

APPENDIX 4
Visual Contrast Rating Sheets

KOP-4 (a)
(ECO)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date	4/14/2010
	District	
	Resource Area	
	Activity (program)	N/A

SECTION A. PROJECT INFORMATION

1. Project name		2. Critical viewpoint number		3. MFP Step III VRM class	
ECO - Substation, Loop-In		KOP-4 - I-8 Eastbound		N/A	
4a. Location			b. LOCATION MAP		
TOWNSHIP	RANGE	SECTION	E15/Figure D.3-6A, -6B, -6C* CIR		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND WATER	FORM	Flat / Rolling w/ Mts in Background
	LINE	Diffused undulating
	COLOR	TANS & Muted Green Grey & Brown
	TEXTURE	Generally uniform w/ Rock / Boulder
2. VEGETATION	FORM	Low shrub - sparse to moderate cover
	LINE	Diffused
	COLOR	Green / Grey
	TEXTURE	Spotted & stippled at distance
3. STRUCTURES	FORM	Vertical poles (utility) &
	LINE	Horizontal lines & bands for unpaved roads Parallel
	COLOR	Brown / dark
	TEXTURE	Solid / Saturation high

SECTION C. PROPOSED ACTIVITY DESCRIPTION

(Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

KOP1 (b)
(ECO)

1. LAND WATER	FORM	Minor landform changes - grading for substation
	LINE	No substantial change
	COLOR	no substantial change - see veg/access roads below (veg)
	TEXTURE	Smooth / Uniform
2. VEGETATION	FORM	geometric / linear forms created by grading for access
	LINE	Strong lines created by veg removal for access + substantial
	COLOR	light tan soils to contrast with grey/green vegetat
	TEXTURE	fine to smooth
3. STRUCTURES	FORM	geometric, rectangular forms (substation)
	LINE	numerous vertical lines (substation equipment ^{roofs} / horizontal lines)
	COLOR	Light to medium grey
	TEXTURE	Smooth

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	FEATURES												1a. Maximum element feature	
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				Form - Substation (Scale)	
	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	b. Maximum feature contrast	
Form (4x)	8	4	0	12	8	4	0	12	8	4	0	Strong - Form = line		
Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0	2. Does project design meet visual resource management requirements? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0	If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not preclude additional mitigating measures; propose as stipulations, and list in section E.	
Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0		
TOTALS														

Evaluator (signature)

Christine A. Keen

Date

4/14/2010

*Note: visual contrasts also apply to ECO Substation (w/Landscaping Plan)

KOPY (c)
(ECO)

Comments:

KOP: 1

Project Features Evaluated: ECO
ECO Substation

Simulations Available: yes

Simulations Not Available: access roads not shown

Visual Factors Considered Important:

* Form - Scale of Facility (Strong)

(Combined PROJECT Elements Seen From KOP 1:
EST Wind Turbines (See KOP 1 Figures)
EST 500KV Gen Tie Lattice D.3-6D
Structures)

Mitigation Measures yes

Impact Class - I

Evaluator's Names: Christine Keller
Tony Kovacic
Josh Saunders

KOP 1 (a)
(255)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date	4/14/2010
	District	
	Resource Area	
	Activity (program)	

SECTION A. PROJECT INFORMATION

1. Project name	2. Critical viewpoint number	3. MFP Step III VRM class
EST-Wind Turbines - Gen-Tie	KOP1-D-8 Eastbound	N/A
4a. Location		b. LOCATION MAP
TOWNSHIP	RANGE	SECTION
		815/81R Figure D.3-6A, -6D

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND WATER	FORM	Flat/Rolling (Gen-Tie) / Mountains (Wind Turbines)
	LINE	Diffused/Mundulating / Jagged & Complex
	COLOR	Tans, Browns
	TEXTURE	Uniform (valley) Medium / Mts - (Base to Smooth Rocks/Boulders)
2. VEGETATION	FORM	low density desert shrubs - sparse to moderate cover
	LINE	Diffused
	COLOR	Green / Grey
	TEXTURE	Dotter / Stippled
3. STRUCTURES	FORM	Vertical Utility Poles
	LINE	Horizontal lines / band patterns (unpaved roads)
	COLOR	Brown / dark
	TEXTURE	Solid / High Contrast

SECTION C. PROPOSED ACTIVITY DESCRIPTION

(Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

KOP 1 (6)
(ESS)

1. LAND WATER	FORM	Minor land form changes - Access Rds to Wind Turbines may be graded
	LINE	Decreased line elements if access roads are visible
	COLOR	No change - Increased color contrast due to veg removal
	TEXTURE	Smooth / linear
2. VEGETATION	FORM	geometric / linear forms / bands may be created created by access
	LINE	strong lines - Access
	COLOR	light tan soils to contrast w/ grey/green shrub vegetation
	TEXTURE	fine to smooth
3. STRUCTURES	FORM	Bold geometric forms (wind turbines) Diffused form (Gen-Tie)
	LINE	Bold Vertical - triangular (wind turbines) Diffused irregular
	COLOR	White / Lt. Tan or Grey (wind turbines) w/ Red Lights Grey
	TEXTURE	Smooth

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	FEATURES												1a. Maximum element feature	
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				N/A (Point - Wind Turbines)	
	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)		
Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0	b. Maximum feature contrast	
Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0	Strong	
Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0	2. Does project design meet visual resource management requirements? <input type="checkbox"/> Yes <input type="checkbox"/> No N/A	
Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0	If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not preclude additional mitigating measures; propose as stipulations, and list in section E.	
TOTALS	N/A				N/A				N/A					
Evaluator (signature)													Date	

0 - wind turbines
 ✓ 1 - Gen-Tie

KOPY (c)
(ESS)

Comments:

KOP: Y

Project Features Evaluated: EST
Phase I Wind Turbines (Mexico)
500KV Gen-Tie T/L

Simulations Available: yes

Simulations Not Available: Access roads to wind turbines not shown

Visual Factors Considered Important:

Wind Turbines - Form (Height / Scale)
Line (Movement of Blades)
Color (Light Color of Turbines)
Red FAA Night Lights
EST Gen-Tie Line - Diffused Form
- Small No. of Structures

Combined PROJECT Elements Seen From KOPY:
ECO Substation (See KOPY, Figure
(See KOPY (ESS) for Contrast Ratings) 0.3-6B)

Mitigation Measures yes

Impact Class - I (Wind Turbines) (Class II - 500KV Gen-Tie)

Evaluator's Names: Christine Keller
Tony Kovacic
Josh Saunders

KOP 2 (a)
(ECO)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date <i>4-14-2010</i>
	District
	Resource Area
	Activity (program)

SECTION A. PROJECT INFORMATION		
1. Project name <i>ECO - Substation; 138kV T/L</i>	2. Critical viewpoint number <i>KOP 2 - Old Hwy 80 E.</i>	3. MFP Step III VRM class
4a. Location		b. LOCATION MAP
TOWNSHIP	RANGE	SECTION
		<i>E15/E16 Figure: D.3-7A, -7B, -7C</i>

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION	
1. LAND WATER	FORM <i>Flat / Rolling w/ Mts in Background</i>
	LINE <i>Diffused, Undulating</i>
	COLOR <i>Natural Tone - Browns, Tans, Grey-greens</i>
	TEX-TURE <i>Uniform w/ Rock Boulders</i>
2. VEGETATION	FORM <i>Low shrubs - sparse to moderate cover</i>
	LINE <i>Diffused - Band edge along unpaved access road</i>
	COLOR <i>Green / Grey</i>
	TEX-TURE <i>Coarse to smooth (dotted / stippled pattern)</i>
3. STRUCTURES	FORM <i>Large Scale 500kV Lattice (SWPL), Lt. Scale Comm. Poles</i>
	LINE <i>Lattice Towers - Diffused Semi Translucent</i>
	COLOR <i>Grey - Lt. to Dark depending on lighting conditions</i>
	TEX-TURE <i>Smooth & Moderate Saturation</i>

KOP 2 (b)
(ECO)

1. LAND WATER	FORM	Sub + 138KV line - Min to no load form alt. ^{except} grading for subst.
	LINE	No change
	COLOR	No change (except veg/soil contrasts for access + site grading)
	TEX-TURE	Smooth/uniform
2. VEGETATION	FORM	geometric/linear form - from access road grading
	LINE	stray lines - veg removal for sub station: access + street ^{site}
	COLOR	light tan soils - contrast with grey/green vegetation
	TEX-TURE	fine to smooth
3. STRUCTURES	FORM	sub - geometric, rectangular form; 138KV T/L - vertical form
	LINE	sub - numerous vertical lines; T/L - horizontal lines (conductors)
	COLOR	light to medium grey (sub); brown/grey tone (T/L)
	TEX-TURE	subst - smooth; T/L - smooth to slightly coarse

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	FEATURES												1a. Maximum element feature Form - Substation (Scale)	
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)					b. Maximum feature contrast Stray - Line + Form
	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)		
Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0	2. Does project design meet visual resource management requirements? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>N/A</i> If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not preclude additional mitigating measures; propose as stipulations, and list in section E.	
Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0		
Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0		
Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0		
TOTALS														

Evaluator (signature) *Christine A. Kelly* Date 4/14/2010

0 = Substation
 □ = 138KV T/L
 Δ = Both

Comments:	
KOP: 2	
Project Features Evaluated: ECO ECO Substation 138 kV T/L	
Simulations Available: yes - substation before and after landscaping plan implementation	
Simulations Not Available: - Access roads not shown (ECO) - Simulation of EST Wind Turbines not available (EST)	
Visual Factors Considered Important:	
Substation - Form / Scale of Facility 138kV T/L - Form / Scale compared to adjacent SWPL lattice st.	
Combined PROJECT Elements Seen From KOP 2:	
• EST Wind Turbines (See KOP 1, Figure ...)	
• EST 500kV GenTie Structures (D. 3'-60")	
(See KOP 1 (EST) for Contrast Ratings)	
Mitigation Measures	yes
Impact Class	I - ECO Substation Impact Class III - ECO 138kV T/L
Evaluator's Names:	Christine Keller, Tony Kovacic, Josh Saunders

KOP2 (a)
(ECO-Alt)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date	4/14/2010
	District	
	Resource Area	
	Activity (program)	N/A

SECTION A. PROJECT INFORMATION		
1. Project name	2. Critical viewpoint number	3. MFP Step III VRM class
ECO-Alt. Sub. Site	KOP2-Old Hwy 80 E	
4a. Location		b. LOCATION MAP
TOWNSHIP	RANGE	SECTION
		815/012 Figure: 0.3-7A, -7D, -7E

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION				
1. LAND WATER	FORM	} SAME AS PROPOSED ECO sub. (See KOP2-ECO Contrast Rating Worksheet)		
	LINE			
	COLOR			
	TEXTURE			
2. VEGETATION	FORM	} SAME AS PROPOSED ECO sub (See KOP2-ECO Contrast Rating Worksheet)		
	LINE			
	COLOR			
	TEXTURE			
3. STRUCTURES	FORM	} SAME AS PROPOSED ECO Substantive (See KOP2-ECO Contrast Rating Worksheet)		
	LINE			
	COLOR			
	TEXTURE			

KOP2(b)
(ECO-ALT)

1. LAND WATER	FORM	
	LINE	
	COLOR	
	TEX-TURE	
2. VEGETATION	FORM	
	LINE	Some As Proposed ECO Substation See KOP2-ECO Contrast Rating Worksheet
	COLOR	
	TEX-TURE	
FORM		
3. STRUCTURES	LINE	
	COLOR	Section D. - Some As Proposed ECO Substation (See KOP2-ECO Contrast Rating Worksheet)
	TEX-TURE	
	FORM	
LINE		

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	FEATURES												1a. Maximum element feature
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				b. Maximum feature contrast
	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong: Line & Form
Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0	Form: Substation
Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0	
Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0	
Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0	
TOTALS													
Evaluator (signature) <i>Christine A. Tyler</i>												Date 4/14/2010	

2. Does project/design meet visual resource management requirements? Yes No *N/A*
If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not preclude additional mitigating measures; propose as stipulations, and list in section E.

0 = substation 17-138KV T/L
F loop-in

KOP2 (c)
(ECO-act)

Comments:

KOP:

Project Features Evaluated:

Simulations Available:

Simulations Not Available:

Visual Factors Considered Important:

Same As Proposed
ECO Substructure
(See KOP 2 - ECO
Contract Rating
Worksheet)

Mitigation Measures *yes*

Evaluator's Names: *Christine Keller*
Tony Kovacic
Josh Saunders

KOP 3 (a)
(ECO)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date <i>A-14-2010</i>
	District
	Resource Area
	Activity (program)

SECTION A. PROJECT INFORMATION		
1. Project name <i>ECO - Substation + 138KV TL</i>	2. Critical viewpoint number <i>KOP 3 - Old Hwy 80 - E (Near BLM Airport Mesa)</i>	3. MFP Step III VRM class
4a. Location		b. LOCATION MAP
TOWNSHIP	RANGE	SECTION
		<i>E15/E16 Range, D. 3 - 5A, -8C</i>

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION	
1. LAND WATER	FORM <i>Rolling w/ Mts in Background / Rugged PB</i>
	LINE <i>Diffused, Unulating, Complex</i>
	COLOR <i>Natural Trees - Numerous rocks (light tan)</i>
	TEXTURE <i>Coarse, Uneven</i>
2. VEGETATION	FORM <i>Low desert shrubs - sparse cover</i>
	LINE <i>Diffused</i>
	COLOR <i>Green / Greys</i>
	TEXTURE <i>Sparse dense / uneven: random pattern (dotted / stippled)</i>
3. STRUCTURES	FORM <i>Lattice towers - Diffused, semi-transparent, large scale</i>
	LINE <i>Horizontal lines (conductors)</i>
	COLOR <i>Grey - Lt. to dark depending on lighting conditions</i>
	TEXTURE <i>Smooth, Moderate Saturation</i>

KOP 3(6)
(PCO)

1. LAND WATER	FORM	sub. 138KV T/L - Minn / road form alt (sub grading)
	LINE	NO Change
	COLOR	NO Change (except T/L access roads)
	TEX-TURE	smooth / uniform (access roads)
2. VEGETATION	FORM	line form (access roads & sub station grading).
	LINE	diffused line from access roads
	COLOR	Lt. tan soil / vegetation contrast (H/L access roads)
	TEX-TURE	fine to moderately coarse.
3. STRUCTURES	FORM	138KV T/L - vertical pole form (scale diminished by SWPL)
	LINE	horizontal lines (H/L conductors - also diminished by SWPL)
	COLOR	brown / lt. grey
	TEX-TURE	smooth to slightly coarse.

