

Tortilla Flats Substation and Power Line

September 28, 2007

Project Proposal

- Mucho Grande Estates is proposing a substation and power lines to support two housing developments
 - Mucho Grande: “high-end” development
 - Tortilla Flats: “affordable housing” project

Proposed Site

- Project landscape:
Enclosed
- Project setting:
Panoramic with small
features on horizon,
some convergence
and enframement
from horizon lines and
existing power lines



Project Specifications

- Substation and power lines located on public lands
- Substation development: 250' x 350' area
- Transmission lines: 115 kV power line to the substation (above ground)
- Distribution lines: 12.47 kV
 - above ground to Tortilla Flats
 - buried line to Mucho Grande Estates

Project Specifications

- 115 kV line
 - 75' ROW width
 - Monopoles, tubular steel, weathering steel brown
 - Ht. of poles range from 55' to 80'
- 12.47 kV line
 - 40' to 50' ROW width
 - Poles are treated wood
 - Ht. of poles range from 30' to 40'

Project Specifications

- Tallest substation structure ~ 40'
- Substation includes small building, 12' x 20' x 10'
- Motion activated security lights
- Proposed fencing surrounding substation
 - galvanized with brown slats
- Road upgrade from 15' to 24' for access

KOP Selection



KOP 1

- Weak overall contrast (ground disturbance largely not seen)
- Moderate contrast in land color, vegetation line, structure form and texture
- Strong contrast in structure color
- Proposed power poles and lines match existing horizontal and vertical lines



KOP 2

- Weak contrasts in land form, line, color, texture (FLCT) and vegetation FLCT
- Moderate contrast in structure FLC
- Strong contrast in structure texture



KOP 3

- Weak contrasts in land form, line, texture
- Moderate contrasts in land color, vegetation form, color, texture, and structure characteristics
- Strong contrasts in vegetation line and texture



Contrast Rating Results

- Area to be managed as VRM Class III
- Recent update to visual inventory
 - Visual sensitivity for area has been raised from moderate to high
 - Increase has raised inventory class for the area to a class II
- Project as proposed does NOT meet VRM Class II or Class III objectives

Recommended Mitigation

- Screen substation with 15' high solid, textured wall
- Color match wall and substation facilities to dominant dark vegetation (as specified by BLM)
- Break up solid wall with vegetation from substation clearing and road work
- Contour power line access road to topo instead of paralleling power line

Recommended Mitigation

- Do not clear to limits of power line ROW
- Site poles in vegetation clearings/patches
- Keep substation access road at current 15'
- Match proposed road surface color to existing ground color
- Re-vegetate buried power line scar
- Shield and reduce night lighting



Simulation – KOP 1



