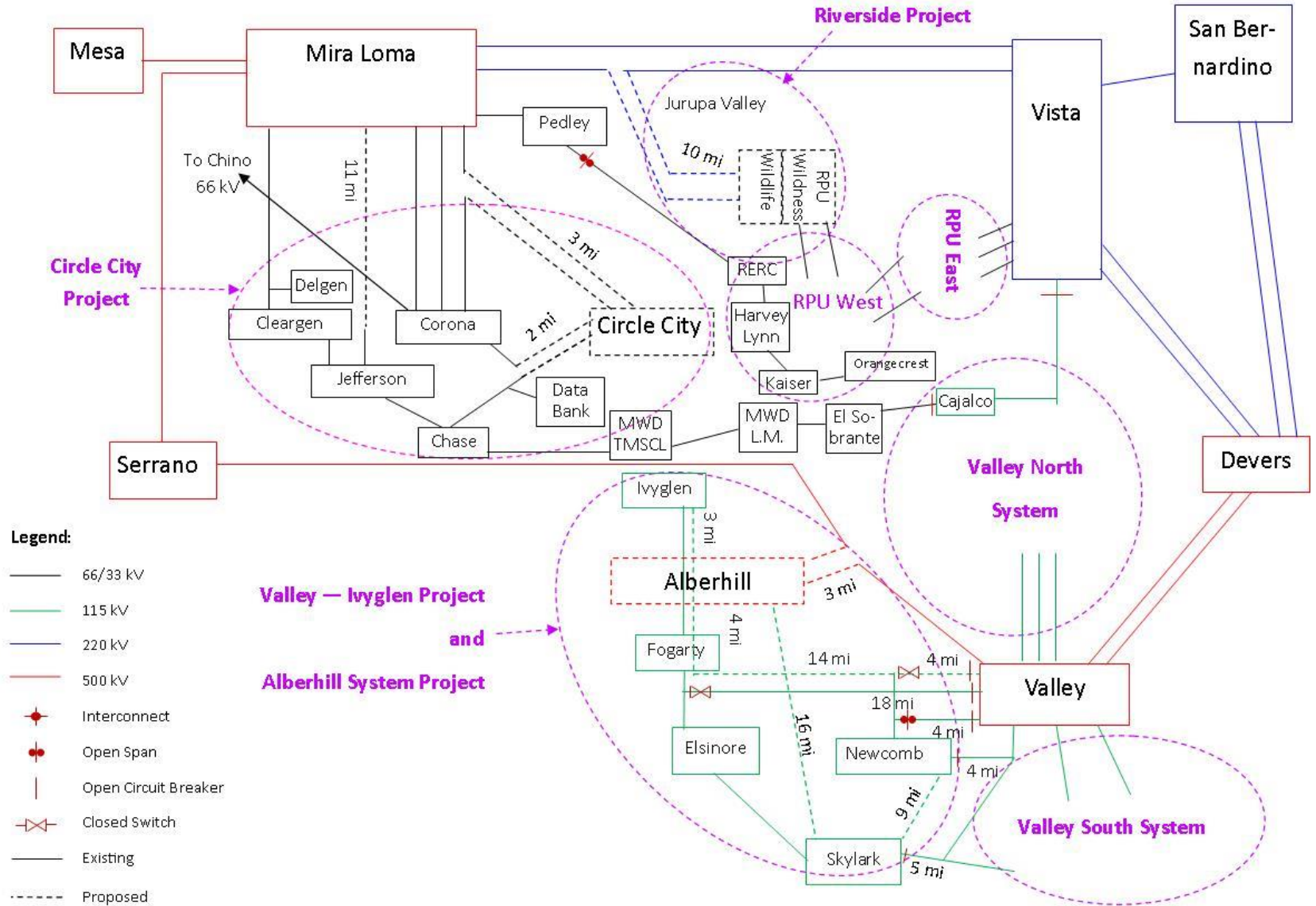


## SCE's Four Proposed Projects

Please refer to the spread sheet and Figure 1.