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	FEATURES												1a. Maximum element feature
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				1b. Maximum feature contrast
	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	
Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0	138KV H/L structures (multiple)
Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0	Moderate - Form & Line
Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0	2. Does project design meet visual resource management requirements? <input type="checkbox"/> Yes <input type="checkbox"/> No
Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0	If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not preclude additional mitigating measures; propose as stipulations, and list in section E.
TOTALS	N/A												
Evaluator (signature)											Date		4/14/2010

NOTE: See KOP 2 for PCO Substation Contrast Ratings

KOP 3 (C)
ECO

Comments:

KOP: 3 (ECO)

Project Features Evaluated:

ECO 138KV T/L

(Note: ECO Sub would also be visible - See KOP 2)

Simulations Available: No (General location of 138KV noted on D. 3-8C)

Simulations Not Available:

From KOP 3, PROJECT Elements seen include
ECO 138KV T/L, ECO Substation; EST Wind Turbines
& EST Gen-Tie

Visual Factors Considered Important:

- Panoramic Views to Multiple PROJECT Elements
- Long Views to 138KV T/L
- 138KV T/L Visibility is highlighted by structure skylining of multiple structures & conductors
- Visual Contrast of 138KV line diminished by adjacent SWPL
- EST Gen-Tie Line shown in KOP 3 (EST) Figure D. 3-8D through 8F

Mitigation Measures gsa

Impact Class: 138KV T/L - Class III

Evaluator's Names: Christine Keller
Tony Kovacic
Jose Snarders

KOP 3 (a)
(75J)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date <i>4-14-2010</i>
	District
	Resource Area
	Activity (program)

SECTION A. PROJECT INFORMATION

1. Project name <i>(75J-Wind Turbines) Center</i>		2. Critical viewpoint number <i>KOP 3 - Old Hwy 80 E (Near BLM Airport Mesa)</i>	3. MFP Step III VRM class
4a. Location		b. LOCATION MAP	
TOWNSHIP	RANGE	SECTION	
			<i>E1S/E1R Figures D. 3-8B, -8D, -8E, -8F, -8G</i>

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND WATER	FORM	}	<i>Same As KOP 3 (75J)</i>
	LINE		
	COLOR		
	TEXTURE		
2. VEGETATION	FORM	}	<i>Same As KOP 3 (75J)</i>
	LINE		
	COLOR		
	TEXTURE		
3. STRUCTURES	FORM	}	<i>Same As KOP 3 (75J)</i>
	LINE		
	COLOR		
	TEXTURE		

SECTION C. PROPOSED ACTIVITY DESCRIPTION

(Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

1. LAND WATER	FORM	Mixed land form alterations
	LINE	No Change
	COLOR	No change (except Gen-Tie Access Pds)
	TEX-TURE	Smooth to slightly coarse (Access roads)
2. VEGETATION	FORM	No change
	LINE	Mixed Change (Access roads); visual change minimized by view angle.
	COLOR	Very light soil contrasts at Gen-Tie Structures
	TEX-TURE	Smooth, slightly coarse
3. STRUCTURES	FORM	Wind turbines - bold geometric form - Very large scale Gen-tie lattice - large scale geometric + diffused form
	LINE	Wind turbines - Bold vertical lines; triangular lines Gen-tie lattice - Horizontal lines (conductors)
	COLOR	Wind turbines - white to light grey Gen-tie lattice - Matte Grey
	TEX-TURE	Smooth

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	FEATURES												1a. Maximum element feature <i>Wind Turbines</i>	
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)					b. Maximum feature contrast <i>Stray - Form, Line, Color, Texture</i>
	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)		
Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0	2. Does project design meet visual resource management requirements? <input type="checkbox"/> Yes <input type="checkbox"/> No If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not preclude additional mitigating measures; propose as stipulations, and list in section E.	
Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0		
Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0		
Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0		
TOTALS														
Evaluator (signature) <i>Christine A. Hill</i>												Date <i>4/14/2010</i>		

□ = EST Wind Turbines
○ = EST Gen-Tie

KOP 3 (c)
(EST)

Comments:

KOP: 3 (EST)

Project Features Evaluated:

EST Wind Turbines
EST Gen-Tie

Simulations Available:

Wind turbines (no)
Gen-tie (yes)

Simulations Not Available:

There are no simulations to show total PROJECT Contrasts. From KOP 3, PROJECT Elements seen would include: EST Wind Turbines, EST Gen-tie, & CO Sub.

Visual Factors Considered Important:

- Open panoramic views to PROJECT. ^{ECO 138kV TL}
- Skylining of EST Wind Turbines
- Form, Color, and Size of Wind Turbines
Created Very Strong "Dominant Visual Contrasts"
- Contrasts of Gen-Tie are reduced by background land slope patterns: SWPL (Single Lattice Structure Design)

Mitigation Measures

yes

Impact Class: EST Wind Turbines - Class I
EST Gen-Tie - Class II

Evaluator's Names:

CHRISTINE KELLER
TONY KOVACIC
JOSH SAUNDERS

Note: This worksheet also applies to EST Optional designs for Gen-Tie; including 230kV lattice, 500kV single pole & 230kV single pole designs. (See Figures D.3-8D through.)

KOP4
(PCO) (a)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date	4/14/2010
	District	N/A
	Resource Area	N/A
	Activity (program)	N/A

SECTION A. PROJECT INFORMATION

1. Project name	2. Critical viewpoint number	3. MFP Step III VRM class
PCO - 138 kV Transmission Line	KOP4 - Old Hwy 80 W	N/A
4a. Location		b. LOCATION MAP
TOWNSHIP	RANGE	SECTION
		815/812 Figure D.3 - 9A, -9B

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND WATER	FORM	Rolling
	LINE	Diffused, & undulating
	COLOR	Tans and Brown Soils, w Lt. Tan Rock Outcroppings
	TEXTURE	Medium Grain w/ Rock Boulders
2. VEGETATION	FORM	Low profile desert shrubs
	LINE	Diffused
	COLOR	Grey/Green
	TEXTURE	Dotted, & stippled pattern - medium texture
3. STRUCTURES	FORM	Large Scale Lattice (SWPL), Bold & Complex
	LINE	Vertical & geometric, Horizontal (conductors)
	COLOR	Grey tone, Varies by lighting conditions
	TEXTURE	Smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION

(Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

KOP 4 (6)
(800)

1. LAND WATER	FORM	Minor to no change (access roads & pole sites)
	LINE	Minor to no change (access roads)
	COLOR	NO change
	TEX-TURE	NO change
2. VEGETATION	FORM	Minor to no change
	LINE	Minor to no change
	COLOR	Minor to no change
	TEX-TURE	Minor to no change
3. STRUCTURES	FORM	Vertical - 138kV poles, subordinate in scale to SWPL
	LINE	horizontal - 138 kV conductors, also subordinate to SWPL
	COLOR	brown - medium saturation
	TEX-TURE	smooth

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	ELEMENTS	FEATURES												1a. Maximum element feature <i>Structure - Form</i>	
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)					b. Maximum feature contrast <i>Moderate - Form, line</i>
		Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)		
	Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0	2. Does project design meet visual resource management requirements? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>N/A</i> If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not preclude additional mitigating measures; propose as stipulations, and list in section E.	
	Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0		
	Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0		
	Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0		
TOTALS															
Evaluator (signature)		<i>Christine D. Hill</i>											Date	<i>4/14/2010</i>	

KOP 4
(ECO) (C)

Comments:

KOP: 4 Old Hwy 80 Westbound

Project Features Evaluated: 138kV T/L structures, + conductors

Simulations Available: yes

Simulations Not Available: May not fully show planned
access roads

Visual Factors Considered Important:

- Open visibility w/ skylining conditions
- Potential contrasts of 138kV T/L reduced by SWPL, which will be paralleled.

Mitigation Measures - no add. measures

Impact Class: Class III

Evaluator's Names: CHRISTINE KELLER JOSH SPANDERS
TONY KOVACIC

KOP-5
(ECO) (a)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date	4-14-2010
	District	N/A
	Resource Area	N/A
	Activity (program)	N/A

SECTION A. PROJECT INFORMATION

1. Project name	2. Critical viewpoint number	3. MFP Step III VRM class
ECO - 138KV Trans. line	KOP5 - Comm. of Incumbent	N/A
4a. Location		b. LOCATION MAP
TOWNSHIP	RANGE	SECTION
		815/812 Figures D. 3-10A, -10B

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND WATER	FORM	Slightly Rolling to Steep Hill
	LINE	Diffused Edge / Curving to straight
	COLOR	Brown tones
	TEXTURE	Fine Grain / Sparse Density of Veg. Pattern
2. VEGETATION	FORM	Diffused
	LINE	Diffused, Lt. tans & greys in community
	COLOR	Green / Grey Patterns & Earth Tones (Comm-Trees)
	TEXTURE	Tree, random with light stippled pattern
3. STRUCTURES	FORM	Comm - Distribution lines, houses - Complex, bold, irregular SWPL - large, bold, complex design
	LINE	Comm - Vertical lines (Utility Poles) - Bold, Rectangular - homes SWPL - Vertical, geometric, Horizontal Conductors varied design
	COLOR	Multi - Comm - Tans, Reds, Whites, grey street SWPL - Greens
	TEXTURE	Comm - Varied, Mostly Smooth SWPL - Smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION

(Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

KOP 5
(800) (b)

1. LAND WATER	FORM	Minor to no change (access roads/pole sites)
	LINE	Minor to no change (access roads)
	COLOR	No Change
	TEX-TURE	no change
2. VEGETATION	FORM	Minor to no change
	LINE	Minor to no change
	COLOR	Minor to no change
	TEX-TURE	Minor to no change
3. STRUCTURES	FORM	Vertical - 138kV poles, subordinate in scale to SWPL
	LINE	Horizontal - 138kV conductors, some vertical w/ Access roads possible
	COLOR	Brown - Medium tone : saturation
	TEX-TURE	Smooth

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	FEATURES												1a. Maximum element feature <i>Structures - 138kV T/L</i>	
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)					b. Maximum feature contrast <i>Moderate - line & form</i>
	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)		
Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0	2. Does project design meet visual resource management requirements? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>N/A</i> If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not preclude additional mitigating measures; propose as stipulations, and list in section E.	
Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0		
Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0		
Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0		
TOTALS		<i>N/A</i>				<i>N/A</i>				<i>N/A</i>				
Evaluator (signature)		<i>Christine A. Hill</i>										Date	<i>4/14/2010</i>	

KOP 5
(ECO (c))

Comments:

KOP: 5 (Community of Jscumba, Near Hwy 80)

Project Features Evaluated:

ECO - 138KV Transmission Line

Simulations Available: yes

Simulations Not Available: \emptyset

Visual Factors Considered Important:

- Open, Elevated View to ECO 138KV Line, Adjacent to SWPL
- Visual Contrasts of 138KV structures & lines minimized by SWPL
- Numerous overhead utility lines are similar in visual characteristics & closer to viewer.

Mitigation Measures No Add. Measures

Impact Class - III

Evaluator's Names: CHRISTINE A. KELLER

Tony Kovacic

Josh Saunders

KOP6
(PCO) (a)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date	4/14/2010
	District	N/A
	Resource Area	N/A
	Activity (program)	N/A

SECTION A. PROJECT INFORMATION		
1. Project name	2. Critical viewpoint number	3. MFP Step III VRM class
PCO-13814 T/L	KOP6-Jacumba, Hill St.	N/A
4a. Location		b. LOCATION MAP
TOWNSHIP	RANGE	SECTION
		DE15/ER Figures D. 3 - 11A, -11C

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION		
1. LAND WATER	FORM	Varied - Rolling to steep hills, ^{in MG} Mts in Background, Flat Agricultural & Cakes - in foreground
	LINE	Diffused - Natural hills & Mts Bold lines - International Border Fence & Agricultural fields
	COLOR	Varied - Browns - Tons - Natural Areas Dark Green, Muted Greens - Community and Ag. Areas
	TEXTURE	Fine to Coarse Grains
2. VEGETATION	FORM	Varied - Sparse, diffused forms in natural areas Dense green forms in agricultural areas
	LINE	Generally diffused. Some strong lines (International Border Fence and Agricultural fields)
	COLOR	Varies from muted natural grey/greens (hills, mts - natural areas) to bright dense greens in fields.
	TEXTURE	Varied - Smooth to Coarse
3. STRUCTURES	FORM	Varied - Rectangular forms - houses, broad band - International SWPL Complex, geometric form Border Fence
	LINE	Dominant lines - International Border Fence & Irrigated Fields
	COLOR	Greys, Browns & White/Red Colors in House: Comm. Structures
	TEXTURE	Smooth to Moderately Coarse

KOP 6
(FCO) (6)

1. LAND WATER	FORM	little to no change
	LINE	little to no change
	COLOR	little to no change
	TEXTURE	little to no change
2. VEGETATION	FORM	little to no change
	LINE	weak change - veg clearing for access roads
	COLOR	little to no change (However, some color contrasts may result from access roads)
	TEXTURE	little to no change
3. STRUCTURES	FORM	slender vertical forms (138kV poles)
	LINE	slender, horizontal conductors, some irregular bands for access roads
	COLOR	brown & grey tones (poles & conductors)
	TEXTURE	smooth

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST		FEATURES												1a. Maximum element feature
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				1b. Maximum feature contrast
		Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	
Elements	Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0	138kV transmission structures
	Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0	Moderate (Line)
	Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0	
	Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0	
TOTALS		N/A				N/A				N/A				2. Does project design meet visual resource management requirements? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>N/A</i> If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not preclude additional mitigating measures; propose as stipulations, and list in section E.
Evaluator (signature)		<i>Steve D. Fell</i>										Date	4/14/2010	

Comments:

KOP: 6 Palomares, Hill St.

