Appendix C
Aesthetic ResourcesDocuments

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Form 8400-4
(September 1985)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

KOP 1 VISUAL CONTRAST RATING WORKSHEET

Date: December 1, 2008 Reviewed: March, 2010
District: Las Vegas Field Office
Resource Area:
Activity (program): Energy Transmission

SECTION A. PROJECT INFORMATION

1. Project Name:
Eldorado-Ivanpah Transmission Project

2. Key Observation Point:
KOP 1: View from the Transmission Corridor that Includes the Eldorado-Baker-Coolwater-Dunn Siding-Mountain Pass 115 kV Transmission Line – Looking Northeast (Proposed Eldorado-Ivanpah Transmission Project – Transmission Lines)

3. VRM Class:
VRM Class III and VRM Class II

The Boundary Between VRM Class III and VRM Class II is Located Between the Foreground and Middleground

(Mark Chandler/BLM Las Vegas Field Office 12/15/2008)

4. Location:
Township 25 S
Range 61 E
Sections 20

5. Location Sketch:

The Proposed Transmission Line, Transmission Line Alternative A, Transmission Line Alternative B, Transmission Line Alternative C, Transmission Line Alternative D, or Transmission Line Alternative E would be present in this view. (see Figure 3.2-1). The information on this worksheet pertains to these proposed transmission lines.

The view was taken looking northeast. Photograph Date: 11/13/2008

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	**Foreground:** Jagged Hill Sloping Uphill then Downhill from Foreground to Background, Eroded Base of the Mountain Range **Middleground:** Incised Low to Tall Mountains **Background:** Not Visible **No Water Visible**	**Foreground:** Irregularly Rounded Low to Medium High Shrubs and Ground Cover; Interspersed Grasses; Random Irregularly Rounded Joshua Tree **Middleground:** Low Mounded Shrubs **Background:** Not Visible	**Foreground:** Near Vertical Angular Lattice Steel Towers (LSTs) with Associated Conductors; Near Vertical Angular T-framed LSTs, Near Vertical Tubular Steel Poles (TSPs) **Middleground:** Near Vertical Angular LSTs with Associated Conductors; Near Vertical Angular T-framed LSTs, Near Vertical Tubular Steel Poles (TSPs) **Background:** Not Visible from this View
LINE	**Foreground:** Jagged Horizontal Line with Vertical Incline **Middleground:** Varying Topographic Variation in the Horizontal Line, Strong Diagonal Lines at the Base of the Mountain Range, Mountains have a Smooth to Jaggedly Rounded Horizontal Skyline **Background:** Not Visible **No Water Visible**	**Foreground:** Weak Horizontal Line **Middleground:** Undulating Horizontal Line **Background:** Not Visible	**Foreground:** Vertical LSTs and TSPs, Horizontal and Diagonal Conductors with Slight Sag **Middleground:** Vertical LSTs and TSPs, Horizontal and Diagonal Conductors with Slight Sag **Background:** Not Visible from this View
COLOR	**Foreground**: Light Golden Tan; Random Tan, Light Brown, and Black Rock **Middleground:** Predominantly Light Golden Tan to Golden Tan and Slate Gray, Visible Striations of Warm Pink, and Wine-Purple **Background:** Not Visible **No Water Visible**	**Foreground:** Medium Amber, Gray-Brown, Yellow-Green, Sage-Green Shrubs, Ground Cover, and Trees; Very Light Sage Green Grasses **Middleground:** Medium Brown and Dark Dusty Green **Background:** Not Visible	**Foreground:** Medium Gray LSTs and Conductors; Rust Brown TSPs **Middleground:**, Medium Gray LSTs and Conductors; Brown TSPs **Background:** Not Visible from this View

TEXTURE	**Foreground:** Rocky, Granular Soil **Middleground:** Smooth to Granular Soils, Discontinuously Rough Mountains **Background:** Not Visible **No Water Visible**	**Foreground**: Varied: Randomly Spaced, Bristly, Pointy Shrubs, Ground Cover, and Trees; Interspersed with Soft Mounded Grasses **Middleground:** Soft Shrubs **Background:** Not Visible	**Foreground**: Orderly Spaced Pointy LSTs and Smooth, Orderly Spaced Pointy TSPs **Middleground:** Orderly Spaced Pointy LSTs and Smooth, Orderly Spaced Pointy TSPs **Background:** Not Visible from this View

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	**Foreground:** - Grading for Structure Sites and Access Roads would be Visible in this View **Middleground:** - Grading for Structure Sites and Access Roads would be Visible in this View **Background:** No Visible Change **No Water Visible** APM AES-1: Road Cut Rock Staining. Where new roads are required to access new or existing transmission and subtransmission towers, the applicant would consult with the BLM regarding feasible methods to treat the exposed rock to match the overall color of the adjacent weathered rock. APM AES-2: Seeding and Inter-Planting. Where new roads are required to access new or existing transmission and subtransmission towers, road cuts would be treated by seeding and/or inter-planting into the disturbed areas to restore the area to an appearance that would blend back into the overall landscape context.	**Foreground:** - Clearing of Vegetation for Structure Sites and Access Roads would be Visible in this View **Middleground:** - Clearing of Vegetation for Structure Sites and Access Roads would be Visible in this View **Background:** No Visible Change APM AES-1: Road Cut Rock Staining. APM AES-2: Seeding and Inter-Planting.	**Foreground and Middleground:** - Removal of Existing Angular H-Frame, Angular T-Frame LSTs, and Associated Conductors Which are Barely Visible in the Existing Environment in this View - Addition of Angular H-Frame Tubular Steel Poles (TSP) and Associated Conductors Which Would be Visible in this View - Addition of Angular Lattice Steel Towers (LSTs) and Associated Conductors Which Would be Visible in this View - Access Roads would be Visible in this View **Background:** Not Visible in this View

LINE	**Foreground:** - Grading for Structure Sites and Access Roads May or May Not be Visible in this View **Middleground:** - Grading for Structure Sites and Access Roads May or May Not be Visible in this View **Background:** No Visible Change **No Water Visible** APM AES-1: Road Cut Rock Staining. APM AES-2: Seeding and Inter-Planting.	**Foreground:** - Clearing of Vegetation for Structure Sites and Access Roads May or May Not be Visible in this View **Middleground:** - Clearing of Vegetation for Structure Sites and Access Roads May or May Not be Visible in this View **Background:** No Visible Change APM AES-1: Road Cut Rock Staining. APM AES-2: Seeding and Inter-Planting.	**Foreground and Middleground:** - Removal of Existing Near Vertical H-Frame, T-Frame LSTs, and Associated Horizontal Conductors Which are Barely Visible in the Existing Environment in this View - Addition of Near Vertical H-Frame Tubular Steel Poles (TSP) and Horizontal and Diagonal Conductors Which Would be Visible in this View - Addition of Near Vertical Angular Lattice Steel Towers (LSTs) and Associated Horizontal Conductors Which Would be Visible in this View - Access Roads would be Visible in this View **Background:** Not Visible in this View
COLOR	**Foreground:** - Grading for Structure Sites and Access Roads May or May Not be Visible in this View **Middleground:** - Grading for Structure Sites and Access Roads May or May Not be Visible in this View **Background:** No Visible Change **No Water Visible** APM AES-1: Road Cut Rock Staining. APM AES-2: Seeding and Inter-Planting.	**Foreground:** - Clearing of Vegetation for Structure Sites and Access Roads May or May Not be Visible in this View **Middleground:** - Clearing of Vegetation for Structure Sites and Access Roads May or May Not be Visible in this View **Background:** No Visible Change APM AES-1: Road Cut Rock Staining. APM AES-2: Seeding and Inter-Planting.	**Foreground and Middleground:** - Removal of Existing Gray H-Frame, T-Frame LSTs, and Gray Conductors Which are Barely Visible in the Existing Environment in this View - Addition of Gray H-Frame TSP and Gray Conductors Which Would be Visible in this View - Addition of Gray LSTs and Gray Conductors Which Would be Visible in this View - Access Roads would be Visible in this View **Background:** Not Visible in this View

TEXTURE	**Foreground:** - Grading for Structure Sites and Access Roads May or May Not be Visible in this View **Middleground:** - Grading for Structure Sites and Access Roads May or May Not be Visible in this View **Background:** No Visible Change **No Water Visible** APM AES-1: Road Cut Rock Staining. APM AES-2: Seeding and Inter-Planting.	**Foreground:** - Clearing of Vegetation for Structure Sites and Access Roads May or May Not be Visible in this View **Middleground:** - Clearing of Vegetation for Structure Sites and Access Roads May or May Not be Visible in this View **Background:** No Visible Change APM AES-1: Road Cut Rock Staining. APM AES-2: Seeding and Inter-Planting.	**Foreground and Middleground:** - Removal of Existing Pointy H-Frame LSTs, Pointy T-Frame LSTs and Smooth Conductors Which are Barely Visible in the Existing Environment in this View - Addition of Pointy and Smooth H-Frame TSP and Smooth Conductors Which Would be Visible in this View - Addition of Pointy LSTs and Smooth Conductors Which Would be Visible in this View - Access Roads would be Visible in this View **Background:** Not Visible in this View

SECTION D. CONTRAST RATING ☐ SHORT TERM ☒ LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource management objectives? ☐ Yes ☒ No (Explain on reverse side) **VRM Class III (Foreground and Middleground)**
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	3. Additional mitigating measures recommended ☐ Yes ☒ No (Explain on reverse side)
ELEMENTS	Form			X				X			X			Evaluator's Names / Reviewed and Revised By:
	Line			X				X		X				Brenda Eells/CH2M HILL — Mark Chandler/BLM
	Color			X				X			X			Liz Cutler/CH2M HILL — Tom Dildine/E&E
	Texture			X				X			X			Colleen Bredensteiner/CH2M HILL — Erica Brown/E&E

SECTION D. (Continued)

Comments from Item 2.

VRM Class III (Foreground and Middleground)

In the view from this KOP the foreground is managed by the BLM as VRM Class III. The middleground in this view is managed by the BLM as VRM Class II. This evaluation addresses the foreground and near middleground managed by the BLM as VRM Class III.

BLM's Visual Resource Management (VRM) Class III objective is to "…partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape" (BLM, 2007b).

With the reseeding, interplanting, and rock staining efforts outlined in APM AES-1 and APM AES-2, the Proposed Eldorado-Ivanpah Transmission Project would result in a weak change in the form, line, color, and texture for Land/Water Body and Vegetation present in the existing environment. Construction and Operation of the project would result in moderate changes to th form, color, and texture of structures and strong changes to the line of structures present in the existing view. The changes to the existing environment would be consistent with the VRM Class III assignment.