**Figure 1: SCE Proposed Projects: VIG, ASP, RTRP, and CCP**



This figure is for illustration purpose only, it is not to scale.

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# ORA Recommended Project Options

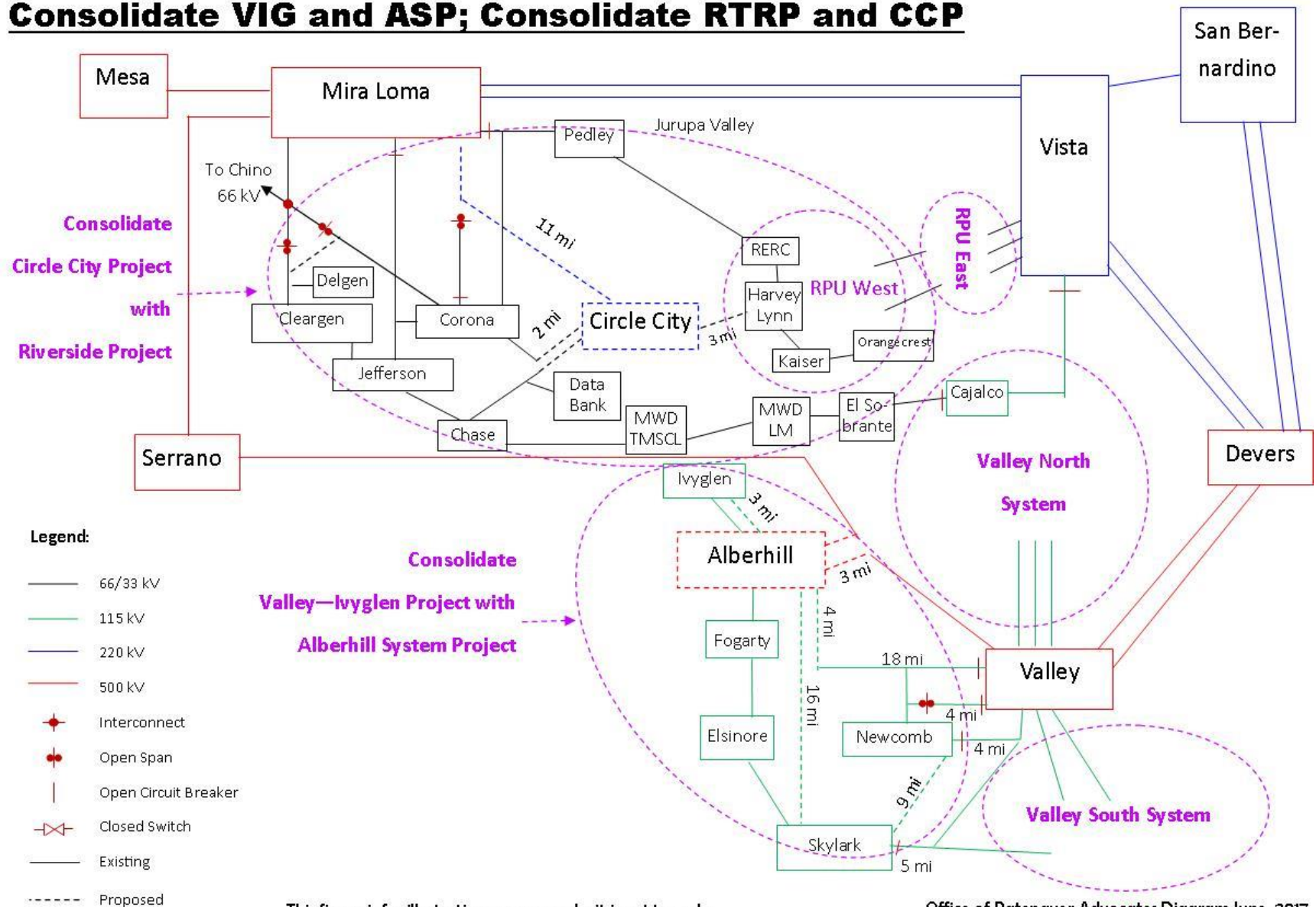
Option 1: Consolidate VIG and ASP; Consolidate RTRP and CCP.