Project Features Evaluated:

ECO-138KV Transmission Line

Simulations Available:

0

Simulations Not Available:

✓

Visual Factors Considered Important:

- Views from Hill St. provide elevated, open, panoramic views to the south
- 138KV TL - Long views, adjacent to SWPL
 - Backscreened in most areas by natural topography & vegetation
 - Access roads may create moderate contrasts in vegetation/soil edges.
- Other Project Elements Seen: EIS Phase I Wind Turbines (See KOP6 (EIS) & Figures D.3-11B and D.3-11D)

Mitigation Measures NO

Impact Class - Class III

Evaluator's Names: CHRISTINE KELLER
TONY KOVACIC
JOSH SAUNDERS

KOP 6
(EST) (a)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date	4/14/2010
	District	N/A
	Resource Area	N/A
	Activity (program)	N/A

SECTION A. PROJECT INFORMATION

1. Project name	2. Critical viewpoint number	3. MFP Step III VRM class
EST - Phase I Wind Turbines	KOP 6 - Tucumba Hill SA	N/A
4a. Location		b. LOCATION MAP
TOWNSHIP	RANGE	SECTION
		815/81R Range D. 3-11B and D3-11D

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND WATER	FORM	
	LINE	
	COLOR	
	TEX-TURE	
2. VEGETATION	FORM	
	LINE	
	COLOR	
	TEX-TURE	
3. STRUCTURES	FORM	
	LINE	
	COLOR	
	TEX-TURE	

SAME AS KOP 6 (ECO)
 See ECO Contrast Rating Worksheet

SECTION C. PROPOSED ACTIVITY DESCRIPTION
 (Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

KOP6
(75J)(6)

1. LAND WATER	FORM	} little to no change
	LINE	
	COLOR	
	TEXTURE	
2. VEGETATION	FORM	} little to no change
	LINE	
	COLOR	
	TEXTURE	
3. STRUCTURES	FORM	Bold Geometric forms (wind turbines)
	LINE	Bold Vertical & Triangular lines (blades + movement)
	COLOR	White/Lt. Gray & Red FAA Night lighting
	TEXTURE	Smooth

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST		FEATURES												1a. Maximum element feature
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				Wind Turbines
		Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	
														b. Maximum feature contrast
														Strong - Form, Line, Color
														2. Does project design meet visual resource management requirements? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>N/A</i>
														If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not preclude additional mitigating measures; propose as stipulations, and list in section E.
Elements	Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0	
	Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0	
	Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0	
	Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0	
TOTALS		<i>N/A</i>				<i>N/A</i>				<i>N/A</i>				
Evaluator (signature)		<i>Cheryl H. Lee</i>												Date <i>4/14/2010</i>

KOP 6
(EST) (c)

Comments:

KOP: KOP 6-EST

Project Features Evaluated: EST Phase I Wind Turbines

Simulations Available: *yes*

~~Simulations Not Available:~~ *∅*

{ Open PROJECT Elements Seen: EST 138KV T/L
Cumulative Projects Seen: Sunrise 500KV T/L

Visual Factors Considered Important:

- Over 20 Wind Turbines will be visible on the ridge line of mountains
- The height (scale), light color, blade movement and FAA lighting will combine to create exceptionally strong contrasts, which will dominate the visual character & scenic quality from JACumba.

Mitigation Measures *yes*

Class I Impacts

Evaluator's Names: CHRISTINE KELLER
TONY KOVACIC
JOSH SAUNDERS

KOP M
(PCO) (a)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date	4/14/2010
	District	N/A
	Resource Area	N/A
	Activity (program)	N/A

SECTION A. PROJECT INFORMATION

1. Project name	2. Critical viewpoint number	3. MFP Step III VRM class
PCO-138K1 TL	KOP M - Boulevard, Tule Jim Rd.	N/A
4a. Location		b. LOCATION MAP
TOWNSHIP	RANGE	SECTION
		E15/E18 Figures D-3-12A, -12B, -12C

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND WATER				2. VEGETATION				3. STRUCTURES			
	FORM	LINE	COLOR	TEXTURE	FORM	LINE	COLOR	TEXTURE	FORM	LINE	COLOR	TEXTURE
	Flat to Slightly Sloping				Patchy w/ Medium Density				Vertical, slender - Existing Utility Lines, Horizontal - Rd			
	Banded Jewel Valley & Tule Jim Roads				Diffused				Banded - Jewel Valley, Tule Jim Rds.			
	Lt. Tan Soil Color				Dark Green to Grey Green				Utility Poles - Brown/Grey; Houses - Earth Tones			
	Varies - Conifer to Pine,				Clumped, Dense w/ Interspersed Rock Boulders				Roads - Grey w/ Lt. Tan Soil Shoulders			
									Predominantly Smooth			

SECTION C. PROPOSED ACTIVITY DESCRIPTION

(Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

KOPM
(ECO) (6)

1. LAND WATER	FORM	} NO change
	LINE	
	COLOR	
	TEX-TURE	
2. VEGETATION	FORM	No change
	LINE	Additional Clearing for Spur Rds. Widening of Road Element
	COLOR	no change
	TEX-TURE	no change
3. STRUCTURES	FORM	Taller, Vertical, Slender Forms, Increased # and structure complexity
	LINE	Increased # of horizontal lines (conductors), ^{cross-arms} vertical lines (poles)
	COLOR	Brown, Grey
	TEX-TURE	Smooth

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST		FEATURES												1a. Maximum element feature
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				138kV T/L poles
		Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	String-Line, Form
Elements	Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0	2. Does project design meet visual resource management requirements? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>N/A</i> If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not preclude additional mitigating measures; propose as stipulations, and list in section E.
	Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0	
	Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0	
	Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0	
TOTALS		N/A												
Evaluator (signature) <i>Theresa C. Lee</i>												Date	4/14/2010	

Note: contrast ratings also applicable to
ECO Substation Site Alternative 138KV T/L
(see Figure D.3-12c)

KOP M
(ECO) (C)

Comments:

KOP: KOP M - Jewell Valley - Tule Grove Rd.

Project Features Evaluated:
ECO 138KV Transmission line w/ Rebuilt Distribution Line

Simulations Available: yes

Simulations Not Available: N/A

Visual Factors Considered Important:

- 138KV T/L will be openly visible & sky lined
- Scale of 138KV T/L be about 50% greater than existing distribution line
- Visual contrasts in Line, Form: (Color are due to the larger, and parallel 138KV structures and larger rebuilt distribution lines).

Mitigation Measures yes

Impact Class: I

Evaluator's Names: CHRISTINE KELLER
Tony Kovacs
Josh Saunders

KOP-M
(ECOALT) (a)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date	4/14/2010
	District	N/A
	Resource Area	N/A
	Activity (program)	N/A

SECTION A. PROJECT INFORMATION

1. Project name	2. Critical viewpoint number	3. MFP Step III VRM class
ECO - Underground Alt - 138KVTL	KOP M Boulevard / Jule Jim Rds.	N/A
4a. Location		b. LOCATION MAP
TOWNSHIP	RANGE SECTION	
		815/81R Figure D. 3-12A and D.3-12D

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND WATER	FORM	
	LINE	
	COLOR	
	TEXTURE	
2. VEGETATION	FORM	
	LINE	
	COLOR	
	TEXTURE	
3. STRUCTURES	FORM	
	LINE	
	COLOR	
	TEXTURE	

Same as KOP M - ECO 138KV Overhead
See Contrast Rating Worksheet.

SECTION C. PROPOSED ACTIVITY DESCRIPTION
(Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

KOP 7
(ECO A14) (b)

SECTION C. PROPOSED ACTIVITY DESCRIPTION
(Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

1. LAND WATER	FORM	<p>Same as KOP 7 - 138KV Overhead except Tule Jim Road Widening will increase width of tan/soil band to moderate (Line and texture elements (Land/Water Body), Line, Color, Texture Elements (Vegetation)).</p>
	LINE	
	COLOR	
	TEX-TURE	
2. VEGETATION	FORM	
	LINE	
	COLOR	
	TEX-TURE	
3. STRUCTURES	FORM	<p>Existing Distribution Lines & Pole Removed</p> <p>Existing Contrasts from structures and lines removed</p>
	LINE	
	COLOR	
	TEX-TURE	

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	FEATURES												1a. Maximum element feature	
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				Existing utility pole removed	
Elements	Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0	b. Maximum feature contrast
	Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0	Moderate
	Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0	2. Does project design meet visual resource management requirements? <input type="checkbox"/> Yes <input type="checkbox"/> No N/A
	Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0	If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not preclude additional mitigating measures; propose as stipulations, and list in section E.
TOTALS		N/A				N/A				N/A				
Evaluator (signature) <i>John B. Fisher</i>												Date 4/14/2010		

KOPY
(ECO-ALT) (C)

Comments:

KOP: 7 (Jewell Valley + Tule Grove Rds / Boulevard)

Project Features Evaluated:

- Removal of Existing Distribution lines
- Undergrounding of 138 KV T/L + Distribution line

Simulations Available:

Simulations Not Available: ✓

Visual Factors Considered Important:

- Existing Visual Contrasts from Distribution line will be removed (Structure, Line, Color + Texture)
- Existing Visual Contrasts created by veg/soil edges along Tule Grove Rd. may be widened (increased width of band edge).
- Alt may require vaults at/pnear ground level for maintenance ^{work} (low structure, color, line + texture contrasts)

Mitigation Measures No additional measure

Impact Class: TV (Beneficial)

Evaluator's Names: CHRISTINE KELLER
TONY KOVACI
JOSH SAUNDERS

(800) KOP 8 (a)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date	4/15/2010
	District	N/A
	Resource Area	N/A
	Activity (program)	N/A

SECTION A. PROJECT INFORMATION

1. Project name	2. Critical viewpoint number	3. MFP Step III VRM class
800-Boulevard Substation / 138 kV PISCA	KOP 8 - Boulevard ^{AT} Hwy 80	N/A
4a. Location		b. LOCATION MAP
TOWNSHIP	RANGE	SECTION
		815/812 Figure D. 3 - 13A, -13B, -13C

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND WATER	FORM	Sloping Hillside
	LINE	Transitional Edges & Butt Edges, Irregular & Subangular
	COLOR	Arctic Tones - Lt. Tan Soils
	TEXTURE	Gradational - Between Smooth & slightly rougher
2. VEGETATION	FORM	Prominent - Live Oak near Rd ? Distinctive
	LINE	Varies from clumpy shrubs to sparse desert grasses to prominent live oaks
	COLOR	Varies from tan/grey desert vegetation to dark green shrubs & trees
	TEXTURE	Varied. Smooth to clumpy
3. STRUCTURES	FORM	Complex, geometric forms - existing Boulevard Substation (utility poles) w/ horizontal cross arms - utility lines
	LINE	Banded lines - Hwy 80 & Tule Jim Road Substation & Utility Conductors
	COLOR	Utility Lines & Boulevard Substation - grey & brown tones (rusty buildings) - Lt. Tans, Reddish roofs, neutral colors
	TEXTURE	Smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION

(Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

1. LAND WATER	FORM	Increased Height: Slope of Land Adj to Old Hwy 80: Increased
	LINE	no change geometric form of sub site.
	COLOR	no change
	TEX-TURE	Increased smoothness, & uniformity of land texture
2. VEGETATION	FORM	Loss of prominent Live Oak Tree near Old Hwy 80: 2 Other Live Oaks on Property
	LINE	Less Diffused lines
	COLOR	Increased uniformity of vegetation patterns: colors
	TEX-TURE	Clumpy, less variety of vegetation textures
3. STRUCTURES	FORM	Boulevard Substation - Prominent increase in Scale (pre and scoping) Riser Structure - Increased Complexity: Mass
	LINE	Reduced Line Complexity
	COLOR	Greys and Neutral Colors (TANS, Lt. Brown)
	TEX-TURE	Smooth

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	FEATURES												1a. Maximum element feature <i>Boulevard Substation</i>	
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)					b. Maximum feature contrast <i>Strong - Pre mitigation Moderate - Post landscape plan</i>
	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)		
Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0	2. Does project design meet visual resource/management requirements? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>N/A</i> If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not preclude additional mitigating measures; propose as stipulations, and list in section E.	
Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0		
Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0		
Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0		
TOTALS	<i>N/A</i>				<i>N/A</i>				<i>N/A</i>					
Evaluator (signature) <i>Chase A. Keller</i>													Date <i>4-15-2010</i>	

0 = Boulevard Substation Rebuild (w/ Landscape Plan)
 v = 138kV Riser Structure

Comments:

KOP: 8 Community of Boulevard @ Old Highway 80

Project Features Evaluated:

Boulevard Substation Rebuild
138KV T/L Riser Structure

Simulations Available: *yes*

Simulations Not Available: *Ø*

Visual Factors Considered Important:

- Views from Old Hwy 80 are slightly inferior, consequently landscaping plan will be effective in screening substation equipment.
- Prominent line Oak is planned for removal. (as well as 2 more trees on site)
- Substation will be similar in form/line elements as existing substation. Scale difference is the main visual element to change
- Riser structure will be evident due to scale, complexity of form & proximity to viewers.