Bureau of Land Management (BLM). 2007b. *BLM Handbook H-8410-1, Visual Resource Inventory*. http://www.blm.gov/nstc/VRM/8431.html. Accessed January 2009.

Additional Mitigating Measures (See item 3)

Construction and operation of the Proposed Eldorado-Ivanpah Transmission Project would be consistent with the BLM land management objectives of VRM Class III and would result in no adverse effect; therefore no mitigation would be required.

SECTION D. CONTRAST RATING ☐ SHORT TERM ☒ LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource management objectives? ☐ Yes ☒ No (Explain on reverse side) **VRM Class II (Foreground/Middleground)**
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	3. Additional mitigating measures recommended ☐ Yes ☒ No (Explain on reverse side)
ELEMENTS	Form			X				X			X			Evaluator's Names / Reviewed and Revised By:
	Line			X				X		X				Brenda Eells/CH2M HILL — Mark Chandler/BLM
	Color			X				X			X			Liz Cutler/CH2M HILL — Tom Dildine/E&E
	Texture			X				X			X			Colleen Bredensteiner/CH2M HILL — Erica Brown/E&E

SECTION D. (Continued)

Comments from Item 2.

VRM Class II (Foreground/Middleground)

In the view from this KOP the foreground is managed by the BLM as VRM Class III. The middleground in this view is managed by the BLM as VRM Class II. This evaluation addresses the distant middleground managed by the BLM as VRM Class II.

BLM's Visual Resource Management (VRM) Class III objective is to "…retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape." (BLM, 2007b).

With the reseeding, interplanting, and rock staining efforts outlined in APM AES-1 and APM AES-2, the Proposed Eldorado-Ivanpah Transmission Project would result in a weak change in the form, line, color, and texture for Land/Water Body and Vegetation present in the existing environment. Construction and Operation of the project would result in moderate changes to th form, color, and texture of structures and strong changes to the line of structures present in the existing view. The changes to the existing environment would not be consistent with the VRM Class II assignment. Construction and Operation would result in a major and unavoidable adverse effect. There is no feasible mitigation to lessen this effect.

Bureau of Land Management (BLM). 2007b. *BLM Handbook H-8410-1, Visual Resource Inventory*. http://www.blm.gov/nstc/VRM/8431.html. Accessed January 2009.

Additional Mitigating Measures (See item 3)

Construction and operation of the project would not be consistent with VRM Class II designation. The project would result in a major and unavoidable adverse effect. There is not feasible mitigation to lessen this effect.

Form 8400-4
(September 1985)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

KOP 2 VISUAL CONTRAST RATING WORKSHEET

Date: December 1, 2008	
District: Las Vegas Field Office	
Resource Area:	
Activity (program): Energy Transmission	

SECTION A. PROJECT INFORMATION

1. Project Name: Eldorado-Ivanpah Transmission Project	**4. Location:** **Township** 26 S	**5. Location Sketch:**
2. Key Observation Point: KOP 2: Representative View from South McCullough Wilderness (Proposed Eldorado-Ivanpah Transmission Project – Transmission Lines)	**Range** 61 E	The Proposed Transmission Line, Transmission Line Alternative A, Transmission Line Alternative B, Transmission Line Alternative C, Transmission Line Alternative D, or Transmission Line Alternative E would be present in this view. (see Figure 4.1-3). The information on this worksheet pertains to these proposed transmission lines.
3. VRM Class: VRM Class III (Mark Chandler/BLM Las Vegas Field Office 12/15/2008)	**Sections** 7	The view was taken looking northwest. Photograph Date: 11/13/2008

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	**Foreground:** Nearly Flat Land Sloping Towards Valley in the Distance **Middleground:** Flat Wide Valley Floor, Low Mounding Hill on Right Edge of View **Background:** Flat Valley Floor Including Dry Lake, Low Mounded Weathered Hills, Incised Domed Low Mountains **No Water Visible**	**Foreground:** Irregularly Rounded and Pyramidal Low to Medium High Shrubs and Ground Cover **Middleground and Background:** Vegetation Present but Indistinguishable	**Foreground:** Nearly Flat Slightly Rutted Dirt Road and Low Berm **Middleground:** Near Vertical Angular Lattice Steel Towers (LSTs), Transmission Conductor is Evident, and Nearly Flat Dirt Roads **Background:** Nearly Flat Dirt Roads on Valley Floor, No Visible Structures in Mountains and Hills
LINE	**Foreground:** Near Horizontal Line **Middleground:** Regular Horizontal Line Across Valley Floor, Diagonally Inclined Undulating Over Crest of Hill **Background:** Nearly Horizontal Line with Slight Topographic Variation in the Valley Floor, Diagonally Inclined Undulating Over Crest of Hills, Low Mountains have a Jagged to Smooth Horizontal Line **No Water Visible**	**Foreground:** Weak Horizontal Line **Middleground:** Nearly Horizontal Line **Background:** Nearly Horizontal Line on Valley Floor, Vegetation Present but Indistinguishable in Mountains and Hills	**Foreground:** Diagonal Dirt Road Following Topography in Right Corner of View **Middleground:** Vertical Transmission Towers, Horizontal Conductors with Slight Sag, Diagonal Roads Across Valley Floor **Background:** Diagonal Roads Across Valley Floor, No Visible Structures in Mountains and Hills
COLOR	**Foreground**: Golden Tan, Random Black Rock **Middleground:** Golden Tan Dirt Rd, Valley Floor Color Indistinguishable Due to Vegetation, White Tan Dry Lake Bed **Background:** Golden Tan Dirt Rd, Valley Floor Color Indistinguishable Due to Vegetation, White Tan Dry Lake Bed, Dark Golden Brown to Gray Brown Hills and Mountains, Far Mountains have Purplish Cast **No Water Visible**	**Foreground:** Tan-Brown, Yellow-Green, Dark Brown, Dark Sage Green Shrubs and Ground Cover **Middleground:** Dark Brown and Dark Dusty Green **Background:** Dark Brown and Dark Dusty Green on Valley Floor, Vegetation Indistinguishable but Overall Brown Tone in Mountains and Hills	**Foreground:** Golden Tan Dirt Road and Berm **Middleground:** Medium Gray LSTs and Conductors, Golden Tan Dirt Roads **Background:** Golden Tan Dirt Roads on Valley Floor, No Visible Structures in Mountains and Hills
TEXTURE	**Foreground:** Sandy, Rocky **Middleground:** Smooth Valley Floor, Smooth Hills **Background:** Velvety Smooth Valley Floor and Dry Lake, Discontinuously Rough and Smooth Mountains and Hills **No Water Visible**	**Foreground**: Varied: Randomly Spaced, Bristly, Pointy Shrubs and Ground Cover Interspersed with Soft Mounded Grasses **Middleground and Background:** Vegetation Indistinguishable	**Foreground**: Soft Sandy Road Bed and Coarse Gravel Berm **Middleground:** Orderly Spaced Pointy LSTs, Smooth Overlapping Conductors, Smooth Dirt Road **Background:** Smooth Dirt Road on Valley Floor, No Visible Structures in Mountains and Hills

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	**Foreground:** No Change **Middleground:** Grading for Transmission Structure Sites and Access Roads May or May Not be Visible in this View **Background:** No Change **No Water Visible**	**Foreground:** No Change **Middleground:** Clearing of Vegetation for Transmission Structure Sites and Access Roads May or May Not be Visible in this View **Background:** No Change	**Foreground:** No Change **Middleground:** - Removal of Existing Angular H-Frame and T-Frame LSTs and Associated Conductors Which are Not Visible in the Existing Environment in this View. - Addition of Near Vertical Angular Lattice Steel Towers (LSTs) and Associated Transmission Conductor Which Would be Barely Visible to Not Visible in this View (Access Roads May or May Not Be Visible in this View) **Background:** No Change
LINE	**Foreground:** No Change **Middleground:** Grading for Transmission Structure Sites and Access Roads May or May Not be Visible in this View **Background:** No Change **No Water Visible**	**Foreground:** No Change **Middleground:** Clearing of Vegetation for Transmission Structure Sites and Access Roads May or May Not be Visible in this View **Background:** No Change	**Foreground:** No Change **Middleground:** - Removal of Existing Vertical H-Frame and T-Frame LSTs and Associated Horizontal Conductors Which are Not Visible in the Existing Environment in this View - Addition of Vertical Transmission Towers and Horizontal Conductors with Slight Sag Which Would be Barely Visible to Not Visible in this View (Access Roads May or May Not Be Visible in this View) **Background:** No Change
COLOR	**Foreground:** No Change **Middleground:** Grading for Transmission Structure Sites and Access Roads May or May Not be Visible in this View **Background:** No Change **No Water Visible**	**Foreground:** No Change **Middleground:** Clearing of Vegetation for Transmission Structure Sites and Access Roads May or May Not be Visible in this View **Background:** No Change	**Foreground:** No Change **Middleground:** - Removal of Existing Gray LSTs and Associated Conductors Which are Not Visible in the Existing Environment in this View - Addition of Medium Gray LSTs and Medium Gray Conductors Which Would be Barely Visible to Not Visible in this View (Access Roads May or May Not Be Visible in this View) **Background:** No Change
TEXTURE	**Foreground:** No Change **Middleground:** Grading for Transmission Structure Sites and Access Roads May or May Not be Visible in this View **Background:** No Change **No Water Visible**	**Foreground:** No Change **Middleground:** Clearing of Vegetation for Transmission Structure Sites and Access Roads May or May Not be Visible in this View **Background:** No Change	**Foreground:** No Change **Middleground:** - Removal of Existing Pointy and Smooth H-Frame and T-Frame LSTs and Associated Conductors Which are Not Visible in the Existing Environment in this View - Addition of Orderly Spaced Pointy LSTs and Smooth Overlapping Conductors Which Would be Barely Visible to Not Visible in this View (Access Roads May or May Not Be Visible in this View) **Background:** No Change

SECTION D. CONTRAST RATING ☐ SHORT TERM ☒ LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource management objectives? ☒ Yes ☐ No (Explain on reverse side)
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	3. Additional mitigating measures recommended ☐ Yes ☒ No (Explain on reverse side)
ELEMENTS	Form			X				X				X		
	Line			X				X				X		
	Color			X				X				X		
	Texture			X				X				X		

Evaluator's Names	Reviewed and Revised By:
Brenda Eells/CH2M HILL	Mark Chandler/BLM
Liz Cutler/CH2M HILL	Tom Dildine/E&E
Colleen Bredensteiner/CH2M HILL	Erica Brown/E&E

SECTION D. (Continued)

Comments from Item 2.

