# Contents

Dear	Res	dor	Letter
DEGL		JUEI	Lener

Summary of	Major Conclusions	i	
List of Abbre	eviations and Acronyms	×	
Glossary of	Terms	<b>x</b> ii	
Chapter 1	Introduction	1-1	
1.1	Introduction	1-1	
1.2	Project Context	1-5	
1.3	Purpose of and Need for the Proposed Action		
1.4	Scoping and Public Involvement		
1.5	Alternatives Considered	1-7	
	1.5.1 Alternatives Considered in the Draft EIS	1-7	
	1.5.2 Alternatives Considered in the Supplemental Draft EIS	1-9	
1.6	Alternatives Analyzed in Detail in the Supplemental Draft EIS		
	1.6.1 Applicant's Proposed Action – Alternative B/B2		
	(Combination of Alternative B on the North		
	and Alternative B2 on the South)	1-17	
	1.6.2 Alternative B3/B2 (Combination of Alternative B3 on the		
	North and Alternative B2 on the South)	1-18	
1.7	Environmentally Preferred Alternative		
1.8	Summary of the Environmental Impacts of the Alternatives		
1.9	Relationship to the Least Environmentally Damaging Practicable	1 17	
1.7	Alternative (LEDPA)	1-23	
1.10	Historic Properties.		
1.10	Cumulative Impacts		
1.11	Agency Responsibilities		
1.12	Organization and Format of This Final EIS		
1.13	Final EIS		
1.14	Filial EIS	1-27	
Chapter 2	Final Recommended Conditions/Mitigation	2-1	
2.1	Introduction	2-1	
	2.1.1 Limits of the Board's Conditioning Power		
	2.1.2 Voluntary Mitigation and Negotiated Agreements		
	2.1.3 Final Environmental Mitigation		
	2.1.4 Role of Cooperating Agencies in Developing Proposed	2	
	Environmental Mitigation Measures	2-2	
2.2	Applicant's Final Voluntary Mitigation Measures		
2.2	2.2.1 Voluntary Mitigation Measures for Rail Operations	23	
	and Safety	2-3	
	2.2.2 Voluntary Mitigation Measures for Land Use		
	2.2.2 voluntary remigation releasures for Land Ose	∠-4	

	2.2.3	Voluntary Mitigation Measures for Biological Resources	2-5
	2.2.4	Voluntary Mitigation Measures for Water Resources and	
		Wetlands	2-7
	2.2.5	Voluntary Mitigation Measures for Topography, Geology,	
		and Soils	
	2.2.6	Voluntary Mitigation Measures for Hazardous Materials	
	2.2.7	Voluntary Mitigation Measures for Air Quality	
	2.2.8	Voluntary Mitigation Measures for Noise	
	2.2.9	Voluntary Mitigation Measures for Socioeconomics	
	2.2.10	Voluntary Mitigation Measures for Historic Properties	2-10
	2.2.11	Voluntary Mitigation Measures for Recreation	
	2.2.12	Voluntary Mitigation Measures for Aesthetics	2-10
2.3	OEA's F	inal Recommended Mitigation Measures	2-11
	2.3.1	Recommended Mitigation Measures for Rail Operations	
		and Safety	2-11
	2.3.2	Recommended Mitigation Measures for Land Use	2-12
	2.3.3	Recommended Mitigation Measures for Biological	
		Resources	2-12
	2.3.4	Recommended Mitigation Measures for Water Resources	
		and Wetlands	2-13
	2.3.5	Recommended Mitigation Measures for Topography,	
		Geology, and Soils	2-14
	2.3.6	Recommended Mitigation Measures for Hazardous Materials.	
	2.3.7	Recommended Mitigation Measures for Air Quality	
	2.3.8	Recommended Mitigation Measures for Noise	
	2.3.9	Recommended Mitigation Measures for Socioeconomics	
	2.3.10	Recommended Mitigation Measures for Historic Properties	
	2.3.11	Recommended Mitigation Measures for Recreation	
	2.3.12	Recommended Mitigation Measures for Federal Public Land	
Chapter 3	Comme	nt Summaries and Responses	3-1
3.1		ion	
3.1		logy	
3.2		Action and Purpose and Need	
3.3	3.3.1	Proposed Action	
	3.3.1	Purpose and Need	
	3.3.3	1	
		Agency Responsibilities	
	3.3.4	NEPA Process	3-0
	3.3.5	Scoping, Public Involvement, and Native American	2.7
2.4	D	Consultation	
3.4	-	Action and Alternatives	
	3.4.1	Alternatives Development	
	3.4.2	Alternatives Considered in OEA's Environmental Review	3-9
	3.4.3	Alignments and Alternatives Considered but Eliminated from	0.11
		Detailed Study	3-11