Mitigation Measures *yes* - (underground T/L further south)

Impact Class - II (Boulevard Substation & Riser Structure)

Evaluator's Names: CHRISTINE KELLER
TONY KOVACIC
JOSH SAUNDERS

Note: KOP's 8 & 9 are from very similar locations. View orientation differs. See KOP 9 Figure, & Worksheets for Additional Information re Tule Project Elements & Alternatives

KOP9
(ECO) (a)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date	4/15/2010
	District	N/A
	Resource Area	N/A
	Activity (program)	N/A

SECTION A. PROJECT INFORMATION

1. Project name	2. Critical viewpoint number	3. MFP Step III VRM class
ECO - Boulevard Substation Rebuild	KOP9 - Boulevard	N/A
4a. Location		b. LOCATION MAP
TOWNSHIP	RANGE	SECTION
		215/212 Figures D. 3, 14A, 14D, 14F

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND WATER	FORM	Flat to Rolling
	LINE	Site - Symmetry; Background - Diffused & Undulating
	COLOR	Light Tan Soils
	TEXTURE	Smooth at Site
2. VEGETATION	FORM	Spaced, except for Live Oak Tree
	LINE	Varies from clumpy shrubs in RB, spaced desert cover - on site & round live oak (prominent)
	COLOR	Varies from light tans, on-site, dark green (on site) yellow & greens
	TEXTURE	Mottled, irregular on site, relatively uniform elsewhere
3. STRUCTURES	FORM	Buildings - Rectangular; Chain-link fences - linear & rectangular
	LINE	Mainly horizontal (roads, fences), existing utility lines - some vertical elements
	COLOR	Predominantly natural earth tones (yellow, greens, & tans) Varied colors (red, white) w/ structures
	TEXTURE	Varies from smooth - solid to semi-transparent (Blvd. Sub; Chain link fence)

SECTION C. PROPOSED ACTIVITY DESCRIPTION

(Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

KOP 9
(700) (6)

1. LAND WATER	FORM	More defined rectangular form (from sub. grading)
	LINE	No significant or notable change N/A
	COLOR	No change
	TEXTURE	Will change to smoother surface texture
2. VEGETATION	FORM	w/landscaping plan, vegetation forms will be more consistent with desert shrub forms
	LINE	No substantial change
	COLOR	Vegetation colors on sub site will be more consistent with desert shrub natural colors
	TEXTURE	More consistent with natural textures + vegetation patterns
3. STRUCTURES	FORM	Bold form, increased scale, as viewed from hillside superior view angle
	LINE	Intricate line patterns seen from superior view angle
	COLOR	Grey - Substation equipment; Night lighting
	TEXTURE	Smoother - Substation equipment; Fencing - Semi-transparent

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	FEATURES												1a. Maximum element feature Substation Superstructure (Blvd.)	
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)					b. Maximum feature contrast Strong-Line, Form, Color, Texture
	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)		
Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0	2. Does project design meet visual resource management requirements? <input type="checkbox"/> Yes <input type="checkbox"/> No N/A If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not preclude additional mitigating measures; propose as stipulations, and list in section E.	
Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0		
Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0		
Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0		
TOTALS		N/A				N/A				N/A				
Evaluator (signature)		[Signature]										Date	4-15-2010	

KOP 9
(700) (c)

Comments:

KOP: 9

Project Features Evaluated:

Boulevard Substation Rebuild

Simulations Available:

Simulations Not Available: ✓

Visual Factors Considered Important:

- Superior Viewing Angle on Hillside South of Old Hwy 80 will allow elevated views into substation. Size / Scale of Substation will be evident.
- Close (K6) Viewing Distance

Other Project Elements Seen From KOP 9:

- Tule Wind Turbines
- Tule 138 KV T/L

Other Cumulative Projects Seen: Sunrise 500KV line
Other Wind Projects to North

Mitigation Measures - No Additional Measures

Impact Class - Class I

Evaluator's Names: CHRISTINE KELLER, TONY KOVACIC,
Josh Saunders

KOP 9
(Pco Alts) @

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date	4/15/2010
	District	N/A
	Resource Area	N/A
	Activity (program)	N/A

SECTION A. PROJECT INFORMATION

1. Project name	2. Critical viewpoint number	3. MFP Step III VRM class
Pco-138KV T/L Alts (Hwy 80.2 UB)	KOP 9 - Boulevard	N/A
4a. Location		b. LOCATION MAP
TOWNSHIP	RANGE	SECTION

P15/P16 Figures D.3, 14A, 14C, 14F, 14G

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND WATER	FORM			
	LINE			
	COLOR			
	TEXTURE			
2. VEGETATION	FORM		<p>Same as KOP 9 (Pco Contrast Rating Worksheet)</p> <p>Boulevard Substation Rebuild</p>	
	LINE			
	COLOR			
	TEXTURE			
3. STRUCTURES	FORM			<p>Same as KOP 9 (Pco Contrast Rating Worksheet)</p> <p>Boulevard Substation Rebuild</p>
	LINE			
	COLOR			
	TEXTURE			

SECTION C. PROPOSED ACTIVITY DESCRIPTION

(Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

KOP 9
(200 Alt) (6)

1. LAND WATER	FORM	} No change
	LINE	
	COLOR	
	TEXTURE	
2. VEGETATION	FORM	Increased Form Contrast at Pole Sites a dly Underground Trench
	LINE	Increased Line Contrast (Band-widths) at Pole Sites ^{Underground} Trench
	COLOR	No Change (long-term)
	TEXTURE	Trusting clumpy texture to become more smooth in regular pattern
3. STRUCTURES	FORM	138kV UG Alt - Access Vaults - Low Rectangular Forms 138kV OH Alt - Slender Vertical Forms, Height/Scale Impacts
	LINE	138kV OH Alt - Horizontal Lines, Increased Banding Across View
	COLOR	Brown structures, grey conductors; Underground Vaults - Neutral Colors w/ Markings
	TEXTURE	Smooth

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	FEATURES								1a. Maximum element feature					
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)		138kV Structure (Hwy 80 Alt)			
	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)		Weak (1x)	None (0x)	
Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0	b. Maximum feature contrast Strong (138kV T/L, Line, Form)	
Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0	2. Does project design meet visual resource management requirements? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>N/A</i>	
Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0	If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not prelude additional mitigating measures; propose as stipulations, and list in section E.	
Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0		
TOTALS		N/A												
Evaluator (signature)		<i>Steve G. Hill</i>										Date 4/15/2010		

0 = 138kV Overhead Alt - Old Hwy 80
 √□ = 138kV Underground Alt - Old Hwy 80

KOP 9
(ECO Alts) (c)

Comments:

KOP: 9 ECO 138KV T/L Alt' -

Project Features Evaluated: Old Hwy 80 Overhead Route Alt
Old Hwy 80 Underground Route Alt.

Simulations Available: NO

Simulations Not Available: ✓

Visual Factors Considered Important:

- Superior View Orientation Provides Open, Panoramic Views to the North, East & West
- 138KV T/L ^{Overhead} would have very strong contrasts due to both structures and conductors cutting across views (branding & view obstruction)
- 138KV Undergound Alt would create weak ^{Moderate} contrasts due to veg/soil edge effects & low profile vaults.

Other Project Elements That Would Be Seen:

Tule Wind Turbines Tule 138KV T/L
Cumulative Projects That would also be seen:
Sunrise 500KV T/L & Other Wind Developments NW.

Mitigation Measures

Impact Classes: (u.p. alt.) seeding/weed control
Old Hwy 80 Pt Alt. (ON) - Class I
Old Hwy 80 Undergound Alt - Class II

Evaluator's Names: CHRISTINE KELLER
TONY KOVACIC
JOSH SAUNDERS

KOP9
(Tule) (a)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date	4/15/2010
	District	N/A
	Resource Area	N/A
	Activity (program)	N/A

SECTION A. PROJECT INFORMATION

1. Project name	2. Critical viewpoint number	3. MFP Step III VRM class
Tule Wind Turbine, 4138KV TL	KOP9 - Boulevard	N/A
4a. Location		b. LOCATION MAP
TOWNSHIP	RANGE	SECTION
		815/81R Figures D. 3 - 14A, -14B, -14C, -14D, -14E

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND WATER	FORM		Same As KOP 9 (PCO Contrast Rating Worksheet) for Boulevard Substation Rebuilt
	LINE		
	COLOR		
	TEXTURE		
2. VEGETATION	FORM		
	LINE		
	COLOR		
	TEXTURE		
3. STRUCTURES	FORM		
	LINE		
	COLOR		
	TEXTURE		

SECTION C. PROPOSED ACTIVITY DESCRIPTION

(Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

Kopq
(Tule) (b)

1. LAND WATER	FORM	Wind Turbines - No Change / Tule 138kV T/L - No Change
	LINE	Wind Turbines - No Change / Tule 138kV T/L - No Change
	COLOR	Wind Turbines - No Change / Tule 138kV T/L - No Change
	TEXTURE	Wind Turbines - No Change / Tule 138kV T/L - No Change
2. VEGETATION	FORM	Wind Turbines - No Change / Tule 138kV - Increased form ^{at pole sites} contrast
	LINE	Wind Turbines - No Change / Tule 138kV - Soil/Veg Edge Contrasts - Pole St.
	COLOR	Wind Turbines - No Change / Tule 138kV - No Change
	TEXTURE	Wind Turbines - No Change / Tule 138kV - Some texture ^{pole sites} change
3. STRUCTURES	FORM	Heavy, Bold Form - Turbines / Slender vertical forms - T/L
	LINE	Bold triangular Lines & Movement / Vertical & Horizontal lines, Banding ^{Across} Veins
	COLOR	Bright - White / Lt. Grey w Red lights / Neutral / Brown Tone & Grey Tone
	TEXTURE	Smooth

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	FEATURES												1a. Maximum element feature Wind Turbines & 138kV Structures	
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)					b. Maximum feature contrast Strong (Wind Turbines) T/L Structures (conductors)
	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)		
Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0	2. Does project design meet visual resource management requirements? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>N/A</i> If "no." (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not preclude additional mitigating measures; propose as stipulations, and list in section E.	
Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0		
Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0		
Texture (1x)	3	2	1	0	2	1	0	0	3	2	1	0		
TOTALS		<i>N/A</i>				<i>N/A</i>				<i>N/A</i>				
Evaluator (signature)		<i>[Signature]</i>										Date	4/15/2010	

0 = Tule Wind Turbines (see Figure D.3-14B + -14E)
 12 = Tule 138kV T/L (OH)

KOP9
(Tule) (c)

<p>Comments:</p> <p>KOP: 9 - Community of Boulevard</p> <p>Project Features Evaluated: Tule Wind Turbines Tule 138KV TRANSMISSION LINE</p> <p>Simulations Available: partial - Wind Turbines</p> <p>Simulations Not Available: No Simulation for Tule 138KV Transmission Line</p> <p>Visual Factors Considered Important:</p> <ul style="list-style-type: none">• Superior View Orientation Provides Open, Panoramic Views to North, East, West.• Tule 138KV TL would create VERY STRONG Contrasts due to structures (Poles) and conductors cutting across views (banding, view obstruction) <p>Other Project Features That Would Be Seen: ECO Boulevard Substation Rebuild</p> <p>Other Cumulative Projects That Would Be Seen: Sunrise 500KV VTL - Other Wind Projects to N/NW</p> <p>Mitigation Measures: yes - underground Tule 138KV TL</p> <p>Impact Classes: Tule Wind Turbines - Class I, 138KV TL - Class I</p> <p>Evaluator's Names: CHRISTINE KELLER TONY KOVACIC JOSH SAUNDERS</p>

KOP9
 Rt. 2 & Rt. 3 Tulelets (a)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date	4/15/2010
	District	N/A
	Resource Area	N/A
	Activity (program)	N/A

SECTION A. PROJECT INFORMATION

1. Project name	2. Critical viewpoint number	3. MFP Step III VRM class
Tule-138kV T/L Let (UG)	KOP9-Boulevard	N/A
4a. Location		b. LOCATION MAP
TOWNSHIP	RANGE	SECTION
		§15/§11C Figures D. 3-14A, -14B, -14C, -14F, -14G

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND WATER	FORM			
	LINE			
	COLOR			
	TEX-TURE			
2. VEGETATION	FORM		Same as Contrast Rating Worksheet for 200 Boulevard Substation Rebuild	
	LINE			
	COLOR			
	TEX-TURE			
3. STRUCTURES	FORM			Same as Contrast Rating Worksheet for 200 Boulevard Substation Rebuild
	LINE			
	COLOR			
	TEX-TURE			

Rt. 2 + Rt. 3 KOP 9
Tule AH (b)

1. LAND WATER	FORM	} NO CHANGE
	LINE	
	COLOR	
	TEXTURE	
2. VEGETATION	FORM	Increased Form Contrast At Underground Trench
	LINE	Increased Line Contrast (Veg/Soil Edge) Along Underground Trench
	COLOR	No Change (Long-term)
	TEXTURE	Existing clumpy pattern to become smooth, regular pattern
3. STRUCTURES	FORM	Low profile rectangular forms - underground vaults
	LINE	No change
	COLOR	Neutral Colors w/ Markings at Vault Locations
	TEXTURE	Smooth

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	FEATURES												1a. Maximum element feature	
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				1b. Maximum feature contrast	
	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)		
Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0	Underground Trench + Vaults Underground Trench - Moderate line, color 2. Does project design meet visual resource management requirements? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>N/A</i> If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not preclude additional mitigating measures; propose as stipulations, and list in section E.	
Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0		
Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0		
Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0		
TOTALS		N/A				N/A				N/A				
Evaluator (signature)		<i>Chris A. Tule</i>										Date	4/15/2010	

Rt. 2 + Rt. 3 UG = 0
Rt. 2 + Rt. 3 OH = ✓ (see ECO AHS) (b) for contrast descriptions

KOP 9
Rt. 2 + Rt. 3 Tule Alt
(c)

Comments:

KOP: KOP 9 - Tule Rt. 2+3 Underground Alt.

Project Features Evaluated:

Underground 138KX T/L - Trench + Vaults

Simulations Available: NO

Simulations Not Available: ✓

Visual Factors Considered Important:

- Superior View Orientation, Open Panoramic Views to North, East, West
- Rt. 2 + Rt. 3 Underground Alt. would create weak to moderate contrasts due to veg/soil edges & low profile rectangular vaults.