BLM's Visual Resource Management (VRM) Class III objective is to "…partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape" (BLM, 2007b).

The Proposed Eldorado-Ivanpah Transmission Project would result in a weak change in the form, line, color, and texture for Land/Water Body, Vegetation, and Structures present in the existing environment. The changes to the existing environment would be consistent with the VRM Class III assignment. Construction, Operation, and Decommissioning would result in no adverse effect and no mitigation would be required.

Bureau of Land Management (BLM). 2007b. *BLM Handbook H-8410-1, Visual Resource Inventory*. http://www.blm.gov/nstc/VRM/8431.html. Accessed January 2009.

Additional Mitigating Measures (See item 3)

Construction and operation of the Proposed Eldorado-Ivanpah Transmission Project would be consistent with the BLM land management objectives of VRM Class III and would result in no adverse effect; therefore no mitigation would be required.

Form 8400-4
(September 1985)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

KOP 3 VISUAL CONTRAST RATING WORKSHEET

Date: December 1, 2008	
District: Las Vegas Field Office	
Resource Area:	
Activity (program): Energy Transmission	

SECTION A. PROJECT INFORMATION

1. Project Name: Eldorado-Ivanpah Transmission Project	**4. Location:** **Township** 24 S	**5. Location Sketch:**
2. Key Observation Point: KOP 3: I-15 Looking Southeast (Proposed Eldorado-Ivanpah Transmission Project – Transmission Lines)	**Range** 60 E	The Proposed Transmission Line, Transmission Line Alternative A, Transmission Line Alternative B, Transmission Line Alternative C, Transmission Line Alternative D, or Transmission Line Alternative E would be present in this view. (see Figure 4.1-4). The information on this worksheet pertains to these proposed transmission lines.
3. VRM Class: VRM Class III (Mark Chandler/BLM Las Vegas Field Office 12/15/2008)	**Sections** 29	The view was taken looking southeast. Photograph Date: 11/14/2008

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	**Foreground:** Nearly Flat Land Sloping Towards Valley in the Distance **Middleground:** Flat Valley Floor Including Dry Lake **Background:** Flat Valley Floor, Low Mounded Weathered Hills, Incised Domed Low Mountains **No Water Visible**	**Foreground:** Irregularly Rounded and Pyramidal Low to Medium High Shrubs and Ground Cover **Middleground and Background:** Vegetation Present but Indistinguishable	**Foreground:** Low Fence Posts, Nearly Medium Distribution Poles with Associated Cross Arms, Flat Slightly Elevated Railroad **Middleground:** No Visible Structures **Background:** Nearly Flat Dirt Roads Barely Visible in the Valley Floor
LINE	**Foreground:** Near Horizontal Line **Middleground:** Nearly Horizontal Line with Slight Topographic Variation in the Valley Floor **Background:** Nearly Horizontal Line with Slight Topographic Variation in the Valley Floor, Diagonally Inclined Undulating Over Crest of Hills, Mountains have a Jagged Horizontal Line **No Water Visible**	**Foreground:** Weak Horizontal Line **Middleground:** Nearly Horizontal Line **Background:** Nearly Horizontal Line on Valley Floor, Vegetation Present but Indistinguishable in Mountains and Hills	**Foreground:** Nearly Vertical Fence Posts, Nearly Vertical Distribution Poles, Generally Horizontal Railroad **Middleground:** No Visible Structures **Background:** Barely Visible Diagonal Roads Across Valley Floor, No Visible Structures in Mountains and Hills
COLOR	**Foreground**: Light Golden Tan **Middleground:** Golden Tan, Very Light Tan Dry Lake Bed **Background:** Barely Visible Golden Tan Dirt Roads, Dark Slate Brown Hills, Dark Golden Brown Mountains, Far Mountains have Purplish Cast **No Water Visible**	**Foreground:** Red Brown, Yellow-Green, Dark Brown, Dark Sage Shrubs **Middleground:** Dark Brown and Dark Dusty Green **Background:** Dark Brown and Dark Dusty Green on Valley Floor, Vegetation Indistinguishable but Overall Brown Tone in Mountains and Hills	**Foreground:** Light Red Brown Posts with Weathered White Tops, Medium to Dark Brown Distribution Poles, Light Tan Railroad Berm, Dark Gray to Black Railroad Rails **Middleground:** No Visible Structures **Background:** Barely Visible Golden Tan Dirt Roads on Valley Floor, No Visible Structures in Mountains and Hills
TEXTURE	**Foreground:** Sandy, Rocky **Middleground:** Velvety Smooth Valley Floor and Dry Lake **Background:** Smooth Valley Floor, Smooth, Rough, Pockmarked Mountains **No Water Visible**	**Foreground**: Varied: Randomly Spaced, Bristly, Pointy Shrubs **Middleground and Background:** Vegetation Indistinguishable	**Foreground**: Orderly Space Dull Pointed Fence Posts and Distribution Poles, Flat Smooth Railroad **Middleground:** No Visible Structures **Background:** Barely Visible Smooth Dirt Road on Valley Floor, No Visible Structures in Mountains and Hills

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	**Foreground:** No Change **Middleground:** No Change **Background:** Grading for Transmission Structure Sites and Access Roads Would Not be Visible in this View **No Water Visible**	**Foreground:** No Change **Middleground:** No Change **Background:** Clearing of Vegetation for Transmission Structure Sites and Access Roads Would Not be Visible in this View	**Foreground:** No Change **Middleground:** No Change **Background:** - Removal of Existing Angular H-Frame and T-Frame LSTs and Associated Conductors Which are Not Visible in the Existing Environment in this View - Addition of Near Vertical Angular Lattice Steel Towers (LSTs) and Transmission Conductor Which Would Not be Visible in this View (Access Roads Would Not Be Visible in this View)
LINE	**Foreground:** No Change **Middleground:** No Change **Background:** Grading for Transmission Structure Sites and Access Roads Would Not be Visible in this View **No Water Visible**	**Foreground:** No Change **Middleground:** No Change **Background:** Clearing of Vegetation for Transmission Structure Sites and Access Roads Would Not be Visible in this View	**Foreground:** No Change **Middleground:** No Change **Background:** - Removal of Existing Vertical H-Frame and T-Frame LSTs and Associated Conductors Which are Not Visible in the Existing Environment in this View - Addition of Vertical LSTs and Horizontal Conductors with Slight Sag Which Would Not be Visible in this View (Access Roads Would Not Be Visible in this View)
COLOR	**Foreground:** No Change **Middleground:** No Change **Background:** Grading for Transmission Structure Sites and Access Roads Would Not be Visible in this View **No Water Visible**	**Foreground:** No Change **Middleground:** No Change **Background:** Clearing of Vegetation for Transmission Structure Sites and Access Roads Would Not be Visible in this View	**Foreground:** No Change **Middleground:** No Change **Background:** - Removal of Existing Gray LSTs and Associated Conductors Which are Not Visible in the Existing Environment in this View - Addition of Medium Gray LSTs and Medium Gray Conductors Which Would Not be Visible in this View (Access Roads Would Not Be Visible in this View)
TEXTURE	**Foreground:** No Change **Middleground:** No Change **Background:** Grading for Transmission Structure Sites and Access Roads Would Not be Visible in this View **No Water Visible**	**Foreground:** No Change **Middleground:** No Change **Background:** Clearing of Vegetation for Transmission Structure Sites and Access Roads Would Not be Visible in this View	**Foreground:** No Change **Middleground:** No Change **Background:** - Removal of Existing Pointy and Smooth H-Frame and T-Frame LSTs and Associated Conductors Which are Not Visible in the Existing Environment in this View - Addition of Orderly Spaced Pointy LSTs and Smooth Conductors Which Would Not be Visible in this View (Access Roads Would Not Be Visible in this View)

SECTION D. CONTRAST RATING ☐ SHORT TERM ☒ LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource management objectives? ☒ Yes ☐ No (Explain on reverse side)
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	3. Additional mitigating measures recommended ☐ Yes ☒ No (Explain on reverse side)
ELEMENTS	Form				X				X				X	Evaluator's Names / Reviewed and Revised By:
	Line				X				X				X	Brenda Eells/CH2M HILL — Mark Chandler/BLM
	Color				X				X				X	Liz Cutler/CH2M HILL — Tom Dildine/E&E
	Texture				X				X				X	Colleen Bredensteiner/CH2M HILL — Erica Brown/E&E

SECTION D. (Continued)

Comments from Item 2.

BLM's Visual Resource Management (VRM) Class III objective is to "…partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape" (BLM, 2007b).

The Proposed Eldorado-Ivanpah Transmission Project would result in no change in the form, line, color, and texture for Land/Water Body, Vegetation, and Structures present in the existing environment. The changes to the existing environment would be consistent with the VRM Class III assignment. Construction, Operation, and Decommissioning would result in no adverse effect and no mitigation would be required.

Bureau of Land Management (BLM). 2007b. *BLM Handbook H-8410-1, Visual Resource Inventory*. http://www.blm.gov/nstc/VRM/8431.html. Accessed January 2009.

Additional Mitigating Measures (See item 3)

Construction and operation of the Proposed Eldorado-Ivanpah Transmission Project would be consistent with the BLM land management objectives of VRM Class III and would result in no adverse effect; therefore no mitigation would be required.

