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Appendix 5.13A
FHWA Ratings Sheet

Visual Resource Survey:	AES - AEC	*Existing Conditions*
KOP Location:	**Channel View Park/Long Beach Bikeway Route 10**	Viewpoint: **KOP 1**
Landscape Unit:	NA	Date: Nov-13
Viewpoint Description (Figure Caption):	View to the southeast from Channel View Park/Long Beach Bikeway Route 10. The tallest portions of the existing AGS site (stacks and scaffolding) are visible across the entire span of the view. Located just west of Los Cerritos Channel, this view also represents views from the adjacent single-family residential development as well as an elementary school.	
Photo Orientation:	SE	
Viewer Position:	_____ Inferior ___X___ Level _____ Superior	

View	***Notes***
Foreground (0 - 1/2 mile)	Existing infrastructure associated with the Los Cerritos Channel, roadway, transmission structures, and existing AGS site combine to create a highly industrial landscape. The existing AGS project site is located beyond Los Cerritos Channel, immediately across North Studebaker Road. The existing AGS stacks, coiled scaffolding and pipes, combined with several existing transmission lines and structures contribute to the overall industrial character of the backrop of the view.
Middleground (1/2 - 4 miles)	In the right portion of the view, AGS stacks are visible above the treetops.
Background (> 4 miles)	N/A

Vividness		
Feature	***Score****	***Notes***
Landform	3	Flat plane of urban development with a thin linear strip of waterway breaking up the landmass.
Vegetation	4.5	Distinct linear line of deciduous trees and a few palms of similar height and form are visible along Studebaker Road in the foreground view. Dense vegetation along this corridor obscures the lower portions of the AGS structures. Round vegetative forms parallel the top portions of riprap along Los Cerritos Channel. A well-maintained green belt is visible in the immediate foreground view within Channel View Park.
Water Feature	3.5	Thin linear forms of Los Cerritos Channel add and element of visual interest to the industrial view.
Human-Made	4.5	A mix of horizontal features including fencing, riprap, transmission lines and roadway infrastructure create layered bands across the view which reinforce the urban landscape. Vertical elements including fence posts, transmission structures, and light poles are evenly spaced in an orderly pattern throughout the view. Prominant existing AGS stacks, coiled scaffolding and pipes are visible above the treeline and are distinct elements in the view.
Overall	**3.9**	This view is occupied entirely by human-made structures with the most vivid features consisting of the existing AGS power plant which add distinct elements of visual interest to the landscape.
Intactness		
Overall	**3**	In this urbanized landscape, the vertical forms (including stacks, transmission structures, and light poles) and horizontal forms (fencing, riprap, transmission lines, roadway) extend from the foreground to middleground cluttering the view. The existing AGS stacks are sporattically spaced in the view with no apparent order. Human-made features are visible along the horizon as well as above the horizon spanning the entire view creating a moderately low level of intactness.
Unity		
Overall	**3.5**	The overall view is typical of an industrial zone. Horizontal and vertical human-made elements create a coherant composistion consistent with a highly urbanized area.
Overall Visual Quality Score	**3.5**	Moderately Low

*Score Key:
1 - Very Low; 2 - Low; 3 - Moderately Low; 4 - Moderate; 5 - Moderately High; 6 - High; 7 - Very High

Visual Resource Survey:	AES - AEC	*With Project*
KOP Location:	**Channel View Park/Long Beach Bikeway Route 10**	Viewpoint: **KOP 1**
Landscape Unit:	NA	Date: Nov-13
Viewpoint Description (Figure Caption):	View from KOP 1 with AEC constructed and AGS removed. The new stacks and heat recovery steam generator (HRSG) units are partially visible near the center-left portion of the view through the existing line of vegetative forms.	
Photo Orientation:	SE	
Viewer Position:	_____ Inferior ___X___ Level _____ Superior	

View	***Notes***
Foreground (0 - 1/2 mile)	The existing AGS stacks and scaffolding would be removed and replaced by new AEC stacks and HRSG units partially visible through the vegetative screening within the foreground view.
Middleground (1/2 - 4 miles)	With the removal of AGS stacks, the far-foreground and middleground would open up in the right side of the view.
Background (> 4 miles)	Same

Vividness		
Feature	***Score****	***Notes***
Landform	3	No change
Vegetation	4.5	No change
Water Feature	3.5	No change
Human-Made	3	Reduction of scale and height of power plant structures decreases the degree of industrial development. The new AEC stacks are significantly lower than existing AGS stacks. Removal of the existing AGS HRSG units are replaced by a smaller sleeker HRSG design that is partially obscured through the vegetative screening.
Overall	**3.5**	With the removal and replacement of the existing view's most prominent features, the skyline is more visable. The vividness of the view remains moderately low with the incremental degree of change.
Intactness		
Overall	**4**	Without the dominating AGS stacks in the view, the trees are the most dominant visual features as they are consistent in form and color and create a linear pattern across the view.
Unity		
Overall	**4**	Reduction of stack height and HRSG units create more cohesiveness and line of development similar to that of the treeline.
Overall Visual Quality Score	**3.8**	Moderately Low