Other Project Elements Seen Would Include:

JCO Boulevard Substation
Tule Wind Turbines

Other Cumulative Projects:

Sunrise 500KX T/L & Other Wind Developments to NW

Mitigation Measures (yes) - seeding / weed control

Impact Classes: Rt 2+3 Underground Alt - Class II

Evaluator's Names: CHRISTINE KELLER

TONY KARCIC, Josh Spuders

Note: Rt. 2 + Rt. 3 OH comments similar to those discussed on ECO AHJ(b) for the ECO Hwy 80 AH(OH)

(Tule) (a)
KOP 10

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date	4/15/2010
	District	
	Resource Area	
	Activity (program)	

SECTION A. PROJECT INFORMATION

1. Project name		2. Critical viewpoint number	3. MFP Step III VRM class
Tule - Wind Tubines		KOP 10 - Ribbonwood Rd	
4a. Location		b. LOCATION MAP	
TOWNSHIP	RANGE	SECTION	E15/E12 Figure D.3-15A and D.3-15B

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND WATER	FORM	Flat to slightly rolling / sloping - higher hills in background
	LINE	Very Diffused
	COLOR	Lt. Tan / Brown
	TEXTURE	Coarse (Rock Boulders) to Smoother Grass
2. VEGETATION	FORM	Low Profile Desert Shrubs
	LINE	Diffused / Clumpy, Irregular
	COLOR	Muted Greens : Greens : Browns
	TEXTURE	Patchy : Clumpy
3. STRUCTURES	FORM	Little evidence - Rectangular forms (houses along Rd)
	LINE	Little evidence in KOP VIEW
	COLOR	Little evidence in KOP VIEW
	TEXTURE	Little evidence in KOP VIEW

SECTION C. PROPOSED ACTIVITY DESCRIPTION

(Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

KOP10
(Tule) (b)

1. LAND WATER	FORM	None
	LINE	Some access roads may create veg/soil bonds. ^{Not Seen -} Angle of View
	COLOR	None
	TEX-TURE	None
2. VEGETATION	FORM	None
	LINE	None
	COLOR	None
	TEX-TURE	None
3. STRUCTURES	FORM	Bold, Dominant Forms (Scale)
	LINE	Vertical, Geometric + Triangular Lines - (Movement of Blades)
	COLOR	Bright Light Color (Lt. Grey / Off White) w/ Red F&A Night Light sig
	TEX-TURE	Smooth

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	FEATURES												1a. Maximum element feature
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				1b. Maximum feature contrast
	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong - Form, Lines, Color
Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0	2. Does project design meet visual resource management requirements? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>N/A</i> If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not preclude additional mitigating measures; propose as stipulations, and list in section E.
Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0	
Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0	
Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0	
TOTALS													
Evaluator (signature) <i>Christine A. Kim</i>											Date <i>4/15/2010</i>		

KOP 10
(Tule) (e)

Comments:

KOP: KOP10 - Boulevard / Ribbonwood Rd.

Project Features Evaluated:

Proposed Tule Wind Turbines

Simulations Available: ✓

Simulations Not Available:

Visual Factors Considered Important:

- Scale, Height, Movement, & Night Lighting will create very strong, dominant visual element
- Views are open, panoramic and natural setting in current state (Normal Angle of View)
- Skylining of Turbines, in PG/MG Distance Zone
- Visual Impacts will be Sustained (On-going) for residents.

Mitigation Measures No Add. Measures

Impact Class - I

Evaluator's Names: CHRISTINE Keller
TONG Kovacic
JOSH Spundera

KOP-10
Tule Act(a)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date <i>4/15/2010</i>
	District
	Resource Area
	Activity (program)

SECTION A. PROJECT INFORMATION

1. Project name <i>Tule - 139k4 T/L Act. Pt. 3</i>		2. Critical viewpoint number <i>KOP-10 - Ribbonwood Rd</i>	3. MFP Step III VRM class
4a. Location		b. LOCATION MAP	
TOWNSHIP	RANGE	SECTION	
		<i>EIS/EIR Figure D. 3- 15A and D. 3-15c</i>	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND WATER	FORM	
	LINE	
	COLOR	
	TEXTURE	
2. VEGETATION	FORM	
	LINE	<i>Same as KOP 10 Tule Wind Turbines</i>
	COLOR	<i>See Previous Contrast Rating Worksheet</i>
	TEXTURE	
3. STRUCTURES	FORM	
	LINE	
	COLOR	
	TEXTURE	

SECTION C. PROPOSED ACTIVITY DESCRIPTION

(Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

KOP 10
(Tule Alt)
(6)

1. LAND WATER	FORM	None
	LINE	None
	COLOR	None
	TEX-TURE	None
2. VEGETATION	FORM	None
	LINE	Some light banding (veg/soil edge) from Access roads
	COLOR	None
	TEX-TURE	None
3. STRUCTURES	FORM	Slender, Vertical Form - Scale diminished by Wind Turbines
	LINE	Horizontal lines (Conductors)
	COLOR	Brown - Grey Tones
	TEX-TURE	Smooth

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	FEATURES												1a. Maximum element feature 138kV T/L Structures	
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)					b. Maximum feature contrast Strong - Form, line
	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)		
Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0	2. Does project design meet visual resource management requirements? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>N/A</i> If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not preclude additional mitigating measures; propose as stipulations, and list in section E.	
Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0		
Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0		
Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0		
TOTALS														
Evaluator (signature) <i>Christine G. Kelly</i>												Date 4/15/2010		

0 = Gen-Tie Rt. 3 04
✓ = Gen-Tie Rt. 3 4G

KOP 10
Tule Alt (c)

Comments:

KOP: 10 Ribbonwood Rd.

Project Features Evaluated: Pt. 3 - 138KV T/L Alt.

Simulations Available: ✓

* Simulation Does Not Show Visual Change
Simulations Not Available: When Adjacent to Homes on
Ribbonwood Rd. Only more
distant views are shown.

Visual Factors Considered Important:

* Pt. 3 will create skylined, open, long views
of 138KV T/L within FQ/MS Distance Zone

* Visual Contrast of 138KV TRANSMISSION Structures
and Conductors will be strongest Adj. to
homes on Ribbonwood Rd. - where long views
cut across existing landscape settings.

Mitigation Measures

yes - underground (Alt.)

Impact Class - Class I

Evaluator's Names: CHRISTINE Keller, Tony Kovacic
Josh Spawders

KOP11
(Tule) (a)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date	4/15/2010
	District	
	Resource Area	
	Activity (program)	

SECTION A. PROJECT INFORMATION

1. Project name		2. Critical viewpoint number		3. MFP Step III VRM class	
Tule Wind Turbines, 138KW TL		KOP11-McCain V.R. FI-8			
4a. Location			b. LOCATION MAP		
TOWNSHIP	RANGE	SECTION	E15/E1R Figures D. 3-16A, -16B, -16C		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND WATER	FORM	Flat to Slightly Sloping - Hills in background
	LINE	Very Diffused / Irregular Lines
	COLOR	Lt. Tan Soils w Some Rock Boulders (Lt. Tan)
	TEXTURE	Coarse (Rocks) to Medium Grains
2. VEGETATION	FORM	Low Profile Desert Shrubs and grasses -
	LINE	Diffused, Clumpy, Irregular, Round - Banded Edge
	COLOR	Muted Natural Greens, Greys, Browns
	TEXTURE	Patchy, Clumpy
3. STRUCTURES	FORM	Vertical (Utility Line), Horizontal Band (McCain Valley Rd)
	LINE	Silhouette (Utility Poles), Dark, Vertical
	COLOR	Brown
	TEXTURE	Smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION

(Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

KOP 11
(Tule) (6)

1. LAND WATER	FORM	} NO visible change
	LINE	
	COLOR	
	TEXTURE	
2. VEGETATION	FORM	no visible change
	LINE	some irregularity, curves/bands @ veg/soil edges (T/L access)
	COLOR	No change
	TEXTURE	Increased smoothness - at pole sites / access roads for T/L
3. STRUCTURES	FORM	Wind Turbines - Bold, Dominant (Scale & Height) multiple st. 138kV T/L - Co-Dominant (Height - prop. to viewers, long views)
	LINE	Wind Turbines - Vertical, Geometric, Triangular (Movement of Blades) 138kV T/L - Vertical & Horizontal
	COLOR	Wind Turbines - Bright light colors (Off White, Lt. Grey) 138kV T/L - Brown & Grey Tones
	TEXTURE	Wind Turbines - Smooth 138kV T/L - Smooth

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	FEATURES												1a. Maximum element feature
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				b. Maximum feature contrast
	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong - Form, Line, Color
Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0	Wind Turbines
Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0	
Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0	
Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0	
TOTALS	N/A				N/A				N/A				
Evaluator (signature)												Date	

0 = 138kV T/L
V = Wind Turbines

Date 4/15/2010

KOP 11
(Tule) (c)

Comments:

KOP: KOP 11 - McCain Valley Road Area/North of Interstate 8

Project Features Evaluated:

Tule Wind Turbines
Tule 138kV Transmission Line

Simulations Available: ✓

two separate simulations, Viewpoints combined due to close proximity to each other (within 0.5 miles)

Simulations Not Available:

lighting conditions for Tule Wind Turbines are not typical. Increased contrasts

Visual Factors Considered Important: would normally occur.

- Wind Turbines - Very Strong Contrasts - Under typical, sunny conditions (Scale/Form) Movement (Colors)

- 138kV T/L - Contrasts will be strong due to FB views, long views, skylining, but diminished by Sunrise & Wind Turbines

Other Cumulative Projects Seen:

- * Sunrise 500kV T/L (Adjacent to McCain Valley Road)

Mitigation Measures

Yes - Underground (Aet.)
138kV T/L

Impact Class - (Wind Turbines) - Class I, 138kV T/L - Class I

Evaluator's Names:

Christine Keller
Tony Kovacic, Josh Saunders

KOP12
(Tule) (a)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date	7/15/2010
	District	California Desert
	Resource Area	Al Centro F.O.
	Activity (program)	

SECTION A. PROJECT INFORMATION

1. Project name		2. Critical viewpoint number	3. MFP Step III VRM class
Tule - (Wind Turbines) 138K1TL		KOP12 - BLM Land entrance @	
4a. Location		b. LOCATION MAP	
TOWNSHIP	RANGE	McCain Valley Road	
		(95/112 Figures) D.3 - 17A, 17B, 17C	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND WATER	FORM	Flat to Slightly Sloping
	LINE	Banded (McCain Valley Rd.)
	COLOR	Light Tan Soil / Grey Asphalt
	TEXTURE	Smooth to Medium Grain (Pine Along Road)
2. VEGETATION	FORM	Low profile grasses & shrubs; Medium profile trees (Pinyon-Juniper)
	LINE	Diffused
	COLOR	Light to Dark Tan grasses/shrubs; Dark green trees (evergreens)
	TEXTURE	Plumps, Fine vertical lines
3. STRUCTURES	FORM	Rectangular signs, vertical posts
	LINE	Geometric, diagonal strips
	COLOR	Browns, tans, yellow & black
	TEXTURE	Smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION
(Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

1. LAND WATER	FORM	} no visible changes from TOP
	LINE	
	COLOR	
	TEXTURE	
2. VEGETATION	FORM	Some veg. clearing for T/L structures - tree removal possible
	LINE	Same as above - increased veg/soil edge contrasts possible
	COLOR	Some increase in soil exposure at T/L sites (increased TANS)
	TEXTURE	Increase in Smooth Textures (from coarse or medium grain)
3. STRUCTURES	FORM	Wind turbines - Vertical, Bold Forms 138kV T/L - Vertical, Scale enhanced by proximity to viewers.
	LINE	Wind turbines - Vertical, Geometric (poles & blades) 138kV T/L - Horizontal (conductors) Vertical (poles)
	COLOR	Wind turbines - Bright light color (off white/grey) Red FAA lights 138kV T/L - Brown earth tones
	TEXTURE	Smooth

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	FEATURES												1a. Maximum element feature	
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				Wind Turbines	
	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	b. Maximum feature contrast	
Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0	Strong - L, F, C, T	
Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0	2. Does project design meet visual resource management requirements? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <u>Class IV</u>	
Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0	If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not preclude additional mitigating measures; propose as stipulations, and list in section E.	
Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0		
TOTALS														

Evaluator (signature) *Arthur V. Hill*

Date 4/15/2010

O = Wind turbines
V = 138kV T/L

KOP12
(Tule) (C)

Comments:

KOP: 12 McCain Valley Road at BLM lands entrance

Project Features Evaluated: Tule Wind Turbines
138 KV Transmission Line

Simulations Available: yes - Wind Turbines

Simulations Not Available: NO sim available for 138KV T/L

Visual Factors Considered Important:

- Slightly Superior View Angle
Used for Simulation (to the North)
- Normal to Slightly Superior View Angle
is typical to the West
- Open, Stepped Views to Wind Turbines;
T/L, within FC/MG Distance Zone

Other Project Components Seen: Ø

Project Alt's Seen: Rough Acres Ranch Site
138KV T/L - Rt. 3

Cumulative Projects Seen: Sunrise 500KV T/L

Mitigation Measures T/L - underground (alt).