Form 8400-4
(September 1985)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

KOP 4 VISUAL CONTRAST RATING WORKSHEET

Date: December 1, 2008	
District: Las Vegas Field Office	
Resource Area:	
Activity (program): Energy Transmission	

SECTION A. PROJECT INFORMATION

1. Project Name: Eldorado-Ivanpah Transmission Project	**4. Location:** **Township** 27 S	**5. Location Sketch:**
2. Key Observation Point: KOP 4: Desert Oasis Apartments (Proposed Eldorado-Ivanpah Transmission Project – Transmission Lines)	**Range** 59 E	The Proposed Transmission Line, Transmission Line Alternative A, Transmission Line Alternative B, Transmission Line Alternative C, Transmission Line Alternative D, or Transmission Line Alternative E would be present in this view. (see Figure 4.1-5). The information on this worksheet pertains to these proposed transmission lines.
3. VRM Class: VRM Class III (Mark Chandler/BLM Las Vegas Field Office 12/15/2008) VRM Class III (Mona Daniels/BLM Needles Field Office 10/16/2008)	**Sections** 8	The view was taken looking southwest. Photograph Date: 10/16/2008

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	**Foreground:** Flat Within Landscaped Area **Middleground:** Not Visible **Background:** Irregularly Weathered Low Mountains with Some Rounding **No Water Visible**	**Foreground:** Near Vertical Low and Tall, Triangular and Rounded Trees, Low Mounded Shrubs in Landscaped Areas, Near Vertical Palm Trees **Middleground:** Not Visible **Background:** Vegetation Indistinguishable	**Foreground:** Near Flat to Abrupt but Minor Elevation Changes Due to Parcel Grading, Drainage, Curbing, and Road Bed, Blocky Buildings, Low Block Wall, Tall Trapezoidal Lattice Steel Towers (LSTs) and Associated Conductors, Bi-Pole T-Framed Rectangular LSTs, Cylindrical Light Poles with Rectangular and Inverted Hemispherical Tops; Vehicles Present **Middleground:** Not Visible **Background:** Structures Not Visible
LINE	**Foreground:** Horizontal Within Landscaped Area **Middleground:** Not Visible **Background:** Irregular Horizontal Skyline with Some Jagged Elements **No Water Visible**	**Foreground:** Broken Irregular Mounded Horizontal Line in Landscaped Areas, Interspersed Near Vertical Palm Trunks **Middleground**: Not Visible **Background:** Vegetation Indistinguishable	**Foreground:** Near Horizontal Roadway and Drainages, Angular to Curved Curbing, Angular Buildings, Stair Stepped Block Wall, Overall T-Frame LSTs with Internal Angles, Near Vertical and Horizontal Insulators, Near Horizontal and Looped Conductors and with Slight Sag, Bi-Pole T-Frame with Internal Angles, Tall T Shaped Light Pole and Tall Light Pole with Oval Cap **Middleground:** Not Visible **Background:** Structures Not Visible
COLOR	**Foreground:** Light to Medium Brown Dirt **Middleground:** Not Visible **Background:** Dark Brown with Shale Green to Purple Tint **No Water Visible**	**Foreground:** Pine Green and Yellow Green Foliage/Brown Tree Trunks, Dark Green Shrubs in Landscaped Areas, Dark Green Vegetation and Dark Brown Tree Trunks **Middleground:** Not Visible **Background**: Vegetation Indistinguishable	**Foreground:** Dark Gray Asphalt, Light Gray Cement Drainage, Weathered Red and Light Gray Curbs, Tan Block Wall, Terracotta Buildings, and Gray LSTs and Conductors, and Black Light Poles **Middleground:** Not Visible **Background:** Structures Not Visible
TEX-TURE	**Foreground:** Coarse Sandy Granular Dirt **Middleground:** Not Visible **Background:** Smoothly Weathered Mountains with Some Sharp Peaks **No Water Visible**	**Foreground:** Interspersed Bristly and Pointy Trees; Sharp Shrubs **Middleground:** Pointy Trees **Background:** Vegetation Indistinguishable	**Foreground:** Uniform Smooth Road and Drainages, Rough Matte Curbs, Pointy to Smooth Buildings with Sharp Edges, Stucco Finished Block Wall, Smooth and Sharp LSTs and Conductors, Smooth and Pointed Light Poles **Middleground:** Not Visible **Background:** Structures Not Visible

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	**Foreground:** Grading for Transmission Structure Sites and Access Roads Would Not be Visible in this View **Middleground:** No Change **Background:** No Change **No Water Visible**	**Foreground:** Clearing of Vegetation for Transmission Structure Sites and Access Roads Would Not be Visible in this View **Middleground:** No Change **Background:** No Change	**Foreground:** - Removal of Existing Tall Trapezoidal Lattice Steel Towers (LSTs) and Associated Conductors, and Bi-Pole T-Framed Rectangular LSTs Which are Visible in the Existing Environment in this View - Addition of Tall Trapezoidal Lattice Steel Towers (LSTs) and Associated Conductors Which Would be Visible in this View (Access Roads Would Not Be Visible in this View) **Middleground:** No Change **Background:** No Change
LINE	**Foreground:** Grading for Transmission Structure Sites and Access Roads Would Not be Visible in this View **Middleground:** No Change **Background:** No Change **No Water Visible**	**Foreground:** Clearing of Vegetation for Transmission Structure Sites and Access Roads Would Not be Visible in this View **Middleground:** No Change **Background:** No Change	**Foreground:** - Removal of Existing Overall T-Frame LSTs with Internal Angles, Near Vertical and Horizontal Insulators, Near Horizontal and Looped Conductors and with Slight Sag, and Bi-Pole T-Frame with Internal Angles Which are Visible in the Existing Environment in this View - Addition of Near Vertical LSTs with Internal Angles (LST) and Near Horizontal Conductors with Slight Sag Which Would be Visible in this View (Access Roads Would Not Be Visible in this View) **Middleground:** No Change **Background:** No Change
COLOR	**Foreground:** Grading for Transmission Structure Sites and Access Roads Would Not be Visible in this View **Middleground:** No Change **Background:** No Change **No Water Visible**	**Foreground:** Clearing of Vegetation for Transmission Structure Sites and Access Roads Would Not be Visible in this View **Middleground:** No Change **Background:** No Change	**Foreground:** - Removal of Existing Gray LSTs and Conductors Which are Visible in the Existing Environment in this View - Addition of Gray LSTs and Associated Gray Conductors Which Would be Visible in this View (Access Roads Would Not Be Visible in this View) **Middleground:** No Change **Background:** No Change
TEXTURE	**Foreground:** Grading for Transmission Structure Sites and Access Roads Would Not be Visible in this View **Middleground:** No Change **Background:** No Change **No Water Visible**	**Foreground:** Clearing of Vegetation for Transmission Structure Sites and Access Roads Would Not be Visible in this View **Middleground:** No Change **Background:** No Change	**Foreground:** - Removal of Existing Smooth and Sharp LSTs and Conductors Which are Visible in the Existing Environment in this View - Addition of Pointy LSTs and Smooth Conductors Which Would be Visible in this View (Access Roads Would Not Be Visible in this View) **Middleground:** No Change **Background:** No Change

SECTION D. CONTRAST RATING ☐ SHORT TERM ☒ LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource management objectives? ☒ Yes ☐ No (Explain on reverse side)
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	3. Additional mitigating measures recommended ☐ Yes ☒ No (Explain on reverse side)
ELEMENTS	Form				X				X		X			Evaluator's Names / Reviewed and Revised By:
	Line				X				X		X			Brenda Eells/CH2M HILL — Mark Chandler/BLM
	Color				X				X		X			Liz Cutler/CH2M HILL — Tom Dildine/E&E
	Texture				X				X		X			Colleen Bredensteiner/CH2M HILL — Erica Brown/E&E

SECTION D. (Continued)

Comments from Item 2.

BLM's Visual Resource Management (VRM) Class III objective is to "…partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape" (BLM, 2007b).

The Proposed Eldorado-Ivanpah Transmission Project would result in no change in the form, line, color, and texture for Land/Water Body and Vegetation and moderate change in the form, line, color, and texture for Structures present in the existing environment. The changes to the existing environment would be consistent with the VRM Class III assignment. Construction, Operation, and Decommissioning would result in no adverse effect and no mitigation would be required.

Bureau of Land Management (BLM). 2007b. *BLM Handbook H-8410-1, Visual Resource Inventory*. http://www.blm.gov/nstc/VRM/8431.html. Accessed January 2009.

Additional Mitigating Measures (See item 3)

Construction and operation of the Proposed Eldorado-Ivanpah Transmission Project would be consistent with the BLM land management objectives of VRM Class III and would result in no adverse effect; therefore no mitigation would be required.

Form 8400-4
(September 1985)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

KOP 5 VISUAL CONTRAST RATING WORKSHEET

Date: December 1, 2008	
District: Needles Field Office	
Resource Area:	
Activity (program): Energy Transmission	

SECTION A. PROJECT INFORMATION

1. Project Name: Eldorado-Ivanpah Transmission Project	**4. Location:** **Township** 17 N	**5. Location Sketch:**
2. Key Observation Point: KOP 5: Ivanpah Lake East of I-15 (Proposed Eldorado-Ivanpah Transmission Project – Transmission Lines)	**Range** 15 E	The Proposed Transmission Line, Transmission Line Alternative A, Transmission Line Alternative B, Transmission Line Alternative C, Transmission Line Alternative D, or Transmission Line Alternative E would be present in this view. (see Figure 4.1-6). The information on this worksheet pertains to these proposed transmission lines.
3. VRM Class: VRM Class III (Mona Daniels/BLM Needles Field Office 10/16/2008)	**Sections** 20	The view was taken looking north-northwest. Photograph Date: 10/16/2008

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	**Foreground:** Near Flat Dry Lake Bed **Middleground:** Near Flat Dry Lake Bed, Mounded Hills and Weathered Mountains **Background:** Weathered Mountains **No Water Visible**	**Foreground:** Single Short Domed Shrub **Middleground:** Vegetation may be Present but Not Distinguishable in the View **Background:** Vegetation Not Visible	**Foreground:** Slightly Elevated Roadway on Rectangular Base, Short Near Vertical Cylindrical Poles **Middleground:** Slightly Elevated Roadway on Rectangular Base, Triangular Lattice Steel Tower (LST) and Associate Conductors, Square Buildings and Signs, and Conical Rooftops **Background:** Structures Not Visible
LINE	**Foreground: :** Near Horizontal Dry Lake **Middleground:** Near Horizontal Dry Lake, Gently Undulating Crest of Hills, Smooth to Nearly Jagged Mountain Skyline **Background:** Nearly Jagged Mountain Skyline **No Water Visible**	**Foreground:** Single Circle **Middleground:** Vegetation may be Present but Not Distinguishable in the View **Background:** Vegetation Not Visible	**Foreground:** Horizontal I-15, Vertical Poles **Middleground:** Horizontal I-15, Vertical LST with Internal Angles, Near Horizontal Lines Associated with Conductors with Slight Sag, Complex Pattern of Vertical and Horizontal Lines Associated with the Skyline of Primm, **Background:** Structures Not Visible
COLOR	**Foreground:** Striated Light and Golden Tan, **Middleground:** Striated Light and Golden Tan Dry Lake; Variations of Light Tan, Dark Brown, Sandy Beige, Wine-Purple, and Slate in the Hills; Mottled Gray and Dark Purple Interspersed with Dark Magenta in the Mountains **Background:** Purple Cast Mountains **No Water Visible**	**Foreground:** Dark Green Shrub **Middleground:** Vegetation may be Present but Not Distinguishable in the View **Background:** Vegetation Not Visible	**Foreground:** Light Gray Roadway Shoulder, Medium Brown Poles **Middleground:** Light Gray Roadway Shoulder, Dull Gray LST and Conductors, Light Tan Buildings with Green, Black, and Red Signs, Red Rooftop **Background:** Structures Not Visible
TEX-TURE	**Foreground:** Smooth to Slightly Coarse and Cracked Dry Lake Bed **Middleground:** Smooth to Slightly Coarse and Cracked Dry Lake Bed, Discontinuously Rough and Smooth Mountains and Hills **Background:** Smoothly Weathered Mountains **No Water Visible**	**Foreground:** Dense Scrubby Shrub **Middleground:** Vegetation may be Present but Not Distinguishable in the View **Background:** Vegetation Not Visible	**Foreground:** Flat Rough Surface Associated with I-15, Dull Pointed Uniformly Spaced Poles **Middleground:** Flat Rough Surface Associated with I-15, Pointy Topped LST, Smooth Conductors; Smooth, Blocky, and Pointy Buildings of Primm **Background:** Structures Not Visible