	3.4.4	General Support	3-12
	3.4.5	General Opposition	3-13
3.5	Rail Op	erations and Safety	3-14
	3.5.1	Rail Operations	3-14
	3.5.2	Hazardous Materials Transportation	3-15
	3.5.3	Land Transportation Network	
	3.5.4	Trucking Operations	3-15
	3.5.5	Rail Safety	3-16
3.6	Land U	se	3-16
	3.6.1	General Land Use	3-16
	3.6.2	Agriculture	3-16
	3.6.3	State Land Use	3-17
	3.6.4	Federal Land Use	3-18
	3.6.5	Grazing Allotments	3-18
3.7	Biologic	cal Resources	3-19
	3.7.1	Plant Communities	3-19
	3.7.2	Wildlife Resources	3-20
	3.7.3	Threatened, Endangered, and Sensitive Species	3-27
3.8	Water R	Resources	
	3.8.1	Wetlands and Waters of the U.S	3-29
	3.8.2	Floodplains	3-30
	3.8.3	Groundwater, Wells, and Irrigation	3-30
3.9	Topogra	aphy, Geology, and Soils	3-31
3.10	Vibratio	on	3-31
3.11	Hazardo	ous Materials and Waste Sites	3-32
3.12	Air Qua	ılity	3-32
3.13	Noise		3-32
3.14	Energy	Resources	3-33
3.15	Socioec	onomics	3-33
3.16	Cultura	l Resources	3-33
3.17	Environ	mental Justice Communities	3-36
3.18	Recreat	ion	3-36
3.19	Aesthetics		
3.20	Cumulative Impacts		
3.21	Mitigati	on	3-38
	3.21.1	Mitigation Measures for Biological Resources	
	3.21.2	Voluntary Mitigation for Land Use, Grants, and Leases	
	3.21.3	Voluntary Mitigation Measures for Water Resources	
		and Wetlands	3-41

Chapter 4	Errata and Other Changes		
4.1	Introduction	4-1	
4.2	Proposed Action and Alternatives		
4.3	Affected Environment		
4.4	Environmental Consequences		
4.5	Mitigation	4-4	
Chapter 5	Agency Coordination and Public Outreach	5-1	
5.1	Agency Coordination	5-1	
	5.1.1 Scoping	5-1	
	5.1.2 Draft EIS	5-2	
	5.1.3 Supplemental Draft EIS	5-2	
5.2	Public Involvement	5-2	
	5.2.1 Scoping	5-2	
	5.2.2 Draft EIS	5-4	
	5.2.3 Supplemental Draft EIS	5-4	
	5.2.4 Final EIS	5-4	
Chapter 6	Preparers	6-1	
6.1	Surface Transportation Board	6-1	
6.2	Contractor		
Chapter 7	References	7-1	
Chapter 8	Index	8-1	

## **List of Tables**

	1-14
Table 1-2. Comparison of Southern Alternatives	1-16
Table 1-3. Comparison of Impacts from the Alternatives Presented in the	
Supplemental Draft EIS	1-20
Table 2-1. Applicant's Proposed Highway/Rail Grade-Crossing Mitigation	2-3
Table A-1. Comments and Responses on the Draft EIS	A-2
Table A-2. Comments and Responses on the Supplemental Draft EIS	A-47
Table A-3. Comments on Cultural Resources and the Programmatic Agreement	A-52
List of Figures	
Figure 1-1. Project Location	
<b>C</b>	
Figure 1-1. Project Location	1-4 1-8
Figure 1-1. Project Location	1-4 1-8 1-11
Figure 1-1. Project Location	1-4 1-8 1-11