Option 2: Consolidate VIG, ASP, CCP, and RTRP.

Option 3: Construct the 220 kV Circle City Substation, and eliminate SCE's proposed VIG, ASP, and RTRP.



**Figure 2: ORA Option 1:  
Consolidate VIG and ASP; Consolidate RTRP and CCP**



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# ORA Proposed Option 1

## Project Components:

- Construct Circle City as 220/66 kV substation and interconnect it to Mira Loma Substation with 11 miles of 220 kV line using the existing ROW and new ROW.
- Circle City substation would supply power to Corona, Pedley, Data Bank, Chase, Jefferson, Cleargen, and Delgen 66 kV substations, to MWD TMSCL, MWD L.M., and El Sobrante 33 kV substations, and to Riverside Public Utility West substations.
- Construct Alberhill 500/115 kV Substation and loop it in to Valley—Serrano 500 kV line.
- Alberhill Substation would supply power to Ivyglen, Fogarty, Elsinore, Skylark, and Newcomb 115 kV substations.







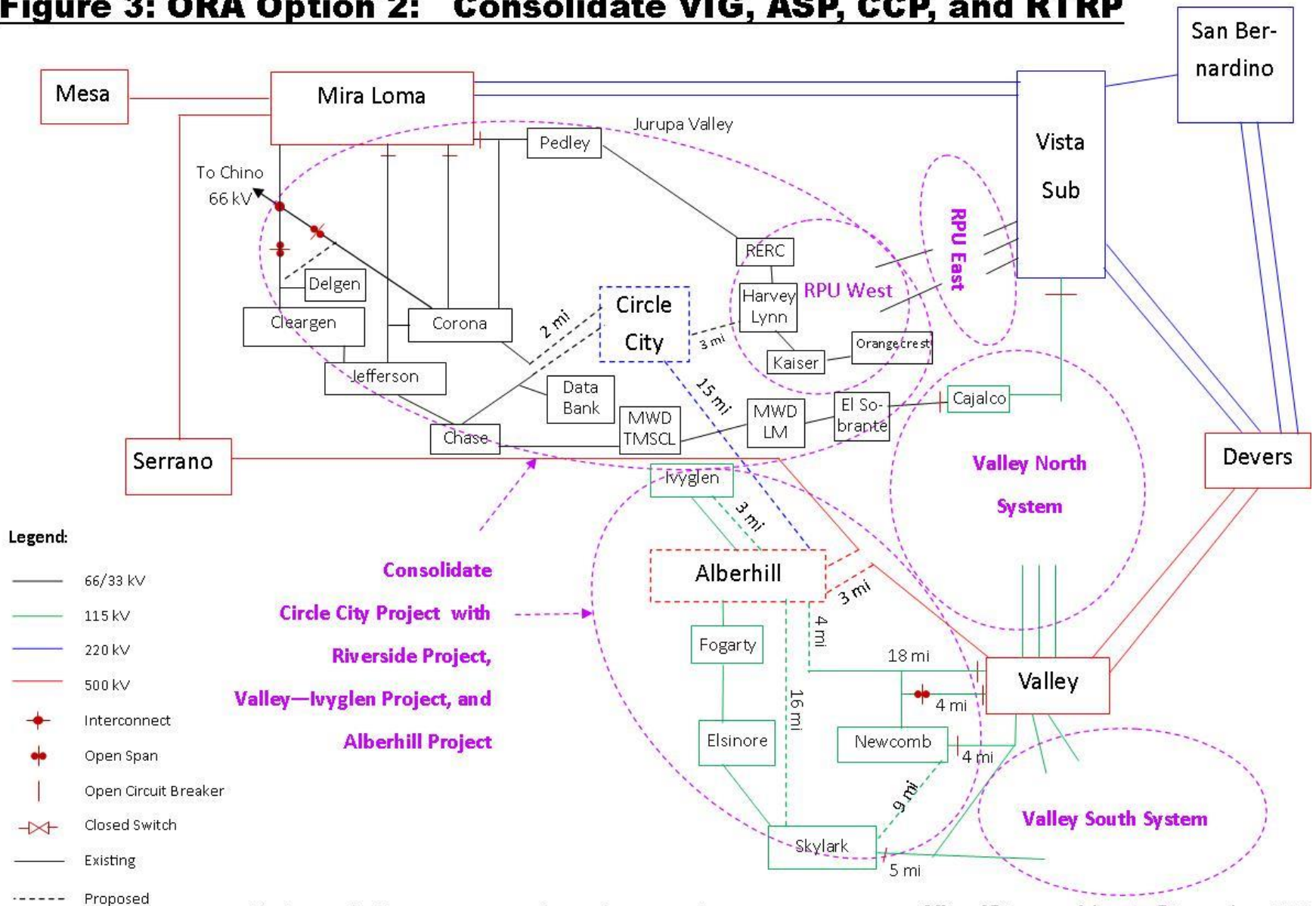
# ORA Option 1 – continued

## Advantages:

- With Circle City substation serving RPU West and backing up Vista substation, there would be no need for the RTRP.
- Constructing 220 kV Substation at Circle City would effectively improve power quality and reliability.
- Would eliminate 18 miles of the VIG transmission line.
- This option would also mitigate the over-loading concerns of the Valley Substation D-section transformers.



**Figure 3: ORA Option 2: Consolidate VIG, ASP, GCP, and RTRP**



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# ORA Proposed Option 2

## Project Components:

- Construct Alberhill 500/220/115 kV substation and loop it in to Valley—Serrano 500 kV line.
- Alberhill substation would supply power to Ivyglen, Fogarty, Elsinore, Skylark, and Newcomb substations; and to Circle City substation.
- Construct the Circle City 220/66 kV substation and interconnect it to the Alberhill Substation with 15 miles of 220 kV line using new ROW along I-15 freeway.
- Circle City substation would supply power to Corona, Pedley, Data Bank, Chase, Jefferson, Cleargen, and Delgen substations, to MWD TMSCL, MWD L.M., and El Sobrante substations, and to Riverside Public Utility West substations.