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	**Foreground:** No Change **Middleground:** Grading for Transmission Structure Sites and Access Roads Would Not be Visible in this View **Background:** No Change **No Water Visible**	**Foreground:** No Change **Middleground:** Clearing of Vegetation for Transmission Structure Sites and Access Roads Would Not be Visible in this View **Background:** No Change	**Foreground:** No Change **Middleground:** - Removal of Existing Angular H-Frame and T-Frame LSTs and Associated Conductors Which are Barely Visible to Not Visible in the Existing Environment in this View - Addition of Triangular Lattice Steel Towers (LST) and Associated Transmission Conductors Which Would be Barely Visible to Not Visible in this View (Access Roads Would Not Be Visible in this View) **Background:** No Change
LINE	**Foreground:** No Change **Middleground:** Grading for Transmission Structure Sites and Access Roads Would Not be Visible in this View **Background:** No Change **No Water Visible**	**Foreground:** No Change **Middleground:** Clearing of Vegetation for Transmission Structure Sites and Access Roads Would Not be Visible in this View **Background:** No Change	**Foreground:** No Change **Middleground:** - Removal of Existing Vertical H-Frame and T-Frame LSTs and Associated Conductors Which are Barely Visible to Not Visible in the Existing Environment in this View - Addition of Vertical LST with Internal Angles and Near Horizontal Lines Associated Conductors with Slight Sag Which Would be Barely Visible to Not Visible in this View (Access Roads Would Not Be Visible in this View) **Background:** No Change
COLOR	**Foreground:** No Change **Middleground:** Grading for Transmission Structure Sites and Access Roads Would Not be Visible in this View **Background:** No Change **No Water Visible**	**Foreground:** No Change **Middleground:** Clearing of Vegetation for Transmission Structure Sites and Access Roads Would Not be Visible in this View **Background:** No Change	**Foreground:** No Change **Middleground:** - Removal of Existing Gray LSTs and Associated Conductors Which are Barely Visible to Not Visible in the Existing Environment in this View - Addition of Dull Gray LST and Dull Gray Conductors Which Would be Barely Visible to Not Visible in this View (Access Roads Would Not Be Visible in this View) **Background:** No Change
TEXTURE	**Foreground:** No Change **Middleground:** Grading for Transmission Structure Sites and Access Roads Would Not be Visible in this View **Background:** No Change **No Water Visible**	**Foreground:** No Change **Middleground:** Clearing of Vegetation for Transmission Structure Sites and Access Roads Would Not be Visible in this View **Background:** No Change	**Foreground:** No Change **Middleground:** - Removal of Existing Pointy and Smooth H-Frame and T-Frame LSTs and Associated Conductors Which are Barely Visible to Not Visible in the Existing Environment in this View - Addition of Pointy Topped LST and Smooth Conductors Which Would be Barely Visible to Not Visible in this View (Access Roads Would Not Be Visible in this View) **Background:** No Change

SECTION D. CONTRAST RATING ☐ SHORT TERM ☒ LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource management objectives? ☒ Yes ☐ No (Explain on reverse side)
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	3. Additional mitigating measures recommended ☐ Yes ☒ No (Explain on reverse side)
ELEMENTS	Form				X				X			X		Evaluator's Names / Reviewed and Revised By:
	Line				X				X			X		Brenda Eells/CH2M HILL — Mark Chandler/BLM
	Color				X				X			X		Liz Cutler/CH2M HILL — Tom Dildine/E&E
	Texture				X				X			X		Colleen Bredensteiner/CH2M HILL — Erica Brown/E&E

SECTION D. (Continued)

Comments from Item 2.

BLM's Visual Resource Management (VRM) Class III objective is to "…partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape" (BLM, 2007b).

The Proposed Eldorado-Ivanpah Transmission Project would result in no change in the form, line, color, and texture for Land/Water Body and Vegetation and weak change in the form, line, color, and texture for Structures present in the existing environment. The changes to the existing environment would be consistent with the VRM Class III assignment. Construction, Operation, and Decommissioning would result in no adverse effect and no mitigation would be required.

Bureau of Land Management (BLM). 2007b. *BLM Handbook H-8410-1, Visual Resource Inventory*. http://www.blm.gov/nstc/VRM/8431.html. Accessed January 2009.

Additional Mitigating Measures (See item 3)

Construction and operation of the Proposed Eldorado-Ivanpah Transmission Project would be consistent with the BLM land management objectives of VRM Class III and would result in no adverse effect; therefore no mitigation would be required.

Form 8400-4
(September 1985)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

KOP 6 VISUAL CONTRAST RATING WORKSHEET

Date: December 1, 2008	
District: Needles Field Office	
Resource Area:	
Activity (program): Energy Transmission	

SECTION A. PROJECT INFORMATION

1. Project Name: Eldorado-Ivanpah Transmission Project	**4. Location:** **Township** 17 N	**5. Location Sketch:**
2. Key Observation Point: KOP 5: Ivanpah Dry Lake - East of I-15 (Transmission Line Alternative D) (Proposed Eldorado-Ivanpah Transmission Project – Transmission Line Alternative D)	**Range** 15 E	The Proposed Transmission Line, Transmission Line Alternative A, Transmission Line Alternative B, Transmission Line Alternative C, Transmission Line Alternative D, or Transmission Line Alternative E would be present in this view. (see Figure 4.1-16). The information on this worksheet pertains to Transmission Line Alternative D.
3. VRM Class: VRM Class III (Mona Daniels/BLM Needles Field Office 10/16/2008)	**Sections** 20	The view was taken looking north-northwest. Photograph Date: 10/16/2008

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	**Foreground:** Near Flat Dry Lake Bed **Middleground:** Near Flat Dry Lake Bed, Mounded Hills and Weathered Mountains **Background:** Weathered Mountains **No Water Visible**	**Foreground:** Single Short Domed Shrub **Middleground:** Vegetation may be Present but Not Distinguishable in the View **Background:** Vegetation Not Visible	**Foreground:** Slightly Elevated Roadway on Rectangular Base, Short Near Vertical Cylindrical Poles **Middleground:** Slightly Elevated Roadway on Rectangular Base, Triangular Lattice Steel Tower (LST) and Associate Conductors, Square Buildings and Signs, and Conical Rooftops **Background:** Structures Not Visible
LINE	**Foreground: :** Near Horizontal Dry Lake **Middleground:** Near Horizontal Dry Lake, Gently Undulating Crest of Hills, Smooth to Nearly Jagged Mountain Skyline **Background:** Nearly Jagged Mountain Skyline **No Water Visible**	**Foreground:** Single Circle **Middleground:** Vegetation may be Present but Not Distinguishable in the View **Background:** Vegetation Not Visible	**Foreground:** Horizontal I-15, Vertical Poles **Middleground:** Horizontal I-15, Vertical LST with Internal Angles, Near Horizontal Lines Associated with Conductors with Slight Sag, Complex Pattern of Vertical and Horizontal Lines Associated with the Skyline of Primm, **Background:** Structures Not Visible
COLOR	**Foreground:** Striated Light and Golden Tan, **Middleground:** Striated Light and Golden Tan Dry Lake; Variations of Light Tan, Dark Brown, Sandy Beige, Wine-Purple, and Slate in the Hills; Mottled Gray and Dark Purple Interspersed with Dark Magenta in the Mountains **Background:** Purple Cast Mountains **No Water Visible**	**Foreground:** Dark Green Shrub **Middleground:** Vegetation may be Present but Not Distinguishable in the View **Background:** Vegetation Not Visible	**Foreground:** Light Gray Roadway Shoulder, Medium Brown Poles **Middleground:** Light Gray Roadway Shoulder, Dull Gray LST and Conductors, Light Tan Buildings with Green, Black, and Red Signs, Red Rooftop **Background:** Structures Not Visible
TEX-TURE	**Foreground:** Smooth to Slightly Coarse and Cracked Dry Lake Bed **Middleground:** Smooth to Slightly Coarse and Cracked Dry Lake Bed, Discontinuously Rough and Smooth Mountains and Hills **Background:** Smoothly Weathered Mountains **No Water Visible**	**Foreground:** Dense Scrubby Shrub **Middleground:** Vegetation may be Present but Not Distinguishable in the View **Background:** Vegetation Not Visible	**Foreground:** Flat Rough Surface Associated with I-15, Dull Pointed Uniformly Spaced Poles **Middleground:** Flat Rough Surface Associated with I-15, Pointy Topped LST, Smooth Conductors; Smooth, Blocky, and Pointy Buildings of Primm **Background:** Structures Not Visible