Impact Classes: Wind Turbines - Class I, 138KV T/L - Class I

Evaluator's Names: CHRISTINE KELLER

TONY KOVACIC, Josh Saunders

KOP12
(Tule) (alt) (a)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date	4/15/2010
	District	California Desert
	Resource Area	El Centro F.O.
	Activity (program)	

SECTION A. PROJECT INFORMATION

1. Project name		2. Critical viewpoint number	3. MFP Step III VRM class
Tule-Alt - Rough Acres: TLR Pt. 3		KOP12 - BLM land entrance @	
4a. Location		b. LOCATION MAP	
TOWNSHIP	RANGE	McLain Valley Road	
		P15/212 Figures D. 3- 17A, -17B, -17D	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND WATER	FORM	} SAME AS KOP12 - Proposed Project
	LINE	
	COLOR	
	TEXTURE	
2. VEGETATION	FORM	} SAME AS KOP12 - Proposed Project
	LINE	
	COLOR	
	TEXTURE	
3. STRUCTURES	FORM	Distribution lines - Vertical form Rough Acres Ranch - Rectangular forms (buildings) low profile
	LINE	Vertical (Tall) - Distribution Horizontal / Rectangular - Ranch structures
	COLOR	Distribution lines - Browns / Greys Ranch structures - Lt. Tans / Off White
	TEXTURE	Smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION

(Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

KOP12
(Tule Alt) (6)

1. LAND WATER	FORM	} NO visible/evident changes from KOP
	LINE	
	COLOR	
	TEXTURE	
2. VEGETATION	FORM	Increased Soil/Veg Clearings - Potential geometric form (TANS)
	LINE	Increased straight line = from veg clearings (Rough)
	COLOR	Increased TANS at Clearings (soil/veg) edges.
	TEXTURE	Increased Fine Grains
3. STRUCTURES	FORM	Rough Area Ranch - Substation - geometric rectangular form 138 KV T/L - vertical, slender Tall to Moderate Scale
	LINE	Rough Area Ranch Site low profile vertical & horizontal 138KV T/L - Vertical
	COLOR	Substation - Grey Tones T/L - Brown & Grey Tones
	TEXTURE	Smoother

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	ELEMENTS	FEATURES												1a. Maximum element feature Substation; T/L Structures	1b. Maximum feature/contrast Stump - Form
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)					
		Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)		
	Form (4x)	12	8	4	0x	12	8x	4	0	12	8	4x	0	2. Does project design meet visual resource management requirements? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Massive T/L) If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not preclude additional mitigating measures; propose as stipulations, and list in section E.	
	Line (3x)	9	6	3	0x	9	6x	3	0	9	6	3	0		
	Color (2x)	6	4	2	0x	6	4x	2	0	6	4	2	0		
	Texture (1x)	3	2	1	0x	3	2x	1	0	3	2	1	0		
TOTALS															
Evaluator (signature)		[Signature]										Date 4/15/2010			

0 = Rough Area Substation Site
 v = Alt-Rt. 30ft for 138 KV T/L
 x = Alt-Rt. 3 UE for 138 KV T/L

KOP12
(Tule Alt) (c)

Comments:

KOP: KOP12 - Rough Acres Ranch Alt Substation Site
Alt. Pt. 3 for 138 kV T/L
Project Features Evaluated: ✓

Simulations Available: ∅

Simulations Not Available: ✓

Visual Factors Considered Important:

- * Rough Acres Ranch Substation will replace site w/ Ranch Structures - Similar scale, Point. Substation will be backscreened by hills from KOP
- * Pt. 3 Alt. for 138 kV T/L will be visible (OH) across the valley / plain (slightly elevated views). Numerous structures: Conductors will be seen

Other Cumulative Projects Seen:

Potential Wind Farm Developments to West

Mitigation Measures

Substation - Fencing / Landscape Screening
T/L - Underground Alt.

Evaluator's Names:

CHRISTINE KELLER
Tomy Kovacic
Josh Saunders

KOP13
(Tule) (a)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date	4/15/2010
	District	California Desert
	Resource Area	81 Central F.O.
	Activity (program)	

SECTION A. PROJECT INFORMATION

1. Project name		2. Critical viewpoint number	3. MFP Step III VRM class
Tule - Wind Turbines		KOP13 - Lark Canyon	
4a. Location		b. LOCATION MAP	
TOWNSHIP	RANGE	OHV Staging Area	
		E15/E12 Pigeon D-3 - 1BA and D.3-18B	

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

		FORM	TEXTURE
1. LAND WATER	FORM	Hilly / Rolling w/ Flat foreground Valley	
	LINE	Curving (Rock Boulders), Bands - Dirt Roads / Trails	
	COLOR	Light Tan Soils, Light Tan Boulders (Large)	
	TEXTURE	Mottled - Smooth w/ Coarse Veg. & Rock Boulders	
2. VEGETATION	FORM	Low Profile Shrubs - Diffused forms	
	LINE	Diffused w/ Straight lines, at soil / veg edges at trails (Horizontal & Vertical)	
	COLOR	Dark to Moderate Natural Green Tone w/ Tan grasses low shrubs	
	TEXTURE	Moderate Grass, Clumpy	
3. STRUCTURES	FORM	BLM Signs - Rectangular, Vertical, Geometric	
	LINE	Geometric, diagonal, vertical, horizontal	
	COLOR	Earth tones - Brown Other colors - Blue, Green, Red, White	
	TEXTURE	Smooth	

SECTION C. PROPOSED ACTIVITY DESCRIPTION

(Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

R0P13
(Tale) (6)

1. LAND WATER	FORM	} No Change Visible From KOP
	LINE	
	COLOR	
	TEX-TURE	
2. VEGETATION	FORM	} No Change Visible From KOP
	LINE	
	COLOR	
	TEX-TURE	
3. STRUCTURES	FORM	Bold, dominant vertical forms (Scale), geometric
	LINE	Vertical, diagonal, moving blades
	COLOR	Bright, off white, with FAA Red lights Required
	TEX-TURE	Smooth

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	FEATURES												1a. Maximum element feature <i>Wind Turbines</i>	
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)					b. Maximum feature contrast <i>Strong - Form, Line, Color Texture</i>
	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)		
Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0	2. Does project design meet visual resource management requirements? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>Clasott</i> If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not preclude additional mitigating measures; propose as stipulations, and list in section E.	
Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0		
Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0		
Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0		
TOTALS														
Evaluator (signature) <i>Chris J. Lee</i>												Date <i>2/15/2010</i>		

KOP 13
(Tule) (c)

Comments:

KOP: 13 Lark Canyon OHV Staging Area

Project Features Evaluated:

Proposed Tule Wind Turbines

Simulations Available:

yes

Simulations Not Available:

Visual Factors Considered Important:

*

Mitigation Measures

none available

Evaluator's Names:

CHRISTINE KELLER, Tony Kavacic, Josh
Snuders

KOP 14
(Tule)(a)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date	4/15/2010
	District	California Desert
	Resource Area	El Centro F.O.
	Activity (program)	

SECTION A. PROJECT INFORMATION

1. Project name		2. Critical viewpoint number	3. MFP Step III VRM class
Tule - Wind Turbines		KOP 14 - (Arizona Overlook)	
4a. Location		b. LOCATION MAP	
TOWNSHIP	RANGE	SECTION	
			815/81R Figures) D. 3 - 19A and D. 3-19B

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND WATER	FORM	Rolling terrain, undulating forms
	LINE	Diffused, undefined lines
	COLOR	Tan Soils (dispersed exposure) Lt. rock boulders (streaked pattern)
	TEXTURE	Varied - Smooth (Soils), Chunky (Rock Boulders)
2. VEGETATION	FORM	Low Profile Shrubs - Undefined edges, broad clusters; pattern.
	LINE	Diffused
	COLOR	Natural muted green; tan/brown tones.
	TEXTURE	Clumpy, dense clumps, some stippling pattern/texture
3. STRUCTURES	FORM	Existing Wind Turbines (MG) - Tall / Dominant Vertical; Geometric forms
	LINE	Vertical lines, diagonal / triangular forms, blade movement
	COLOR	Bright - off white / Lt. Grey
	TEXTURE	Smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION

(Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

KOP14
(Tule) (b)

1. LAND WATER	FORM	} No Visual Changes from KOP
	LINE	
	COLOR	
	TEX-TURE	
2. VEGETATION	FORM	} No Visible Changes from KOP
	LINE	
	COLOR	
	TEX-TURE	
3. STRUCTURES	FORM	- Tule Turbines - Same / Similar form, however scale is 2+3 times longer (Proximity)
	LINE	Tule Turbines - Same / Similar lines as existing turbines (More Distinct Due to Proximity)
	COLOR	Same as existing turbines (or similar) Bright, Off/White / FAA Required Red lights; Lt. Grey
	TEX-TURE	Smooth - Same as existing turbines

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	FEATURES												1a. Maximum element feature		
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				Wind Turbines		
	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	b. Maximum feature contrast		
Elements	Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0	Strong - Form / Scale	
	Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0	2. Does project design meet visual resource management requirements? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>Class IV</i>	
	Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0	If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not preclude additional mitigating measures; propose as stipulations, and list in section E.	
	Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0		
TOTALS															
Evaluator (signature)		<i>Christine A. Taylor</i>											Date	4/15/2010	

KOP 14
(Tule) (c)

Comments:

KOP: 14 (Carrizo Avulosa)

Project Features Evaluated: Tule - Proposed

Simulations Available: yes

Simulations Not Available: ~~no~~

Visual Factors Considered Important:

The strong contrasts are related to the FC/MG viewing distance zone to at least 5 turbines.

Proximity of turbines to Overlook create very bold, dominant forms, with blade movement & red lights contributing to contrast. Turbines will dominate visual landscape.

Other Project Elements Seen:

Proposed Collector Substation: T/L
Not shown in Simulations.

Mitigation Measures none available

Impact Class: Class I

Evaluator's Names: CHRISTINE KELLER, TONY KOVACIC
JOSH SAUNDERS

Cumulative Projects: Regional Wind Developments - to the West

KOP 15
(Tule) (a)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date	4/15/2010
	District	
	Resource Area	
	Activity (program)	

SECTION A. PROJECT INFORMATION		
1. Project name	2. Critical viewpoint number	3. MFP Step III VRM class
Tule - Proposed 138km TL #200(24)	KOP15-Old Hwy 80 W	
4a. Location		b. LOCATION MAP
TOWNSHIP	RANGE	SECTION
		815/812 Figures P. 3 - 20A and D. 3-20B

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION		
1. LAND WATER	FORM	Flat
	LINE	Diffused, little variation
	COLOR	TAN (Soil)
	TEX-TURE	Not Evident
2. VEGETATION	FORM	Mainly desert shrubs - low/mod. profile/height. Taller landscape/trees - South of road.
	LINE	Banded - Highway 80; Diagonal
	COLOR	Natural muted green/grey. Trees - Darker, Saturated Green
	TEX-TURE	Medium to Fine Grains
3. STRUCTURES	FORM	Distribution line - Vertical slender form
	LINE	poles - vertical, lines - horizontal
	COLOR	Brown & grey tones
	TEX-TURE	Smooth

KOP 15
(Tule) (b)

1. LAND WATER	FORM	} no evident visual changes
	LINE	
	COLOR	
	TEXTURE	
2. VEGETATION	FORM	} no evident visual changes
	LINE	
	COLOR	
	TEXTURE	
3. STRUCTURES	FORM	Vertical, slender form, prominent scale; ⁴ Cross-ARMS
	LINE	vertical - structures; horizontal - conductors; lines
	COLOR	Browns, greys
	TEXTURE	Smooth

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	FEATURES												1a. Maximum element feature	
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				138 kV Structure	
	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	b. Maximum feature contrast	
Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0	2. Does project design meet visual resource management requirements? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>N/A</i> If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not preclude additional mitigating measures; propose as stipulations, and list in section E.	
Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0		
Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0		
Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0		
TOTALS														
Evaluator (signature)											<i>Chris L. Telle</i>		Date	4/15/2010

KOP 15
(Tule) (c)

Comments:

KOP: 15 Old Hwy 80 - Westbound

Project Features Evaluated: 138kV T/E with Distribution
Underbuilt

Simulations Available: yes

Simulations Not Available: \emptyset

Visual Factors Considered Important:

- * T/E parallel and adjacent to highway:
 - Long views (multiple structures)
 - FQ Distance Zone
 - Prominent Scale (Height)

Mitigation Measures underground alt.

Impact Class - Class I

Evaluator's Names: CHRISTINE Keller, TONY KOVACIC
Josh Saunders

KOP 15
(Tule Alts) (a.)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date	4/15/2010
	District	
	Resource Area	
	Activity (program)	

SECTION A. PROJECT INFORMATION

1. Project name	138KV Tule - Underground Alts	2. Critical viewpoint number	KOP 15 - Old Hwy 80 W	3. MFP Step III VRM class	
4a. Location		b. LOCATION MAP			
TOWNSHIP	RANGE	SECTION	215/212 Figure D. 3 - 20A, -20C, and -20D		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND WATER	FORM	} Same as KOP 15 (Tule P.P.)
	LINE	
	COLOR	
	TEXTURE	
2. VEGETATION	FORM	} Same as KOP 15 (Tule P.P.)
	LINE	
	COLOR	
	TEXTURE	
3. STRUCTURES	FORM	} Same as KOP 15 (Tule P.P.)
	LINE	
	COLOR	
	TEXTURE	

SECTION C. PROPOSED ACTIVITY DESCRIPTION

(Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

KOP15
(Tule Aets) (b)

1. LAND WATER	FORM	} No visual changes expected (no simi/stime)
	LINE	
	COLOR	
	TEX-TURE	
2. VEGETATION	FORM	No visual changes expected.
	LINE	Increased veg/soil edge contrasts at/to trench ROW.
	COLOR	Increased tan/soil color along ROW / vegetation removal
	TEX-TURE	Increased smooth/fine grains
3. STRUCTURES	FORM	none - vaults not expected to be visible
	LINE	none
	COLOR	none
	TEX-TURE	none

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	FEATURES												1a. Maximum element feature
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				1b. Maximum feature contrast
	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Moderate - Line, Color, Texture
Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0	Underground ROW
Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0	2. Does project design meet visual resource management requirements? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>N/A</i> If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not preclude additional mitigating measures; propose as stipulations/and list in section E.
Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0	
Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0	
TOTALS													
Evaluator (signature) <i>Cheryl R. Hill</i>											Date <i>4/15/2010</i>		

0 = Tule Gen Tie Rt. 2 + 3 UG 135 KV AHS
 ✓ = Tule Gen Tie Rt. 2 + 3 OH 138 KV AHS
 *n.k. : Tule Gen Tie Rt. 2 AHS - see figure D.3-20C
 Tule Gen Tie Rt. 3 AHS - see figure D.3-20D

KOP15
(Tule Alts)(C)

Comments:

