

IVANPAH SOLAR ELECTRIC GENERATION SYSTEM (SEGS)



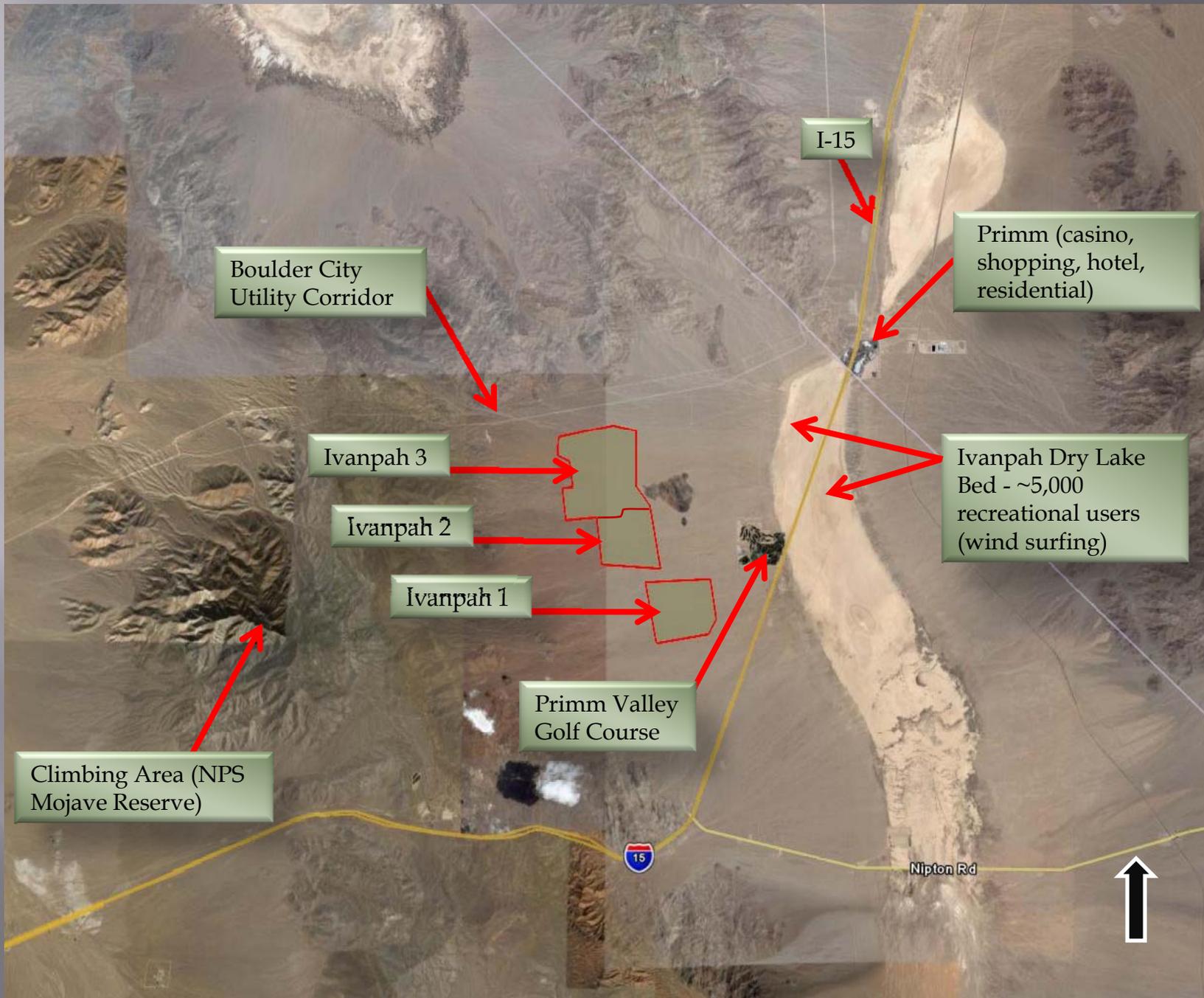
Solar Group VRM Project

Presentation Overview

- ▣ Proposed Project
- ▣ KOP Selection
- ▣ KOP Evaluation
 - Land/Water, Vegetation, Structure
 - Visual Contrast Rating & Project Compatibility with VRM III Objectives
- ▣ Simulated Conditions
 - Proposed Project
 - Mitigated Project
- ▣ Summary