# **List of Appendices**

Appendix A. Comments and Responses

Appendix B. Comment Letters

Appendix C. Conditional Approval of the Petition for Exemption

### List of Abbreviations and Acronyms

§ section

Applicant Six County Association of Governments

ATV all-terrain vehicle

BLM Bureau of Land Management
BMP best management practice
Board Surface Transportation Board

Btu British thermal units

CEQ Council on Environmental Quality
CFR Code of Federal Regulations

Cir. Circuit

D&RGW Denver & Rio Grande Western Railroad

dBA decibels on the A-weighted scale
EIS Environmental Impact Statement

EPA U.S. Environmental Protection Agency

et seq. and subsequent sections

I-15 Interstate 15 I-70 Interstate 70

ICC Interstate Commerce Commission

ID identification

LEDPA Least Environmentally Damaging Practicable Alternative

NEPA National Environmental Policy Act NHPA National Historic Preservation Act

NOI Notice of Intent

OEA Office of Environmental Analysis

PA Programmatic Agreement

PC&N public convenience and necessity

Pub. L. Public Law

RM recommended mitigation

SCAOG Six County Association of Governments (the Applicant)

SHPO State Historic Preservation Officer

SPC Sevier Power Company

spp. various species
SR State Route
Stat. Statute

Stat. Statute

SUFCO Southern Utah Fuel Company

U.S. United States

U.S. 28	U.S. Highway 28
U.S. 50	U.S. Highway 50
U.S. 89	U.S. Highway 89

UDNR Utah Department of Natural Resources
UDOT Utah Department of Transportation
UDWR Utah Division of Wildlife Resources

UPRR Union Pacific Railroad

USACE U.S. Army Corps of Engineers

USC United States Code

USFWS U.S. Fish and Wildlife Service

VM voluntary mitigation

VRM Visual Resource Management [program]

vs. versus

WMA Wildlife Management Area

### **Glossary of Terms**

adverse environmental

impact

A negative effect, resulting from the implementation of a proposed action, that serves to degrade or diminish an aspect of human or

natural resources.

**Applicant** Six County Association of Governments.

attainment area An area that EPA has classified as complying with the National

Ambient Air Quality Standards (NAAQS) specified under the

Clean Air Act.

A-weighted sound level

(dBA)

The most commonly used measure of noise, expressed in "A-weighted" decibels (dBA), is a single-number measure of sound severity that accounts for the various frequency components in a

way that corresponds to human hearing.

**ballast** Crushed rock used to distribute weight, keep the ties in place,

allow water to drain away, protect track from the effects of frost heaving, facilitate maintenance by keeping track up off the ground, retard the growth of vegetation, and provide firm yet resilient

support.

best management practice (BMP)

Technique that various parties (for example, the construction industry) use to provide protection from adverse impacts to the environment. The Board may designate these techniques as

mitigation measures.

**Board** The Surface Transportation Board.

Clean Air Act (Clean Air Act Amendments)

The primary Federal law that protects the nation's air resources. The Clean Air Act is comprised of the Clean Air Act of 1970 and

the subsequent amendments, including the Clean Air Act

Amendments of 1990 (42 USC 7401–7671g). This act establishes

a comprehensive set of standards, planning processes, and requirements to address air pollution problems and reduce

emissions from major sources of pollutants.

#### **Clean Water Act**

The Federal Water Pollution Control Act Amendment of 1972 (33 USC 1251 et seq.) is the primary Federal law that protects the nation's waters, including lakes, rivers, aquifers, and coastal areas. Specifically, the Clean Water Act provides for the following:

- Requires major industries to meet performance standards to ensure pollution control.
- Charges States and tribes with setting specific water quality standards appropriate for area water and developing pollutioncontrol programs to meet them.
- Protects valuable wetlands and other aquatic habitats through a permitting process that conducts land-development activities and other activities in an environmentally sound manner.

condition

A provision that the Board imposes as part of any decision that requires action by one or more of the Applicants.