KOP: 15 Old Highway 80 Westbound

Project Features Evaluated:

Tule Underground Alternatives
and
Overhead

Simulations Available:

Simulations Not Available: ✓

Visual Factors Considered Important:

* Underground Trench Would Be Set Back
from Highway (ROW would not be seen)

Tule Overhead Alts: Class I

Tule Rt. 2 Underground Alt: Class II

Tule Rt. 3 Underground Alt: Class I

Mitigation Measures

- ROW Vegetation Restoration - Bio Measure

Evaluator's Names:

Christine Keller, Josh Saunders
Tony Kovacic

(Tule) (a)
KOP16

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date	4/15/2010
	District	
	Resource Area	
	Activity (program)	

SECTION A. PROJECT INFORMATION

1. Project name	2. Critical viewpoint number	3. MFP Step III VRM class
Tule - Wind Turbines	KOP16 - BLM Lands near	
4a. Location		b. LOCATION MAP
TOWNSHIP	RANGE	SECTION
EIS/EIR figure D.3-21A and D.3-21B		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND WATER	FORM	Flat to Slightly Rolling / Sloping
	LINE	Horizontal
	COLOR	Tans, browns
	TEXTURE	Coarse (boulders) to smoother (exposed soils)
2. VEGETATION	FORM	Low profile shrubs (primarily)
	LINE	Clumpy and irregular
	COLOR	muted greens and browns
	TEXTURE	patchy to dense
3. STRUCTURES	FORM	no evidence (from orientation)
	LINE	no evidence (from orientation)
	COLOR	no evidence (from orientation)
	TEXTURE	no evidence (from orientation)

(Tule)(b)

KOP 16

SECTION C. PROPOSED ACTIVITY DESCRIPTION
(Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

1. LAND WATER	FORM	Moderate land form changes - grading for access roads + turbine pad foundations
	LINE	Increased line elements - access roads
	COLOR	Increased color contrast due to vegetation removal
	TEX-TURE	Linear (moderate change)
2. VEGETATION	FORM	Linear forms created by surface disturbances
	LINE	Irregular due to access road construction, turbine pad foundation construction
	COLOR	Brown, tan natural colors (exposed soils - grading)
	TEX-TURE	Patchy
3. STRUCTURES	FORM	Bold, dominant vertical form - geometric
	LINE	Vertical, diagonal moving blades
	COLOR	Bright, off-white, with FAA required red lights (obstruction)
	TEX-TURE	Smooth

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	FEATURES												1a. Maximum element feature	
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				Wind turbines	
Elements	Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0	b. Maximum feature contrast
	Line (3x)	9	6	3	0	9	6	3	0	6	3	0	Strong - form, line, color, texture	
	Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0	2. Does project design meet visual resource management requirements? <input type="checkbox"/> Yes <input type="checkbox"/> No N/A
	Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0	If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not preclude additional mitigating measures; propose as stipulations, and list in section E.
TOTALS														

Evaluator (signature) *J. B. J.*

Date 4/15/2010
Although KOP located on BLM lands wind turbines located on County of San Diego lands

KOP 16
(Tule Alt)(a)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date	4/15/2010
	District	California Desert
	Resource Area	Y1 Center P.O
	Activity (program)	

SECTION A. PROJECT INFORMATION

1. Project name	2. Critical viewpoint number	3. MFP Step III VRM class
Tule - Turbine Redaction Alt. KOP16 - c BLM Lands near In-ko-Pah ACEC		
4a. Location		b. LOCATION MAP
TOWNSHIP	RANGE	SECTION
		E15/E16 Kiguil D. 3-21A and D. 3-21C

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND WATER	FORM	Flat to Rolling Terrain w/ Numerous Scattered Boulders
	LINE	Undulating, Horizontal
	COLOR	Lt. Tan
	TEXTURE	Coarse (Boulders) to Medium Grain
2. VEGETATION	FORM	Low Profile shrubs - grasses - masses w/ undefined boundaries
	LINE	Diffused
	COLOR	Green, Gray, - Brown / Tan Natural Colors (Muted)
	TEXTURE	Clumpy
3. STRUCTURES	FORM	N/A
	LINE	N/A
	COLOR	N/A
	TEXTURE	N/A

SECTION C. PROPOSED ACTIVITY DESCRIPTION
(Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

KOP16
(Table Alt)(b)

1. LAND WATER	FORM	} NO CHANGE TO VISUAL ENVIRONMENT ANTICIPATED
	LINE	
	COLOR	
	TEXTURE	
2. VEGETATION	FORM	} NO CHANGE TO VISUAL ENVIRONMENT ANTICIPATED
	LINE	
	COLOR	
	TEXTURE	
3. STRUCTURES	FORM	
	LINE	
	COLOR	
	TEXTURE	

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST		FEATURES												1a. Maximum element feature
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				b. Maximum feature contrast
		Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	
Elements	Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0	2. Does project design meet visual resource management requirements? <input type="checkbox"/> Yes <input type="checkbox"/> No N/A If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not preclude additional mitigating measures; propose as stipulations, and list in section E.
	Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0	
	Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0	
	Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0	
TOTALS		N/A				N/A				N/A				

Evaluator (signature)

J. R. [Signature]

Date

See KOP 16 (Table)(b)

KOP16
(Tule Delt.) (C)

Comments: BUM Lands near

KOP: 16 In-ko-Psk ACEC

Project Features Evaluated: Wind Turbines Under Reduced
Turbine Alternative

Simulations Available:

Simulations Not Available: ✓

Visual Factors Considered Important:

under Tule Reduction in Turbines Alt
area viewed from KOP location would remain
underdeveloped.

Mitigation Measures

Evaluator's Names:

KOP14
(KOP14) (a)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date	4/15/2010
	District	N/A
	Resource Area	N/A
	Activity (program)	N/A

SECTION A. PROJECT INFORMATION

1. Project name	2. Critical viewpoint number	3. MFP Step III VRM class
CO-138N TL - Hwy 80 Alts	KOP14 - Old Hwy 80 W	
4a. Location		b. LOCATION MAP
TOWNSHIP	RANGE	SECTION
A15/01R Figures D.3-22A and D.3-22B		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND WATER	FORM	Flat to rolling hills
	LINE	Diffused, Boulder along Hwy edge
	COLOR	Light Tans to Browns
	TEX-TURE	Smooth, with coarse rock textures - boulders along highway & strewn rock boulders
2. VEGETATION	FORM	Clumpy (shrubs) to light transparent forms (GRASSES)
	LINE	Diffused, some curved & vertical (short) line elements
	COLOR	greens, greys, brown tones (natural, muted)
	TEX-TURE	Coarse to medium grains. Some light grains - grass areas
3. STRUCTURES	FORM	Distribution line - Moderately bold, horizontal & vertical forms Rural Structures - rectangular forms low roofs w/diagonals
	LINE	Strong / Bold lines (horizontal distribution) & telephone lines (None straight lines - rural buildings)
	COLOR	Distribution Lines - Browns & grey tones Rural Structures - light, off whites & tans.
	TEX-TURE	Smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION

(Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

1. LAND WATER	FORM	Linear Rectangular Form (Underground Trench/Row)
	LINE	UG alt - Broken diagonal/horizontal line expected OH alt - No visually evident change expected.
	COLOR	UG alt - Increased tons - exposed soils OH alt - No visually evident change expected.
	TEXTURE	UG alt - Increased smoothness, fine grain elements OH alt - No visually evident change expected.
2. VEGETATION	FORM	
	LINE	OH alt } No evident change expected UG alt }
	COLOR	
	TEXTURE	
3. STRUCTURES	FORM	
	LINE	OH alt } Similar form, increased scale/height UG alt } Increased # of horizontal lines (buses)
	COLOR	
	TEXTURE	

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	ELEMENTS	FEATURES												1a. Maximum element feature	1b. Maximum feature contrast	2. Does project design meet visual resource management requirements? <input type="checkbox"/> Yes <input type="checkbox"/> No If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not preclude additional mitigating measures; propose as stipulations, and list in section E.
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)						
		Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)			
	Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0			
	Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0			
	Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0			
	Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0			
TOTALS		N/A				N/A				N/A						
Evaluator (signature)		[Signature]												Date		

O = Overhead 138kV T/L (OH)
 V = Underground 138kV T/L + Distribution line (U.G.)

Comments:

KOP: 17 - Old Hwy 80 Westboard

Project Features Evaluated: ~~ECO~~ -

- (a) Old Alternative - 138kV T/L structures, 4 lines w/ existing distribution/utility lines underbuilt
- (b) UG Alternative - Existing structures, 4 lines removed, 2 buried w/ new 138kV T/L

Simulations Available:

Simulations Not Available: None Available

Visual Factors Considered Important:

- * O.H. Alternative - Would create strong contrasts in scale (form) & line due to increased height of 138kV T/L and entry height. 4 cross arms required for distribution underbuild.
- * Long Duration of Views from Residences. 4 Highway Traveler
- * Skylining of structures, 4 lines due to proximity of viewers.

U.G. Alternative

- * Beneficial Visual Effects due to the elimination of vertical structures & horizontal lines (visual clutter improved)
- * Elimination of existing skylining conditions
- * Improve amount of views/viewshed for residents. 4 Hwy traveler.

Mitigation Measures U.G. - Vegetation/Road Restoration (see Bid)

Impact Classes - Old 138kV Alt - Class I; UG 138kV Alt - Class II (as viewed from KOP 17)

Evaluator's Names: CHRISTINE KELLER
TONY KOVACIC
JOSH SAUNDERS

KOP18
(PCO) (a)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date <i>4/14/2016</i>
	District <i>California Desert</i>
	Resource Area <i>Yuma Central P.O.</i>
	Activity (program)

SECTION A. PROJECT INFORMATION

1. Project name <i>PCO East Co. Substation, 138 kV TL</i>	2. Critical viewpoint number <i>KOP18-Table Mt. ACEC</i>	3. MFP Step III VRM class
4a. Location		b. LOCATION MAP
TOWNSHIP	RANGE	SECTION
		<i>815/21E Figures D.3-23A and D.3-23B</i>

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND WATER	FORM	<i>Combination in valley/plain; Moderate Sloped Hills, Jagged Mts (Bkex)</i>
	LINE	<i>horizontal & diagonal lines I-8 dirt roads create diagonal & horizontal bands</i>
	COLOR	<i>Light tans & browns; light rock outcroppings/boulders on mts.</i>
	TEXTURE	<i>Smooth to coarse</i>
2. VEGETATION	FORM	<i>simple, homogeneous forms/patterns (shrubs)</i>
	LINE	<i>diffused; lines noticeable only at veg/sail edges</i>
	COLOR	<i>green/grey tones (muted)</i>
	TEXTURE	<i>stippled pattern, regular/consistent/homogeneous</i>
3. STRUCTURES	FORM	<i>Communication facilities - sky lined, vertical/geometric forms I-8 - horizontal bonding form. SWPL - Barely visible (backscreened)</i>
	LINE	<i>Vertical (simple - Comm. facilities) horizontal - I-8 and open dirt roads geometric - SWPL lattice structures</i>
	COLOR	<i>I-8, Dirt Roads - Lt. tan bands & grey band SWPL - Medium grey, semi-transparent color</i>
	TEXTURE	<i>Smooth</i>

SECTION C. PROPOSED ACTIVITY DESCRIPTION

(Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

KOP18
(ECO) (6)

1. LAND WATER	FORM	Rectangular forms - East County Substation - grading plan
	LINE	Increased line Patterns - Gen-Tie & 138kV T/L Access Rds
	COLOR	Similar neutral earth tones
	TEXTURE	Smooth, increased contrast w/ natural texture
2. VEGETATION	FORM	Similar forms long-term (ECO Substation landscaping plan)
	LINE	Increased lines - veg/pole edges at Substation & at T/L structure/location
	COLOR	Similar vegetation colors (long-term veg restoration at Substation Site and Pole Sites)
	TEXTURE	Smooth, increased contrast
3. STRUCTURES	FORM	Geometric, intricate forms (sub. & 500kV Lattice Structures)
	LINE	Diffused, semi-transparent against natural desert colors/patterns
	COLOR	Neutral grey & brown tones
	TEXTURE	Smooth

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	FEATURES												1a. Maximum element feature ECO Substation: Loop - In	
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)					b. Maximum feature contrast Moderate - F, L, C, T
	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)		
Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0	2. Does project design meet visual resource management requirements? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 138kV (Class III) If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not preclude additional mitigating measures; propose as stipulations, and list in section E.	
Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0		
Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0		
Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0		
TOTALS														
Evaluator (signature) <i>Cheryl A. Kee</i>												Date 4/14/2010		

O = ECO East Co. Substation & Loop - In
V = ECO 138kV T/L

KOP18
(ECO) (C)

Comments:

KOP: 18 Table Mt. ACEC (BLM Class II Area) ^{VRM}

Project Features Evaluated: ECO Substation + Loop-In (Private Land)
138KV T/L (Private Land); BLM VRM (Class III Lands)

Simulations Available:

Simulations Not Available: ✓

- Other Project Elements Seen: EST Wind Turbines; Gen-Tie

- Other Cumulative Project Seen: Sunrise 500KV T/L

Visual Factors Considered Important:

- * Superior Viewing Position
- * Middle ground Viewing Distance
- * ECO Facilities will be backscreened by desert landscape terrain + vegetation
- * ECO Substation - will be visible from elevated KOP location, however. (Large, Scale Neutral Colors)
- * Access Roads will create live elements, however, similar elements (e.g. 1-8 dirt roads) already have introduced other visual components
- * Lattice Structures will be effectively screened by landscape patterns
- * 138KV poles + Conductors will not be prominent in scale or color contrast elements.