Proposed Project

- ▣ Located in VRM Inventory Class III, south of Primm and west of I-15
- ▣ Ivanpah SEGS project consists of 3 sites that will be constructed in 3 phases that will service 1/2 a million people
 - Ivanpah Site I: 100 MW, 914 acres
 - Ivanpah Site II: 100 MW, 921 acres
 - Ivanpah Site III: 200 MW, 1,843 acres
 - ~50% of each of the sites would be graded to accommodate the proposed project
 - Administrative facilities, warehouses, and major infrastructure (roadways, initial pipe system, etc.) would be constructed with Ivanpah Site/Phase I
- ▣ Proposed towers would be ~320' high
- ▣ Project life of ~50 years



Boulder City
Utility Corridor

I-15

Primm (casino,
shopping, hotel,
residential)

Ivanpah 3

Ivanpah 2

Ivanpah 1

Ivanpah Dry Lake
Bed - ~5,000
recreational users
(wind surfing)

Primm Valley
Golf Course

Climbing Area (NPS
Mojave Reserve)

15

Nipton Rd



KOP Selection

- ▣ KOP (Simulated Proposed Project)
 - KOP 1 – Primm Valley Golf Course entry drive looking west
- ▣ Candidate KOPs
 - CKOP 1 – Ivanpah Dry Lake Bed, east of I-15 looking west
 - CKOP 2 – I-15 bridge at Nipton Road looking north

Looks like a polished xxxx to me!



CKOP 1

KOP 1



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CKOP 2

KOP and CKOP Evaluation: Land/Water

CHARACTERISTIC LANDSCAPE DESCRIPTION

- ▣ Form
 - Flat lake bed; gradual uplift, ascending; bold, angular, conical ranges, asymmetrical; focal feature
- ▣ Line
 - Soft, silhouette, triangular, flowing
- ▣ Color
 - Browns, grays, tans, light to dark, dull to bright chroma (depends on time of day & viewing location)
- ▣ Texture
 - Smooth to coarse

PROPOSED ACTIVITY DESCRIPTION

- ▣ Form
 - Clearing: angular, edges, geometric, rectangular
- ▣ Line
 - Horizontal, diagonal, bold, radial bands created by arrays
- ▣ Color
 - Tans, beiges, lighter than existing
- ▣ Texture
 - Smooth

KOP and CKOP Evaluation: Vegetation

CHARACTERISTIC LANDSCAPE DESCRIPTION

- ▣ Form
 - Indistinct, uniform
- ▣ Line
 - Edges and horizontal bands along roadsides; uniform on slope
- ▣ Color
 - Browns, grays, tans, monotone
- ▣ Texture
 - Smooth

PROPOSED ACTIVITY DESCRIPTION

- ▣ Form
 - Bare ground
- ▣ Line
 - No vegetative line
- ▣ Color
 - No vegetative color
- ▣ Texture
 - No vegetative texture

KOP and CKOP Evaluation: Structure

CHARACTERISTIC LANDSCAPE DESCRIPTION

- ▣ Form
 - Towers: vertical, tall, bold, geometric
- ▣ Line
 - Linear, horizontal, conical, angular, geometric, symmetrical, bands (roads)
- ▣ Color
 - Grays, metallic, reflective
- ▣ Texture
 - Smooth, angular

PROPOSED ACTIVITY DESCRIPTION

- ▣ Form
 - Vertical, massive, semi-circular (dust umbrella), curving, rectangular, cylindrical
- ▣ Line
 - Vertical, diagonal, angular, geometric, banding
- ▣ Color
 - Reflective/luminous, tans, beiges, silver (mirror), grays
- ▣ Texture
 - Rippled, coarse

KOP and CKOP Degree of Contrast

- ▣ Landform
 - Form: Strong
 - Line : Strong
 - Color : Strong
 - Texture : Strong
- ▣ Vegetation
 - Form : Strong
 - Line : Strong
 - Color : Strong
 - Texture : Strong
- ▣ Structures
 - Form : Strong
 - Line : Strong
 - Color : Strong
 - Texture : Strong
- ▣ Project Compatibility with VRM III
Objectives: **NO**
- ▣ Additional Mitigation Required: **YES**

Existing Conditions KOP 1



Simulated Conditions: Proposed Project



Mitigated Project

- ▣ Reduce tower height by half (simulated)
- ▣ Paint to blend into existing landscape (simulated)
- ▣ Have BLM and proponent's solar engineers consult to see if there is room to modify the design to achieve VRM III objectives while meeting the energy objective of the power purchase agreement in a cost effective manner
- ▣ Implement Phase I and evaluate its ability to meet all mitigation measures and proponents energy supply requirements (100 MW)
- ▣ Apply adaptive management measures for Phases II and III

Existing Conditions KOP 1



Simulated Conditions: Mitigated Project



Simulated Conditions: Proposed Project



Conclusion: The Polished Project