# ORA Option 2 – continued

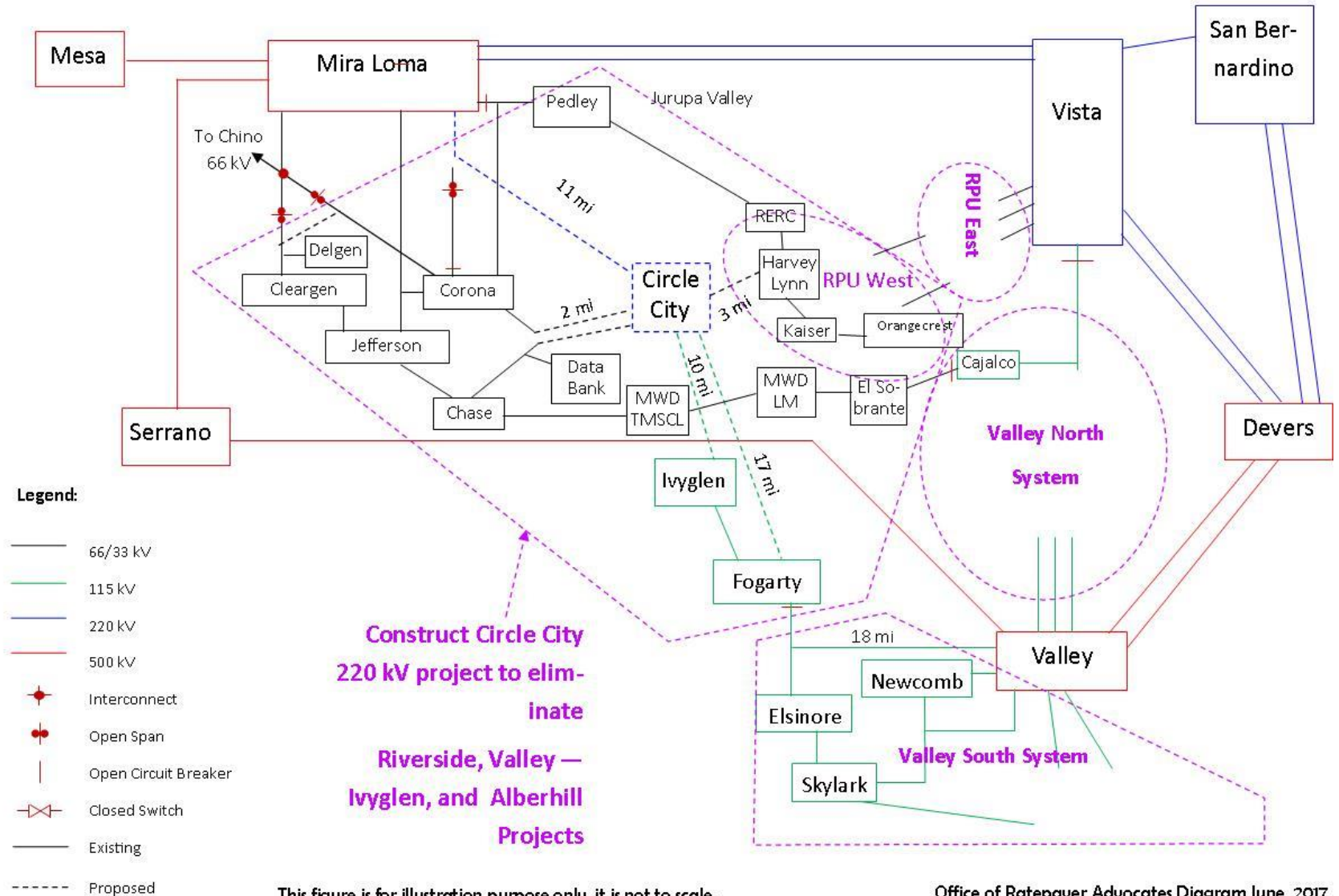
## Advantages:

- With Circle City Substation Serving RPU West and backing up Vista Substation, the RTRP would not be needed.
- Siting 220 kV Substation at Circle City would effectively arrange substations so power quality and reliability would be improved.
- Would eliminate 18 miles of the VIG transmission line.
- This option would also mitigate the over-loading concerns of the Valley Substation Section D transformers.



### Figure 4: ORA Option 3:

### Construct the 220 kV Circle City Substation and Eliminate VIG, ASP, and RTRP



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# ORA Proposed Option 3

## Project Components:

- Construct Circle City 220/115/66 kV Substation and interconnect it to Mira Loma Substation with 11 miles of 220 kV lines.
- Construct 27 (17+10) miles of 115 kV lines to interconnect Ivyglen and Fogarty substations to Circle City Substation.
- Circle City Substation would supply power to Corona, Pedley, Data Bank, Chase, Jefferson, Cleargen, and Delgen substations, to MWD TMSCL, MWD L.M., and El Sobrante substations, to Ivyglen and Fogarty substations, and to RPU West substations.





# ORA Option 3 – continued

## Advantages:

- With Circle City 220 kV Substation serving RPU West and backing up Vista Substation, there would be no need for the RTRP.
- Siting 220 kV Substation at Circle City would improve power supply quality and reliability.
- This option would eliminate the following project components:
  - 1) The Alberhill 500 kV Substation
  - 2) The 25 mile Valley – Ivyglen line,
  - 3) The 16 mile Alberhill – Skylark line, and
  - 4) The 9 mile Skylark – Newcomb line.
- This option would also mitigate the over-loading concerns of the Valley Sub D-section transformers.