Mitigation Measures - No Add. Measures (non-reflective materials will be required)

Impact Classes - ECO Sub/Loop-In: Class II; 138KV T/L

Evaluator's Names: CHRIS KELLER (Class III)
TONI KOVACIC
JOSH SAUNDERS

Note: VRM Class Consistency Applies Only to 138KV T/L
Other Project Facilities are located on

Private (non-BLM) Lands

KOP18
(75J-) (a)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date	4/14/2010
	District	California Desert
	Resource Area	El Centro
	Activity (program)	

SECTION A. PROJECT INFORMATION

1. Project name	2. Critical viewpoint number	3. MFP Step III VRM class
EST-(Wind Turbines) Gen-Tie ⁵ State ⁰⁰⁷⁵	18 Table Mt. ACCC	
4a. Location		b. LOCATION MAP
TOWNSHIP	RANGE	SECTION
415/EIR Figure) P. 3- 23A and D.3-23B		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND WATER	FORM			
	LINE			
	COLOR			
	TEXTURE			
2. VEGETATION	FORM		<p>Same as KOP18 (ECO)</p> <p>See Contrast Worksheet for Description</p>	
	LINE			
	COLOR			
	TEXTURE			
3. STRUCTURES	FORM			<p>Same as KOP18 (ECO)</p> <p>See Contrast Worksheet for Description</p>
	LINE			
	COLOR			
	TEXTURE			

SECTION C. PROPOSED ACTIVITY DESCRIPTION

(Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

EST - Wind Turbines

EST - Cur-tie ^{Structure} Alternatives (EST) (6) KOP18

1. LAND WATER	FORM	no visual change	no visual change
	LINE	no visual change	no visual change
	COLOR	no visual change	no visual change
	TEXTURE	no visual change	no visual change
2. VEGETATION	FORM	no visual change	Access roads and structure sites - LINEAR, NARROW rectangular form
	LINE	no visual change	primarily horizontal & diagonal lines (irregular) for access roads (curving)
	COLOR	no visual change	lt. tan/darker green grey at veg. road edges
	TEXTURE	no visual change	Smooth texture (soil exposure, shrubs, grasses)
3. STRUCTURES	FORM	Bold, large Scale Forms (Geometric)	Geometric, intricate forms (230kV & 500kV)
	LINE	Vertical Poles, Diagonal Blades, Movement	Semi-transparent, diffused - lattice Solid vertical lines - single pole struc
	COLOR	Bright Off White, FAA. Its Light Grey	grey - lattice brown to grey - single pole
	TEXTURE	Smooth	Smooth

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	FEATURES												1a. Maximum element feature	
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				b. Maximum feature contrast	
	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)		
Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0	EST Wind Turbines	
Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0		Strong - Form, Line, Color
Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0		
Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0		
TOTALS													2. Does project design meet visual resource management requirements? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>N/A*</i>	
Evaluator (signature) <i>Chase G. Kee</i>													Date 4/14/2010	

0 = Wind Turbines
 V = Cur-tie Lines & Structures (all Cells)
 * VEM Consistency does not apply as Prudhoe would not be located on BLM lands

Comments:

KOP: 18 - Table Mt. ACEC (BLM VRM Class II Area)

Project Features Evaluated:

- EST - Wind Turbines
- EST - Gen-Tie - Structures, lines (Alt. Designs)

Simulations Available: ✓ (500KV Synthetic Gen-Tie Design: Wind Turbines)

Simulations Not Available:

(No simulation for Total Project - EST & ECO)

Other Project Features Seen: ECO East Co. Substation;

ECO loop-in: 138KV T/L

Other Cumulative Projects Seen: Sunrise 500KV T/L

Visual Factors Considered Important:

- * KOP Has Superior View Angle
- * Middle ground Distance Cone
- * EST Wind Turbines - On Prominent Ridge line & Skelined
- * EST Gen-Tie - Will be ^{partially} accepted by ECO Substation & Desert landscape (Bachman)
- * Access Roads - Will be evident (veg/soil) contrasts similar horizontal & diagonal line elements already present (I-8, SWRL & access roads)
- * Wind Turbines - Will create very bold element with prominent and night lighting (will be dominant feature)

Mitigation Measures (Wind turbines) - no add. measures available/known

Impact Class: EST Wind Turbines - Class I
EST Gen-Tie lines: Structure - Class II

Evaluator's Names: Chris Keller
Tom Kovacic
Josh Saunders

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date 4/14/2010
	District
	Resource Area
	Activity (program) N/A

SECTION A. PROJECT INFORMATION		
1. Project name	2. Critical viewpoint number	3. MFP Step III VRM class
Campo and Jordan wind	KOP 19 - I-8 Eastbound	N/A
4a. Location		b. LOCATION MAP
TOWNSHIP	RANGE	SECTION
EIS/ Figure D.3-24A, D.3-24B EIR		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION		
1. LAND WATER	FORM	Flat/rolling hills with mountains in background
	LINE	Diffusing Diffused
	COLOR	Tans and muted green, grey and brown
	TEX-TURE	Generally uniform with rocks/boulders
2. VEGETATION	FORM	low shrubs and trees, moderate cover
	LINE	Diffused
	COLOR	Green, grey, tan
	TEX-TURE	Dotted and stippled at distance
3. STRUCTURES	FORM	Vertical poles (utility) and billboard (advertisement)
	LINE	Horizontal line from unpaved roadway
	COLOR	brown, dark (poles and billboard), tan (roadway)
	TEX-TURE	Solid/saturation high

SECTION C. PROPOSED ACTIVITY DESCRIPTION
 (Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

1. LAND WATER	FORM	none
	LINE	Access roads may create vegetation/soil bands (not seen in simulation)
	COLOR	none
	TEX-TURE	none
2. VEGETATION	FORM	none
	LINE	↓
	COLOR	
	TEX-TURE	
3. STRUCTURES	FORM	Bold, dominant forms (scale)
	LINE	Vertical geometric and triangular lines - movement of blades
	COLOR	Bright light color (light grey, off-white) w/ red FAA night lighting
	TEX-TURE	smooth

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	FEATURES											1a. Maximum element feature		
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				Wind turbines	
Elements	Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0	b. Maximum feature contrast
	Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0	Strong - form, line, color
	Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0	2. Does project design meet visual resource management requirements? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>N/A</i> If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not preclude additional mitigating measures; propose as stipulations, and list in section E.
	Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0	
TOTALS														
Evaluator (signature)											Date			
John B. Flanders											4/15/2010			

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date 4/15/20
	District
	Resource Area
	Activity (program)

SECTION A. PROJECT INFORMATION		
1. Project name	2. Critical viewpoint number	3. MFP Step III VRM class
Campo Jordan, Manzanita, Tule 4a. Location	KOP 20 - Jewel Valley Road	N/A
b. LOCATION MAP		
TOWNSHIP	RANGE	SECTION
EIS/ Figure D.3-25A and D.3-25B EIR		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

1. LAND WATER	FORM	Flat to slightly rolling hills - distant mountains in background
	LINE	Diffused Banded (Jewel Valley Road)
	COLOR	Lt. tan and brown (soil edges)
	TEX-TURE	Smooth to coarse (rock boulders)
2. VEGETATION	FORM	Desert shrubs (moderate/medium to low profile)
	LINE	Diffused, irregular
	COLOR	Muted greys, greens, and browns
	TEX-TURE	Patchy and clumpy
3. STRUCTURES	FORM	Vertical (utility lines), horizontal (Jewel Valley Road)
	LINE	Banded - Jewel Valley Road
	COLOR	Utility poles - brown/grey ; roads - grey w/ lt. tan soil shoulders
	TEX-TURE	Predominantly smooth.

SECTION C. PROPOSED ACTIVITY DESCRIPTION
 (Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

1. LAND WATER	FORM	None
	LINE	Some access roads may create veg/soil bands (not seen in simulation)
	COLOR	None
	TEX-TURE	None
2. VEGETATION	FORM	None
	LINE	↓
	COLOR	
	TEX-TURE	
3. STRUCTURES	FORM	Bold dominant forms (scale)
	LINE	Vertical, geometric, and triangular form (movement of blades)
	COLOR	Bright light color (lt. grey / off-white) with FAA night lighting (red)
	TEX-TURE	Smooth

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	FEATURES											1a. Maximum element feature		
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			Wind Turbines		
Elements	Form (4x)	12	8	4	0	12	8	4	0	2	8	4	0	b. Maximum feature contrast
	Line (3x)	9	6	0	0	9	6	3	0	0	6	3	0	
	Color (2x)	6	4	2	0	6	4	2	0	0	6	4	0	
	Texture (1x)	3	2	1	0	3	2	1	0	0	2	1	0	
	TOTALS													2. Does project design meet visual resource management requirements? <input type="checkbox"/> Yes <input type="checkbox"/> No N/A
Evaluator (signature) <i>Joshua B. Saunders</i>													Date 4/15/2010	

1a. Maximum element feature
 Wind Turbines

b. Maximum feature contrast
 Strong - form, line, color

2. Does project design meet visual resource management requirements? Yes No N/A
 If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not preclude additional mitigating measures; propose as stipulations, and list in section E.

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date 4/14/2010
	District
	Resource Area
	Activity (program) N/A

SECTION A. PROJECT INFORMATION

1. Project name Mazunika, Jordan, Tule Wind Projects		2. Critical viewpoint number KOP 21 - NB Ribbonwood Road	3. MFP Step III VRM class N/A
4a. Location		b. LOCATION MAP	
TOWNSHIP	RANGE	SECTION	EIS/ Figure D.3-26A and D.3-26B EIR

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

		FORM
		1. LAND WATER
	COLOR	Banded - Ribbonwood Road travels N/S from KOP
	TEX-TURE	Lt. tan soils w/ distant rock boulders (4. ton)
	FORM	medium grains to coarse (rocks)
2. VEGETATION	FORM	medium profile desert shrubs, trees
	LINE	Road - banded edge, vegetation - regular to irregular
	COLOR	Natural greens, greys, tans, browns
	TEX-TURE	uneven - denser in foreground, patchy in middle ground
3. STRUCTURES	FORM	Horizontal Vertical - utility lines, horizontal band (Ribbonwood Road)
	LINE	Utility lines parallel + perpendicular to roadway Roadway - bold and continuous
	COLOR	Roadway - Dark, utility lines - dark black grey
	TEX-TURE	Smooth.

SECTION C. PROPOSED ACTIVITY DESCRIPTION (Refer to BLM Manual Section 8131 for proposed descriptions and requirements)				
1. LAND WATER	FORM	None		
	LINE	Access roads may create veg/soil band - not included in simulation		
	COLOR	none		
	TEX-TURE	None		
2. VEGETATION	FORM	None		
	LINE	↓		
	COLOR			
	TEX-TURE			
3. STRUCTURES	FORM	Roid, dominant forms (scale) - wind turbines		
	LINE	Vertical, geometric + triangular lines - movement of blades		
	COLOR	Bright light color (lt. grey/off white) w/red FAA night lighting		
	TEX-TURE			

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	FEATURES												1a. Maximum element feature Wind turbines	
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)					b. Maximum feature contrast Strong - form, line, color
	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)	Strong (3x)	Moderate (2x)	Weak (1x)	None (0x)		
Form (4x)	12	8	4	0	12	8	4	0	2	8	4	0	2. Does project design meet visual resource management requirements? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>N/A</i> If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not preclude additional mitigating measures; propose as stipulations, and list in section E.	
Line (3x)	9	6	3	0	9	6	3	0	2	6	3	0		
Color (2x)	6	4	2	0	6	4	2	0	2	4	2	0		
Texture (1x)	3	2	1	0	3	2	1	0	2	2	1	0		
TOTALS														
Evaluator (signature)												Date		

Johnnie Jackson

Date 4/14/2010

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VISUAL CONTRAST RATING WORKSHEET	Date 4/15/2010
	District
	Resource Area
	Activity (program)

SECTION A. PROJECT INFORMATION		
1. Project name	2. Critical viewpoint number	3. MFP Step III VRM class
Tule Wind, Jordan, Manzanita Project	KOP-22 - Carrizo Overlook	IV
4a. Location		b. LOCATION MAP
TOWNSHIP	RANGE	SECTION
EIS / Figure D.3-26A + D.3-26B EIR		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION	
1. LAND WATER	FORM Rolling hills, undulating forms
	LINE Diffused, undefined lines
	COLOR tan soils (dispersed exposure) lt. rock boulders (stream pattern)
	TEX-TURE Varied - smooth (soils), and clunky (rock boulders)
2. VEGETATION	FORM Low profile shrubs - undefined edges, broad clusters + pattern
	LINE Diffused
	COLOR Natural muted green and tan / brown tones
	TEX-TURE Clumpy, dense clumps, some stippling patterns/textures
3. STRUCTURES	FORM Existing wind turbines in mid/foreground views - tall prominent vertical forms
	LINE Vertical lines, diagonal/triangle forms, blade movement
	COLOR Bright-off white / lt. grey
	TEX-TURE smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION
 (Refer to BLM Manual Section 8131 for proposed descriptions and requirements)

1. LAND WATER	FORM	} no visual change from KOP
	LINE	
	COLOR	
	TEX-TURE	
2. VEGETATION	FORM	} no visual/visible changes from KOP
	LINE	
	COLOR	
	TEX-TURE	
3. STRUCTURES	FORM	Turbines - similar form as existing however larger scale due to proximity
	LINE	similar lines as existing but more distinct due to proximity
	COLOR	same as existing but more pronounced due to proximity
	TEX-TURE	smooth - same as existing turbines

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	FEATURES												1a. Maximum element feature	
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				Wind turbines	
Elements	Form (4x)	12	8	4	0	12	8	4	0	12	8	4	0	b. Maximum feature contrast Strong-form / scale
	Line (3x)	9	6	3	0	9	6	3	0	9	6	3	0	
	Color (2x)	6	4	2	0	6	4	2	0	6	4	2	0	
	Texture (1x)	3	2	1	0	3	2	1	0	3	2	1	0	
TOTALS													2. Does project design meet visual resource management requirements? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <u>Class IV</u> If "no," (or if rating is over maximum allowable) redesign project in section E, concentrating on feature/element of greatest contrast. If contrast is acceptable, this does not preclude additional mitigating measures; propose as stipulations, and list in section E.	

Evaluator (signature) Joshua Fisher Date 4/15/2010