Council on Environmental Quality (CEQ) Federal agency responsible for developing regulation and guidance for agencies implementing the National Environmental Policy Act.

criteria pollutant

Any of six emissions (lead, carbon dioxide, sulfur dioxide, nitrogen dioxide, ozone, and particulate matter) regulated under the Clean Air Act, for which area must meet national air quality standards.

critical habitat

The specific site within the geographical area occupied by threatened or endangered species that includes the physical or biological features essential to the conservation of the species. These areas may require special management considerations or protection. These areas may include specific sites outside the geographical areas occupied by the species at the time of the listing that are essential for the conservation of the species.

cumulative effect

Impact on the environment which results from the incremental impact of the proposed action when added to other past, present, and reasonably foreseeable future actions, regardless of which agency (Federal or non-Federal) or person undertakes such actions. Cumulative effects result from individually minor but collectively significant actions taking place over a period of time.

dBA

Adjusted decibel level. A sound measurement that adjusts to noise by filtering out certain frequencies to make it analogous to the sound perceived by the human ear. It applies what is known as an "A-weighting" scale to acoustical measurements.

emissions

Air pollutants that enter the atmosphere.

endangered species

A species of plant or animal that is in danger of extinction throughout all or a significant portion of its range and is protected by state and/or federal laws.

**Environmental Impact Statement (EIS)** 

A document that the CEQ regulations implementing the National Environmental Policy Act requires Federal agencies to prepare for major projects or legislative proposals with the potential to significantly affect the environment. A tool for decision-making, it describes the positive and negative environmental effects of the undertaking and alternative actions and measures to reduce or eliminate potentially significant environmental impacts.

environmental justice

The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income by identifying and addressing the effects of transportation projects on the public, especially high or adverse impacts to minority or low-income populations.

Executive Order (EO) 11988 Executive Order 11988, Floodplain Management, requires Federal agencies to take actions to reduce the risk of flood damage and directs agencies to evaluate the potential effects of actions they may take or allow in floodplains and to consider alternatives to avoid adverse effects.

fill

The term used by the U.S. Army Corps of Engineers (USACE) that refers to the placement of suitable materials (for example, soils, aggregates, concrete structures, etc.) within water resources under USACE's jurisdiction.

floodplain

The lowlands adjoining inland and coastal waters and relatively flat areas and flood-prone offshore islands, including, at a minimum, those areas that have a 1 percent or greater chance of flood in any given year (also known as a 100-year or a Zone A floodplain).

habitat

The place(s) where plant or animals species generally occur(s) including specific vegetation types, geologic features, and hydrologic features. The continued survival of that species depends on the intrinsic resources of the habitat.

hazardous materials

Substances or materials that the Secretary of Transportation has determined are capable of posing an unreasonable risk to human health, safety, and property when transported in commerce, as designated under 49 CFR 172 and 173.

**hazardous wastes** Waste materials that, by their nature, are inherently dangerous to

handle or dispose of (for example, old explosives, radioactive materials, some chemicals, some biological wastes), as designated under 40 CFR 261. Usually, industrial operations produce these

waste materials.

highway/rail at-grade

road crossing

The general area of an intersection of a public or private highway and a railroad where the intersecting rail and highway traffic are at

the same level.

**historic property** Any prehistoric or historic district, site, building, structure, or

object included in or eligible for inclusion in the National Register of Historic Places (NRHP). The term "eligible for inclusion in the NRHP" pertains to both properties that the Secretary of the Interior has formally determined to be eligible and to all other properties

that meet NRHP listing criteria.

horn noise (train) Noise that occurs when locomotives sound warning horns in the

vicinity of highway/rail at-grade crossings.

**jurisdictional wetland** Wetlands that the U.S. Army Corps of Engineers regulates under

Section 404 of the Clean Water Act (33 USC 1344).

L<sub>dn</sub> The day-night average noise sound level, which is the receptor's

cumulative noise exposure from all noise events over a full 24 hours. This is adjusted to account for the perception that noise at night is more bothersome than the same noise during the day.

L<sub>eq</sub> The sound level equivalent, which is the energy-averaged sound

pressure level over a specified time interval.

L<sub>max</sub> The RMS (root mean squared) maximum level of a noise source or

environment where peak is the maximum level of the raw noise

source.

**low-income population** A population composed of persons whose median household

income is below the U.S. Department of Health and Human

Services poverty guidelines.

mainline A principal track, other than an auxiliary track, designed by

timetable or special instructions, on which train movements are generally authorized and controlled by the train dispatcher.

**minority population** A population composed of persons who are Black (non-Hispanic),

Hispanic, Asian American, American Indian, or Alaskan Native.

**mitigation** An action taken to prevent, reduce, or eliminate adverse

environmental effects.