*Score Key:
1 - Very Low; 2 - Low; 3 - Moderately Low; 4 - Moderate; 5 - Moderately High; 6 - High; 7 - Very High

Visual Resource Survey:	AES - AEC	*Existing Conditions*
KOP Location:	**University Park Estates**	Viewpoint: **KOP 2**
Landscape Unit:	NA	Date: Nov-13
Viewpoint Description (Figure Caption):	View to the east from the single-family residential development of University Park Estates located just west of Los Cerritos Channel bound between Seventh Street and Lyons Drive. Prominent views of the existing AGS power plant stacks extend above rooftops in the immediate center foreground view.	
Photo Orientation:	E	
Viewer Position:	_____ Inferior ___X___ Level _____ Superior	

View	***Notes***
Foreground (0 - 1/2 mile)	The foreground is occupied by several single-family residences, beyond is the existing AGS project site immediately across North Studebaker Road in the center portion of the view. The existing AGS stacks, coiled scaffolding and pipes, combined with several existing transmission lines and structures contribute to the overall industrial character of the backrop of the view.
Middleground (1/2 - 4 miles)	N/A
Background (> 4 miles)	N/A

Vividness		
Feature	***Score****	***Notes***
Landform	3	Flat, horizontal plane historically dominated by tidal lands which have been replaced by a highly developed mixed-use landscape.
Vegetation	4	Several well-established deciduous trees and residential lanscaping are visible at varied heights and forms across the entire foreground. Existing AGS elements are partially screened by residences in the neighborhood since the trees provide a vegetative buffer which reaches above the rooftops.
Water Feature	N/A	
Human-Made	4	The AGS power plant stands out as a relatively unique and dominant human-made feature. The whitewashed stacks skylined above the residences as well as the visible vapor plume create a sharp contrast in the view. The intrigate scaffolding and pipes on the air cooled condenser (ACC) units as well as the transmission lines and structures clutter the view.
Overall	**3.7**	This view is occupied entirely by human-made structures with predominant views of the AGS from within the closest residential pocket of development. The prominance of the existing AGS ACC and stacks add a high-level of industrial elements to the residential views which results in a moderate degree of vividness.
Intactness		
Overall	**2.5**	The visual pattern of residential development sharply contrasts with the visually encroaching vertical and blocky elements of the AGS stacks and HRSG unit, creating a low level of intactness in the view.
Unity		
Overall	**3**	The overall view is one within a single-family residential development with a focal point in the center-left side of the view dominated by towering features of the existing AGS power plant.
Overall Visual Quality Score	**3.1**	Moderately Low

*Score Key:
1 - Very Low; 2 - Low; 3 - Moderately Low; 4 - Moderate; 5 - Moderately High; 6 - High; 7 - Very High

Visual Resource Survey:	AES - AEC	*With Project*
KOP Location:	**University Park Estates**	Viewpoint: **KOP 2**
Landscape Unit:	NA	Date: Nov-13
Viewpoint Description (Figure Caption):	View from KOP 2 with the AEC constructed and AGS removed. New stacks, ACC and HRSG units are visible through the treeline in the foreground in the center-left portion of the view.	
Photo Orientation:	E	
Viewer Position:	_____ Inferior ___X___ Level _____ Superior	

View	***Notes***
Foreground (0 - 1/2 mile)	The AGS would be removed/replaced by AEC features in the far-foreground. The tops of AEC stacks, ACC and HRSG units are visible in the center-left side of the view.
Middleground (1/2 - 4 miles)	Same
Background (> 4 miles)	Same

Vividness		
Feature	***Score****	***Notes***
Landform	3	No change
Vegetation	4	No change
Water Feature	N/A	
Human-Made	3.5	Removal of the tall AGS stacks and HRSG unit reduces the degree to which human-made features contribute to the vividness of the view.
Overall	**3.5**	The view is reinforced as one that is moderately low in terms of vividness, despite the removal and replacement of the existing view's most prominent features.
Intactness		
Overall	**3.5**	With the removal of AGS features, the existing residences appear as the most dominant built features in the view. The new AEC stacks and HRSG units appear lower than the trees and in-line with the rooftops, creating a skyline appearing more intact than in the existing view. Though the new blocky ACC and HRSG forms eliminate pockets of visibility in the left and center portion view above the roofline, the low profile forms increase the level of intactness to a moderately low degree.
Unity		
Overall	**4.5**	Scale and linearized AEC features are consistent with the roofline of residences in the immediate foreground, creating a moderate degree of visual cohesion.
Overall Visual Quality Score	**3.8**	Moderately Low