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	**Foreground:** - Grading for Structure Sites and Access Roads May or May Not be Visible in this View **Middleground:** No Change **Background:** No Change **No Water Visible**	**Foreground:** - Clearing of Vegetation for Structure Sites and Access Roads May or May Not be Visible in this View **Middleground:** No Change **Background:** No Change	**Foreground:** - Addition of Triangular Lattice Steel Towers (LST) and Associated Transmission Conductors Some of Which Would Visible in this View (Access Roads May or May Not Be Visible in this View) **Middleground:** - Removal of Existing Angular H-Frame and T-Frame LSTs and Associated Conductors Which are Barely Visible to Not Visible in the Existing Environment in this View **Background:** No Change
LINE	**Foreground:** - Grading for Structure Sites and Access Roads May or May Not be Visible in this View **Middleground:** No Change **Background:** No Change **No Water Visible**	**Foreground:** - Clearing of Vegetation for Structure Sites and Access Roads May or May Not be Visible in this View **Middleground:** No Change **Background:** No Change	**Foreground:** - Addition of Vertical LST with Internal Angles and Near Horizontal Lines Associated Conductors with Slight Sag Some of Which Would be Barely Visible in this View (Access Roads May or May Not Be Visible in this View) **Middleground:** - Removal of Existing Vertical H-Frame and T-Frame LSTs and Associated Conductors Which are Barely Visible to Not Visible in the Existing Environment in this View **Background:** No Change
COLOR	**Foreground:** - Grading for Structure Sites and Access Roads May or May Not be Visible in this View **Middleground:** No Change **Background:** No Change **No Water Visible**	**Foreground:** - Clearing of Vegetation for Structure Sites and Access Roads May or May Not be Visible in this View **Middleground:** No Change **Background:** No Change	**Foreground:** - Addition of Dull Gray LST and Dull Gray Conductors Some of Which Would be Visible in this View (Access Roads May or May Not Be Visible in this View) **Middleground:** - Removal of Existing Gray LSTs and Associated Conductors Which are Barely Visible to Not Visible in the Existing Environment in this View **Background:** No Change
TEXTURE	**Foreground:** - Grading for Structure Sites and Access Roads May or May Not be Visible in this View **Middleground:** No Change **Background:** No Change **No Water Visible**	**Foreground:** - Clearing of Vegetation for Structure Sites and Access Roads May or May Not be Visible in this View **Middleground:** No Change **Background:** No Change	**Foreground:** - Addition of Pointy Topped LST and Smooth Conductors Some of Which Would Visible in this View (Access Roads May or May Not Be Visible in this View) No Change **Middleground:** - Removal of Existing Pointy and Smooth H-Frame and T-Frame LSTs and Associated Conductors Which are Barely Visible to Not Visible in the Existing Environment in this View **Background:** No Change

SECTION D. CONTRAST RATING ☐ SHORT TERM ☒ LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource management objectives? ☒ Yes ☐ No (Explain on reverse side)
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	3. Additional mitigating measures recommended ☐ Yes ☒ No (Explain on reverse side)
ELEMENTS	Form			X				X				X		Evaluator's Names / Reviewed and Revised By:
	Line			X				X				X		Brenda Eells/CH2M HILL — Mark Chandler/BLM
	Color			X				X				X		Liz Cutler/CH2M HILL — Tom Dildine/E&E
	Texture			X				X				X		Colleen Bredensteiner/CH2M HILL — Erica Brown/E&E

SECTION D. (Continued)

Comments from Item 2.

BLM's Visual Resource Management (VRM) Class III objective is to "…partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape" (BLM, 2007b).

The Proposed Eldorado-Ivanpah Transmission Project would result in a weak change in the form, line, color, and texture for Land/Water Body, Vegetation, and Structures present in the existing environment. The changes to the existing environment would be consistent with the VRM Class III assignment. Construction, Operation, and Decommissioning would result in no adverse effect and no mitigation would be required.

Bureau of Land Management (BLM). 2007b. *BLM Handbook H-8410-1, Visual Resource Inventory*. http://www.blm.gov/nstc/VRM/8431.html. Accessed January 2009.

Additional Mitigating Measures (See item 3)

Construction and operation of the Proposed Eldorado-Ivanpah Transmission Project would be consistent with the BLM land management objectives of VRM Class III and would result in no adverse effect; therefore no mitigation would be required.

Form 8400-4
(September 1985)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

KOP 7 VISUAL CONTRAST RATING WORKSHEET

Date: December 1, 2008	
District: Needles Field Office	
Resource Area:	
Activity (program): Energy Transmission	

SECTION A. PROJECT INFORMATION

1. Project Name: Eldorado-Ivanpah Transmission Project	**4. Location:** **Township** 17 N	**5. Location Sketch:**
2. Key Observation Point: KOP 6: I-15 Driving North (Proposed Eldorado-Ivanpah Transmission Project – Transmission Lines)	**Range** 15 E	The Proposed Transmission Line, Transmission Line Alternative A, Transmission Line Alternative B, Transmission Line Alternative C, Transmission Line Alternative D, or Transmission Line Alternative E would be present in this view. (see Figure 4.1-7). The information on this worksheet pertains to these proposed transmission lines.
3. VRM Class: VRM Class III (Mona Daniels/BLM Needles Field Office 10/16/2008)	**Sections** 19	The view was taken looking north-northeast. Photograph Date: 10/16/2008

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	**Foreground:** Flat Dry Lake **Middleground:** Flat Dry Lake, Low Domed Hills at Edge of View **Background:** Irregularly Weathered Mountains Range **No Water Visible**	**Foreground:** Low Mounded Shrubs and Interspersed Grasses **Middleground and Background:** Vegetation Indistinguishable	**Foreground:** Flat I-15, Short Near Vertical Fence Posts and Road Markers **Middleground:** Flat I-15, Tall and Medium Angular Lattice Steel Towers (LSTs); Short Vertical H-Frames; Square Buildings and Signs, and Conical Rooftops; and Rectangular Overpass **Background:** Structures Not Visible
LINE	**Foreground:** Horizontal Dry Lake **Middleground:** Horizontal Dry Lake, Irregular Horizontal Hill Line at Edge of View **Background:** Irregularly Weathered Rugged Skyline **No Water Visible**	**Foreground:** Distinct Diagonal Line Paralleling Road **Middleground and Background:** Vegetation Indistinguishable	**Foreground:** Strong Diagonal Line of I-15 Bisects Valley Floor, Regular Diagonal Fence Wire on Vertical Fence Poles **Middleground:** Strong Diagonal Line of I-15 Bisects Valley Floor, Vertical LST with Internal Angles, Near Horizontal Lines Associated with Conductors with Slight Sag, Vertical H-frames Transmission Structures, Complex Pattern of Vertical and Horizontal Lines Associated with the Skyline of Primm; Horizontal Overpass **Background:** Structures Not Visible
COLOR	**Foreground:** Golden Tan Dry Lake **Middleground:** Golden Tan Dry Lake, Golden Desert Brown Hills **Background:** Slate Brown to Wine-Purple Mountains **No Water Visible**	**Foreground:** Golden Tan and Light Olive Shrubs with Intermittent Medium Brown Grasses **Middleground and Background:** Vegetation Indistinguishable	**Foreground**: Dark Gray Asphalt, Faded Yellow and White Roadway Lines; White, Yellow, and Blue Signs; Medium Gray Fence Posts and Wires **Middleground:** Dark Gray Asphalt, Dull Gray LSTs and Conductors, Red, Yellow, White, and Brown Buildings, White Overpass **Background:** Not Visible
TEX-TURE	**Foreground:** Slightly Rough where Gravel Present **Middleground:** Lumpy Hills **Background:** Pointed Mountain Tops **No Water Visible**	**Foreground:** Bristly Rough Shrubs and Soft Grasses **Middleground and Background:** Vegetation Indistinguishable	**Foreground:** Smooth I-15; Dull pointed Fence Posts; and Smooth Fence Wire **Middleground:** Smooth I-15; Pointy LSTs and Smooth Conductors; Lumpy Buildings; and Smooth Overpass **Background:** Structures Not Visible

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	**Foreground:** No Change **Middleground:** Grading for Transmission Structure Sites and Access Roads Would Not be Visible in this View **Background:** No Change **No Water Visible**	**Foreground:** No Change **Middleground:** Clearing of Vegetation for Transmission Structure Sites and Access Roads Would Not be Visible in this View **Background:** No Change	**Foreground:** No Change **Middleground:** - Removal of Existing Short Vertical H-Frame LSTs and Associated Conductors Which are Barely Visible to Not Visible in the Existing Environment in this View - Addition of Angular Lattice Steel Towers (LSTs) and Conductors Which Would be Barely Visible in this View (Access Roads Would Not Be Visible in this View) **Background:** No Change
LINE	**Foreground:** No Change **Middleground:** Grading for Transmission Structure Sites and Access Roads Would Not be Visible in this View **Background:** No Change **No Water Visible**	**Foreground:** No Change **Middleground:** Clearing of Vegetation for Transmission Structure Sites and Access Roads Would Not be Visible in this View **Background:** No Change	**Foreground:** No Change **Middleground:** - Removal of Existing Vertical H-Frame LSTs and Associated Near Horizontal Conductors with Slight Sag Which are Barely Visible to Not Visible in the Existing Environment in this View - Addition of Vertical LST with Internal Angles and Near Horizontal Lines Associated Conductors with Slight Sag Which Would be Barely Visible in this View (Access Roads Would Not Be Visible in this View) **Background:** No Change
COLOR	**Foreground:** No Change **Middleground:** Grading for Transmission Structure Sites and Access Roads Would Not be Visible in this View **Background:** No Change **No Water Visible**	**Foreground:** No Change **Middleground:** Clearing of Vegetation for Transmission Structure Sites and Access Roads Would Not be Visible in this View **Background:** No Change	**Foreground:** No Change **Middleground:** - Removal of Existing Dull Gray H-Frame LSTs and Associated Conductors Which are Barely Visible to Not Visible in the Existing Environment in this View - Addition of Dull Gray LSTs and Gray Conductors Which Would be Barely Visible in this View (Access Roads Would Not Be Visible in this View) **Background:** No Change
TEXTURE	**Foreground:** No Change **Middleground:** Grading for Transmission Structure Sites and Access Roads Would Not be Visible in this View **Background:** No Change **No Water Visible**	**Foreground:** No Change **Middleground:** Clearing of Vegetation for Transmission Structure Sites and Access Roads Would Not be Visible in this View **Background:** No Change	**Foreground:** No Change **Middleground:** - Removal of Existing Pointy H-Frame LSTs and Associated Smooth Conductors Which are Barely Visible to Not Visible in the Existing Environment from this View - Addition of Pointy LSTs and Smooth Conductors Which Would be Barely Visible in this View (Access Roads Would Not Be Visible in this View) **Background:** No Change

SECTION D. CONTRAST RATING ☐ SHORT TERM ☒ LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource management objectives? ☒ Yes ☐ No (Explain on reverse side)
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	3. Additional mitigating measures recommended ☐ Yes ☒ No (Explain on reverse side)
ELEMENTS	Form				X				X			X		Evaluator's Names / Reviewed and Revised By:
	Line				X				X			X		Brenda Eells/CH2M HILL / Mark Chandler/BLM
	Color				X				X			X		Liz Cutler/CH2M HILL / Tom Dildine/E&E
	Texture				X				X			X		Colleen Bredensteiner/CH2M HILL / Erica Brown/E&E

SECTION D. (Continued)

Comments from Item 2.