National Ambient Air Quality Standards (NAAQS) Air pollutant concentration limits established by EPA for the protection of human health, structures, and the natural environment.

National

**Environmental Policy** Act (NEPA)

The National Environmental Policy Act of 1969, as amended (42 USC 4321–4347; PL 91-190) is the basic national charter for the protection of the environment. It establishes policy, sets goals, and provides means for carrying out the policy. Its purpose is to provide for the establishment of a Council on Environmental Quality and to instruct Federal agencies on what they must do to comply with the procedures and achieve the goals of NEPA.

National Historic Preservation Act (NHPA) The National Historic Preservation Act of 1966, as amended (16 USC 470–470 et seq.; PL 89-665), is the basic legislation of the nation's historic preservation program that established the Advisory Council on Historic Preservation and the Section 106 review process. Section 106 of the NHPA requires every Federal agency to "take into account" the effects of its undertakings on historic properties.

National Register of Historic Places (NRHP) Administered by the National Park Service, the nation's master inventory of known historic properties, including buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the Federal, state, and local levels.

**No-Action Alternative** 

The Proposed Action does not take place under this alternative; also, the present setting for the pre-action conditions.

noise

Any undesired sound or unwanted sound.

noise contour

Line plotted on a map or drawing connecting points of equal sound levels.

noise-sensitive receptor

Location where noise can interrupt ongoing activities and can cause community annoyance, especially in residential areas. The Board's environmental regulations include schools, libraries, hospitals, residences, retirement communities, and nursing homes as examples of noise-sensitive receptors.

non-attainment area

An area that EPA has classified as not complying with the National Ambient Air Quality Standards promulgated under the Clean Air Act.

Office of Environmental Analysis (OEA) The Office of Environmental Analysis is responsible for directing the environmental-review process in pertinent cases before the Surface Transportation Board, conducting independent analyses of

all environmental data, and making environmental

recommendations to the Board members.

particulate matter

(PM)

Airborne dust or aerosols.

prime farmland According to the Natural Resources Conservation Service, land

having the best combination of physical and chemical

characteristics for producing food, feed forage, fiber, and oilseed

crops.

rail yard A system of tracks of defined limits for the purpose of storing and

sorting cars.

**receptor** See *noise-sensitive receptor*.

**right-of-way** The strip of land for which an entity (for example, a railroad) has a

property right to build, operate, and maintain a linear structure,

such as a road, railroad, or pipeline.

**riparian** Relating to, living or located on, or having access to the bank of a

natural water course, sometimes also a lake or tidewater.

**scoping** The process for determining the scope of environmental issues to

address in the EIS and their potential significance.

**Section 106** Refers to Section 106 of the National Historic Preservation Act

(NHPA) of 1966, as amended through 1992 (16 USC 470). Section

106 requires a Federal agency head performing a Federal undertaking to take into account the undertaking's effects on

historic properties.

**sensitive receptor** See *noise-sensitive receptor*.

**service** The official notification and delivery of Board decisions and

notices (including environmental documents) by the Secretary of

the Board to persons involved in a particular proceeding.

siding A track parallel to a main track that is connected to the main track

at each end. A siding is used for passing and/or storing trains.

**switch** The portion of the track structure used to direct cars and

locomotives from one track to another.

**switching** The activity of moving cars from one track to another in a yard or

where tracks go into a railroad customer's facility.

threatened species A species that is likely to become an endangered species within the

foreseeable future throughout all or part of its range and is

protected by state and/or Federal law.

**tipple** A structure used at a mine to load the extracted product (for

example, coal or ores) for transport, typically into railroad hopper

cars.

**turnout** A mechanical installation that enables trains to be guided from one

track to another, such as at a railway junction or where a spur or

siding branches off.

wayside train noise Train noise adjacent to the right-of-way that comes from sources

other than the horn, such as engine noise, exhaust noise, and noise

from steel train wheels rolling on steel rails.

wetlands According to 40 CFR 230.41, "areas that are inundated or saturated

by surface or ground water at a frequency and duration sufficient to

support, and that under normal circumstances do support, a

prevalence of vegetation typically adapted for life in saturated soil conditions," generally including swamps, marshes, bogs, and

similar areas.

wye Y-shaped intersection of rail line.