*Score Key:
1 - Very Low; 2 - Low; 3 - Moderately Low; 4 - Moderate; 5 - Moderately High; 6 - High; 7 - Very High

Visual Resource Survey:	AES - AEC	*Existing Conditions*
KOP Location:	**Marine Stadium Park**	Viewpoint: **KOP 3**
Landscape Unit:	NA	Date: Nov-13
Viewpoint Description (Figure Caption):	View from within Alamitos Bay at the easternmost edge of Marine Stadium Park. The existing AGS stacks are partially visible through breaks in structures in the center and right side of the view. Both AGS and Los Angeles Department of Water and Power power plants anchor the backdrop of the view and reinforce the industrial nature of the landscape.	
Photo Orientation:	NE	
Viewer Position:	_____ Inferior ___X___ Level _____ Superior	

View	***Notes***
Foreground (0 - 1/2 mile)	The foreground includes maritime features in the view with the Pacific Coast Highway bridge over the Los Cerritos Channel beyond. Development of residences, commercial business and reacreational centers (Long Beach Rowing Center) flank the channelized waterways.
Middleground (1/2 - 4 miles)	The middleground includes partially obscured existing AGS and LADWP power plants which for the most part span across the entire view.
Background (> 4 miles)	N/A

Vividness		
Feature	***Score****	***Notes***
Landform	3	Flat tidal plane surrounding by interweaving channelized waterways flanked by residential,commercial, and recreational development.
Vegetation	3.5	Variety of decidous and evergreen (palm) trees visible throughout the view, varying in height and forms. Very little other vegetation is visible within the urban landscape.
Water Feature	6	The curvilinear Los Cerritos Channel is the dominant feature in the foreground view which shows the convergence of where the inlet empties into Alamitos Bay.
Human-Made	3.5	Beyond the channel, all visible, non-vegetative features are human-made. The human-made features, especially the stacks, associated with the AGS and LADWP power plants appear as particularly vivid features above the horizon of the view.
Overall	**4.0**	While the visible land space surrounding the channel is a mix of of commercial and industrial uses, beyond is a highly dense industrial landscape which results in a moderate degree of vividness.
Intactness		
Overall	**3.5**	The channel and associated mooring structures and bouys that occupy the immediate foreground reinforce the unique coastal character. The existing AGS structures are limited to the middleground. Distant vertical forms including trees, light poles, AGS and LADWP stacks reinforce the vertical and horizontal elements contributing to the repetitive vertical features across the view.
Unity		
Overall	**3.5**	The natural channelized areas are disrupted sharply by relatively large energy-generating facilities in the background. Vertical elements (stacks) span across the entire view reinforcing the industrial nature of the landscape creating a moderately low level of visual unity.
Overall Visual Quality Score	**3.7**	Moderately Low

*Score Key:
1 - Very Low; 2 - Low; 3 - Moderately Low; 4 - Moderate; 5 - Moderately High; 6 - High; 7 - Very High

Visual Resource Survey:	AES - AEC	*With Project*
KOP Location:	**Marine Stadium Park**	Viewpoint: **KOP 3**
Landscape Unit:	NA	Date: Nov-13
Viewpoint Description (Figure Caption):	View from KOP 3 with the AEC constructed and AGS removed. Ten of the twelve AEC stacks and associated HRSG units are visible in the center portion of the view.	
Photo Orientation:	NE	
Viewer Position:	_____ Inferior ___X___ Level _____ Superior	

View	***Notes***
Foreground (0 - 1/2 mile)	No change
Middleground (1/2 - 4 miles)	The six asymmetricly arranged AGS stacks and HRSG unts would be replaced by AEC features which appear orderly in the far-middleground view.
Background (> 4 miles)	Same

Vividness		
Feature	***Score****	***Notes***
Landform	3	No change
Vegetation	3.5	No change
Water Feature	6	No change
Human-Made	3.5	The existing tall vertical AGS structures in the view are removed and are replaced by lower and bulkier AEC forms which reinforce the moderately low level of vividenss in the view.
Overall	**4.0**	This relatively open view across the bay up Los Cerritos Channel maintains an average degree of vividness despite the removal of the existing view's prominent features and replacement of new AEC structures.
Intactness		
Overall	**2.5**	The six existing AGS stacks are replaced by twelve smaller stacks oriented in a linear pattern across the view. The impact of the bulky ACC forms fill in areas of what was previously open sky resulting in a low level of intactness.
Unity		
Overall	**4**	The presence of new AEC stacks and HRSG units create a horiontal pattern across the middleground that reinforces the visual unity of the view by causing the industrial presence to have a lower and more streamline profile in the landscape.
Overall Visual Quality Score	**3.5**	Moderately Low

*Score Key:
1 - Very Low; 2 - Low; 3 - Moderately Low; 4 - Moderate; 5 - Moderately High; 6 - High; 7 - Very High