BLM's Visual Resource Management (VRM) Class III objective is to "…partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape" (BLM, 2007b).

The Proposed Eldorado-Ivanpah Transmission Project would result in no change in the form, line, color, and texture for Land/Water Body and Vegetation and weak change in the form, line, color, and texture for Structures present in the existing environment. The changes to the existing environment would be consistent with the VRM Class III assignment. Construction, Operation, and Decommissioning would result in no adverse effect and no mitigation would be required.

Bureau of Land Management (BLM). 2007b. *BLM Handbook H-8410-1, Visual Resource Inventory*. http://www.blm.gov/nstc/VRM/8431.html. Accessed January 2009.

Additional Mitigating Measures (See item 3)

Construction and operation of the Proposed Eldorado-Ivanpah Transmission Project would be consistent with the BLM land management objectives of VRM Class III and would result in no adverse effect; therefore no mitigation would be required.

Form 8400-4
(September 1985)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date: December 1, 2008	
District: Las Vegas Field Office	
Resource Area:	
Activity (program): Energy Transmission	

SECTION A. PROJECT INFORMATION

1. Project Name: Eldorado-Ivanpah Transmission Project	**4. Location:** **Township** 25 N	**5. Location Sketch:**
2. Key Observation Point: KOP 7: Highway 95 View Looking Southwest (Proposed Eldorado-Ivanpah Transmission Project – Eldorado Substation and Transmission Lines)	**Range** 63 E	The Eldorado Substation, the Proposed Transmission Line, Transmission Line Alternative A, Transmission Line Alternative B, Transmission Line Alternative C, Transmission Line Alternative D, or Transmission Line Alternative E would be present in this view. (see Figure 4.1-8). The information on this worksheet pertains to the Eldorado Substation and these proposed transmission lines.
3. VRM Class: VRM Class III (Unclassified Boulder City Evaluated for VRM Class III per Mark Chandler/BLM Vegas Field Office 11/14/2008 and 12/15/2008)	**Sections** 4	The view was taken looking southwest. Photograph Date: 11/14/2008.

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	**Foreground**: Flat Valley Floor Sloping Downhill from Foreground to Middleground **Middleground:** Flat Wide Valley Floor with Some Topographic Variation, Alluvial Fans at Base of Mountain Range **Background:** Alluvial Fans at Base of Mountain Range and Irregularly Weathered Mountain Range **No Water Visible**	**Foreground:** Low Rounded Scraggly Shrubs **Middleground and Background:** Vegetation Indistinguishable	**Foreground:** Low Wire Fence with Near Vertical Metal Posts and Horizontal Fence Wire **Middleground:** Flat, Slightly Raised Solar Facility; Low Lying Cylindrical and Square to Rectangular Structures and Near Horizontal Solar Panels; and Near Vertical Poles; Vertical Poles and Equipment and Blocky Low Buildings Associated with Two Substations Located Beyond the Solar Facility **Background:** No Visible Structures
LINE	**Foreground:** Near Horizontal Line **Middleground:** Near Horizontal Valley; Diagonally Inclined Alluvial Fans **Background:** Diagonally Inclined Alluvial Fans; Irregular Horizontal Skyline **No Water Visible**	**Foreground:** Generally Horizontal Undulating Shrub Line **Middleground and Background:** Vegetation Indistinguishable	**Foreground:** Weak Horizontal Fence Wire on Vertical Fence Poles **Middleground:** Uniform Horizontal Solar Facility and Complex Horizontal and Vertical Lines Associated with Support Buildings and Poles; Complex Horizontal and Vertical Lines Associated with Support Buildings and Poles Associated with Two Substations Beyond Solar Facility **Background:** No Visible Structures
COLOR	**Foreground:** Light Tan to Ash Brown **Middleground:** Mostly Indistinguishable Due to Vegetation and Paved Areas, Some Light Tan to Golden Tan Visible on Valley Floor; Warm Pink, Dark Golden Brown, Gray Brown Alluvial Fans **Background:** Warm Pink, Dark Golden Brown, Gray Brown, Sage Green **No Water Visible**	**Foreground:** Tan and Light Green and Dark Red-Brown **Middleground:** Dusty Greens and Brown **Background:** Vegetation Indistinguishable	**Foreground:** Light Gray Wire, Light and Dark Gray and Green Fence Posts with White Posts Tops **Middleground:** Reflective Blue Solar Panels; Light Yellow and Light Gray Buildings, and Light Gray Poles **Background:** No Visible Structures
TEX-TURE	**Foreground:** Sandy, Gravelly, Small Random Rocks **Middleground:** Smooth Valley Floor; Intermittent Rough and Smooth Fans **Background:** Intermittent Rough and Smooth Fans and Rugged Peaks **No Water Visible**	**Foreground:** Randomly Spaced, Bristly to Sharp Shrubs **Middleground and Background:** Vegetation Indistinguishable	**Foreground:** Orderly Dull Pointed Fence Posts and Smooth Fence Wire **Middleground:** Smooth Solar Paneling, Pointy and Smooth Buildings, and Sharp Poles **Background:** No Visible Structures

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	**Foreground:** No Change **Middleground:** Grading for Transmission Structure Sites and Access Roads Would Not be Visible in this View **Background:** No Change **No Water Visible**	**Foreground:** No Change **Middleground:** Clearing of Vegetation for Transmission Structure Sites and Access Roads Would Not be Visible in this View **Background**: No Change	**Foreground:** No Change **Middleground:** - Removal of Existing Short Vertical H-Frame LSTs, T-Frame LSTs, and Associated Conductors Which are Not Visible in the Existing Environment in this View - Expansion of the Eldorado Substation Switchyard within the Existing Fence and Addition of Angular Lattice Steel Towers (LSTs) and Conductors Which Would Not be Visible in this View (Access Roads Would Not Be Visible in this View) **Background**: No Change
LINE	**Foreground:** No Change **Middleground:** Grading for Transmission Structure Sites and Access Roads Would Not be Visible in this View **Background:** No Change **No Water Visible**	**Foreground:** No Change **Middleground:** Clearing of Vegetation for Transmission Structure Sites and Access Roads Would Not be Visible in this View **Background**: No Change	**Foreground:** No Change **Middleground:** - Removal of Existing Vertical H-Frame LSTs, T-Frame LSTs, and Associated Near Horizontal Conductors with Slight Sag Which are Not Visible in the Existing Environment in this View - Expanded Switchyard Associated with the Eldorado Substation, Vertical LST with Internal Angles and Additional Near Horizontal Conductors with Slight Sag Which Would not be Visible in this View (Access Roads Would Not Be Visible in this View) - **Background:** No Change **Background**: No Change
COLOR	**Foreground:** No Change **Middleground:** Grading for Transmission Structure Sites and Access Roads Would Not be Visible in this View **Background:** No Change **No Water Visible**	**Foreground:** No Change **Middleground:** Clearing of Vegetation for Transmission Structure Sites and Access Roads Would Not be Visible in this View **Background**: No Change	**Foreground:** No Change **Middleground:** - Removal of Existing Dull Gray H-Frame LSTs, T-Frame LSTs, and Associated Conductors Which are Not Visible in the Existing Environment in this View - Addition of Gray Substation Equipment, Gray LSTs, and Conductors Which Would not be Visible in this View (Access Roads Would Not Be Visible in this View) **Background**: No Change
TEXTURE	**Foreground:** No Change **Middleground:** Grading for Transmission Structure Sites and Access Roads Would Not be Visible in this View **Background:** No Change **No Water Visible**	**Foreground:** No Change **Middleground:** Clearing of Vegetation for Transmission Structure Sites and Access Roads Would Not be Visible in this View **Background**: No Change	**Foreground:** No Change **Middleground:** - Removal of Existing Pointy H-Frame LSTs, T-Frame LSTs, and Associated Smooth Conductors Which are Not Visible in the Existing Environment in this View - Addition of Substation Equipment, Pointy Towers, and Smooth Conductors Which Would not be Visible in this View (Access Roads Would Not Be Visible in this View) **Background**: No Change

SECTION D. CONTRAST RATING ☐ SHORT TERM ☒ LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource management objectives? ☒ Yes ☐ No (Explain on reverse side)
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	3. Additional mitigating measures recommended ☐ Yes ☒ No (Explain on reverse side)
ELEMENTS	Form				X				X				X	
	Line				X				X				X	
	Color				X				X				X	
	Texture				X				X				X	

Evaluator's Names	Reviewed and Revised By:
Brenda Eells/CH2M HILL	Mark Chandler/BLM
Liz Cutler/CH2M HILL	Tom Dildine/E&E
Colleen Bredensteiner/CH2M HILL	Erica Brown/E&E

SECTION D. (Continued)

Comments from Item 2.

BLM's Visual Resource Management (VRM) Class III objective is to "…partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape" (BLM, 2007b).

The Proposed Eldorado-Ivanpah Transmission Project would result in no change in the form, line, color, and texture for Land/Water Body, Vegetation, and Structures present in the existing environment. The changes to the existing environment would be consistent with the VRM Class III assignment. Construction, Operation, and Decommissioning would result in no adverse effect and no mitigation would be required.

Bureau of Land Management (BLM). 2007b. *BLM Handbook H-8410-1, Visual Resource Inventory*. http://www.blm.gov/nstc/VRM/8431.html. Accessed January 2009.

Additional Mitigating Measures (See item 3)

Construction and operation of the Proposed Eldorado-Ivanpah Transmission Project would be consistent with the BLM land management objectives of VRM Class III and would result in no adverse effect; therefore no mitigation would be required.

Form 8400-4
(September 1985)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

KOP 8 VISUAL CONTRAST RATING WORKSHEET

Date: December 1, 2008	
District: Needles Field Office	
Resource Area:	
Activity (program): Energy Transmission	

SECTION A. PROJECT INFORMATION

1. Project Name: Eldorado-Ivanpah Transmission Project	**4. Location:** **Township** 16 N	**5. Location Sketch:**
2. Key Observation Point: KOP 8: Highway 164 Overpass View Looking North-Northwest (Proposed Eldorado-Ivanpah Transmission Project – Ivanpah Substation and Transmission Lines)	**Range** 14 E	The Proposed Ivanpah Substation, the Proposed Transmission Line, Transmission Line Alternative A, Transmission Line Alternative B, Transmission Line Alternative C, Transmission Line Alternative D, or Transmission Line Alternative E would be present in this view. (see Figure 4.1-9). The information on this worksheet pertains to the Proposed Ivanpah Substation and these proposed transmission lines.
3. VRM Class: VRM Class III (Mona Daniels/BLM Needles Field Office 10/16/2008)	**Sections** 35	Note: Photograph taken from overpass, elevated view of project area. The view was taken looking north-northwest. Photograph Date: 11/14/2008

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	**Foreground:** Toe of Low Sloping Hill Visible in Left Side of Hill, Near Flat Slope Dropping Toward Valley Floor **Middleground:** Near Flat Valley **Background:** Near Flat Valley Floor and Dry Lake Bed, Isolated Low Conical Hills, Irregularly Weathered Mountains **No Water Visible**	**Foreground:** Low Mounded Randomly Spaced Shrubs **Middleground and Background:** Vegetation Indistinguishable	**Foreground:** Flat Sloping Road Surface, Triangular Highway Dividers; Near Vertical Distribution Poles; and Rectangular Near Vertical Signs and Highway Markers **Middleground:** Flat Road Surface Sloping Downhill; Flat Dirt Roads Across Valley Floor **Background:** Flat Road Surface Sloping Downhill; Flat Dirt Roads Across Valley Floor; Low Buildings Associated with Former Roadside Services; Various Blocky Buildings Associated with Primm
LINE	**Foreground:** Diagonal Line Associated with Hill Toe Intersects Nearly Horizontal Slope Dropping Towards Valley Floor **Middleground:** Continuous Near Horizontal Valley Floor **Background:** Near Horizontal Valley Floor and Dry Lake Bed Broken by Diagonal Incline at Isolated Low Hills, Irregularly Peaked Mountain Skyline **No Water Visible**	**Foreground:** Weak Horizontal Vegetation Line **Middleground and Background:** Vegetation Indistinguishable	**Foreground:** Strong Diagonal Line Curving North; Vertical Poles; Diagonal Signs **Middleground:** Vertical Road, Diagonal and Horizontal Dirt Roads, **Background:** Vertical Road, Diagonal and Horizontal Dirt Roads, Rectangular Buildings Associated with Former Roadside Services, Blocky Buildings Associated with Primm
COLOR	**Foreground:** Golden Tan **Middleground:** Golden Tan **Background:** Golden Tan Valley Floor, Light Tan Dry Lake**,** Striated Light Tan, Dark Golden Brown Isolated Hills, and Light-Dark Brown Mountain Range with a Warm Pink Cast **No Water Visible**	**Foreground:** Sage Green, Red Brown , Light Dusty Tan Shrubs **Middleground:** Green and Brown Cast to Valley Floor **Background:** Green and Brown Cast to Valley Floor	**Foreground:** Gray and Black Asphalt; Faded Yellow and White Roadway Lines; White and Light Gray Highway Dividers; Dark Brown Distribution Poles; and Light Gray, Yellow, White, and Green Road Signs **Middleground:** Dark Gray to Black Asphalt; Tan Dirt Roads **Background:** Gray Asphalt; Tan Dirt Roads; Light Gray Buildings Associated with Former Roadside Services; Muted Gray Buildings Associated with Primm

TEX-TURE	**Foreground:** Gravelly **Middleground:** Generally Smooth Valley Floor **Background:** Generally Smooth Valley Floor and Dry Lake, Isolated Pointy Hills, Intermittent Rough and Smooth Mountains **No Water Visible**	**Foreground:** Rough Bristly Shrubs **Middleground:** Smooth Texture **Background:** Vegetation Indistinguishable:	**Foreground:** Continuous Smooth I-15, Dull Ridged Highway Dividers, Pointly Signs and Highway Markers **Middleground:** Smooth Highway, Smooth Dirt Roads **Background:** Smooth Highway, Smooth Dirt Roads, Chunky Buildings Associated with Former Roadside Services, Lumpy Buildings Associated with Primm Indistinguishable

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	**Foreground:** No Change **Middleground:** No Change **Background:** Grading for Transmission Structure Sites and Access Roads Would Not be Visible in this View **No Water Visible**	**Foreground:** No Change **Middleground:** No Change **Background:** Clearing of Vegetation for Transmission Structure Sites and Access Roads Would Not be Visible in this View	**Foreground:** No Change **Middleground:** No Change **Background:** - Removal of Existing Short Vertical H-Frame LSTs, T-Frame LSTs, and Associated Conductors Which are Not Visible in the Existing Environment in this View - Addition of New Low Structures Associated with the Proposed Ivanpah Substation Which Would be Visible in this View - Addition of Triangular Lattice Steel Towers (LST) and Associated Transmission Conductors Which Would Not be Visible in this View - Addition of One 180 foot Triangular Microwave Tower with Two 8 foot Diameter Circular Microwave Dishes Which Would Not be Visible in this View - Access Roads Would Not Be Visible in this View
LINE	**Foreground:** No Change **Middleground:** No Change **Background:** Grading for Transmission Structure Sites and Access Roads Would Not be Visible in this View **No Water Visible**	**Foreground:** No Change **Middleground:** No Change **Background:** - Vegetation Clearing Associated with the Proposed Ivanpah Substation May Be Visible in this View - Clearing of Vegetation for Transmission Structure Sites and Access Roads Would Not be Visible in this View	**Foreground:** No Change **Middleground:** No Change **Background:** - Removal of Existing Vertical H-Frame LSTs, T-Frame LSTs, and Associated Near Horizontal Conductors with Slight Sag Which are Not Visible in the Existing Environment in this View - Addition of Rectangular Structures Associated with the Proposed Ivanpah Substation Which Would be Visible in this View - Addition of Vertical LST with Internal Angles and Associated Near Horizontal Conductors with Slight Sag Which Would not be Visible in this View - Addition of One Vertical Microwave Tower with Two 8 foot Diameter Circular Microwave Dishes Which Would Not be Visible in this View - Access Roads Would Not Be Visible in this View

COLOR	**Foreground:** No Change **Middleground:** No Change **Background:** - Light Tan Valley Floor Visible Resulting from the Clearing Associated with the Proposed Ivanpah Substation - Grading for Transmission Structure Sites and Access Roads Would Not be Visible in this View **No Water Visible**	**Foreground:** No Change **Middleground:** No Change **Background:** Clearing of Vegetation for Transmission Structure Sites and Access Roads Would Not be Visible in this View	**Foreground:** No Change **Middleground:** No Change **Background:** - Removal of Existing Dull Gray H-Frame LSTs, T-Frame LSTs, and Associated Conductors Which are Not Visible in the Existing Environment in this View - Addition of New Light Gray Structures Associated with the Proposed Ivanpah Substation Which Would be Visible in this View - Addition of Dull Gray LST and Dull Gray Conductors Which Would not be Visible in this View - Addition of One Dull Gray Microwave Tower with Two Off-White Microwave Dishes Which Would Not be Visible in this View - Access Roads Would Not Be Visible in this View
TEXTURE	**Foreground:** No Change **Middleground:** No Change **Background:** Grading for Transmission Structure Sites and Access Roads Would Not be Visible in this View **No Water Visible**	**Foreground:** No Change **Middleground:** No Change **Background:** Clearing of Vegetation for Transmission Structure Sites and Access Roads Would Not be Visible in this View	**Foreground:** No Change **Middleground:** No Change **Background:** - Removal of Existing Pointy H-Frame LSTs, T-Frame LSTs, and Associated Smooth Conductors Which are Not Visible in the Existing Environment in this View - Addition of New Blocky Structures Associated with the Proposed Ivanpah Substation Which Would be Visible in this View - Addition of Pointy Topped LST and Smooth Conductors Which Would Not Visible in this View - Addition of One Pointy Topped Microwave Tower with Two 8 foot Microwave Dishes Which Would Not be Visible in this View - Access Roads Would Not Be Visible in this View

SECTION D. CONTRAST RATING ☐ SHORT TERM ☒ LONG TERM

1. DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1) Strong	Moderate	Weak	None	VEGETATION (2) Strong	Moderate	Weak	None	STRUCTURES (3) Strong	Moderate	Weak	None
ELEMENTS	Form				X				X		X		
	Line				X			X			X		
	Color		X						X		X		
	Texture				X				X		X		

2. Does project design meet visual resource management objectives? ☒ Yes ☐ No (Explain on reverse side)

3. Additional mitigating measures recommended ☒ Yes ☐ No (Explain on reverse side)

Evaluator's Names	Reviewed and Revised By:
Brenda Eells/CH2M HILL	Mark Chandler/BLM
Liz Cutler/CH2M HILL	Tom Dildine/E&E
Colleen Bredensteiner/CH2M HILL	Erica Brown/E&E

SECTION D. (Continued)

Comments from Item 2.

BLM's Visual Resource Management (VRM) Class III objective is to "…partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape" (BLM, 2007b).

The Proposed Eldorado-Ivanpah Transmission Project would result in no change in the form, line, and texture for Land/Water Body and in the form, color, and texture for Vegetation present in the existing environment. It would result in a moderate change in the color for Land/Water Body, a weak change in the line for Vegetation, and moderate changes in the form, line, color, and texture for Structures present in the existing environment. The changes to the existing environment would be consistent with the VRM Class III assignment. Additionally, mitigation measures AES-1, AES-2, and AES-3 would lessen the contrast that would be introduced to the existing colors in the viewshed and minimize the dominance of the substation and microwave tower within the view.

Additional Mitigating Measures (See item 3)

The following mitigation is required for the project:

MM AES-1: Painting the Ivanpah Substation. Prior to construction, the applicant will consult with the BLM to select an appropriate color from the BLM approved palette to paint any enclosed structures that would be constructed for the Ivanpah Substation. The applicant will submit photographs following substation construction to the BLM and the CPUC to document compliance with this measure.

MM AES-2: Rock Staining near the Ivanpah Substation. For areas that are cleared and/or graded to construct the Ivanpah Substation, the applicant would consult with the BLM regarding feasible methods to treat the exposed rock to match the overall color of the adjacent weathered rock.

MM AES-3: Microwave Dish Color. Prior to construction, the color of the microwave dishes or covers must be approved by the BLM. White dishes or covers will be avoided to minimize color contrast with the existing landscape.

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APPENDIX D