HI-STORE
Chapter 2 & Environmental Report RSI's
HI-STORE Chap. 2 RSI s

• **Purpose and Discussion**
  
  • This presentation outlines the methodologies that will be utilized to respond to Chapter 2 RSI s 2-1 through 2-11 and Environmental Report RSI s ER-1 through ER-9.
  
  • The information requested will be used to determine compliance with the applicable sections of 10CFR72, NUREG-1567, and Regulatory Guide 3.48.
  
  • Specific focus on RSI s 2-9, 2-10, 2-11
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• **RSI 2-1**
  - Requested information includes:
    - Entire GNEP Siting Study
  - Strategies to respond
    - Holtec will provide entire GNEP Siting Study

• **RSI 2-2**
  - Requested information includes:
    - Discussion on mining processes at Belco and Intrepid facilities.
      - Potential effects on Holtec CISF
  - Strategies to respond
    - Additional details, history, tables, and figures will be included in the chapter to discuss the mines and their potential impacts.
• **RSI 2-3**
  
  • Requested information includes:
    • Provide assessment of the hazards from aircraft, flight related activities to proposed CISF.
  
  • Strategies to respond
    • Additional aircraft flight patterns and data
      • Research from FAA master records and Military Training Routes (MTRs) will be included.
    • Hazards assessment will be performed using this data
• **RSI 2-4**
  • Requested information includes:
    • Provide assessment of the hazards from cargo transported through roads and railroads near proposed CISF.
  • Strategies to respond
    • Additional freight patterns and data pulled from:
      • National Hazardous Materials Route Registry (NHMRR)
      • United States Department of Transportation (USDOT)
      • New Mexico Department of Transportation (NMDOT)
• **RSI 2-5**
  
  • Requested information includes:
    • Information describing hydrologic characteristics of the site.
  
  • Strategies to respond
    • Additional data compiled from:
      • Federal Emergency Management Center Flood Map Service Center
      • State of New Mexico Interstate Stream Commission, Lea County Regional Water Plan 2016
      • U.S. Fish and Wildlife Service, National Wetlands Inventory
      • Western Regional Climate Center, Hobbs, Lea County Airport Data
      • Etc.
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• **RSI 2-6**
  
  • Requested information includes:
    
    • Elevation of SSCs with respect to site Probable Maximum Flood (PMF)
    
    • Strategies to respond
      
      • Additional discussion on topography, site elevations, SSC elevation, and expected flood levels.
• RSI's 2-7 and 2-8
  • Requested information includes:
    • Probable Maximum Flood
    • Site specific topography
    • Site specific hydrologic information
    • Laguna free board space
  • Strategies to respond
    • Analysis using GIS data to determine PMF Level.
      • Digital elevation model
      • 24-hour storm data
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GIS Watershed/PMF Model

Legend
- Project Site
- Laguna Plata Flood Level (3.425 ft)
- Laguna Grande Flood Level (3.505 ft)

Elevation (feet)
- High: 4461
- Low: 2841

Figure 1. Holtec New Mexico Proposed Nuclear Waste Storage 7.5 inch Rain Event Flood Map

Prepared For: HOLTEC
Prepared By: TETRATECH
Date: 06/2017

Source: Esti, et. al., 2014; New Mexico Resource Geographic Information System (RGIS), 2015; USGS, 2016
Coordinate System: North American Datum 1983 Universal Transverse Mercator, Zone 13 North
HI-STORE ER RSIs

• **RSI ER-1**
  - Requested information includes:
    - Schedule of construction phases
  - Strategies to respond
    - Construction Phases and Timelines to be detailed
      - Construction impact per phase to be considered

• **RSI ER-2**
  - Requested information includes:
    - Publicly available replacement pages
  - Strategies to respond
    - Review and revise any sensitive figures
HI-STORE ER RSI s

• **RSI ER-3**
  - Requested information includes:
    - Proposed site and impact of new access road and railroad spur
  - Strategies to respond
    - Map of site, access road, and railroad spur
    - Describe expected impacts
HI-STORE ER RSI's

- **RSI's ER-4 & 5**
  - Requested information includes:
    - Wind roses and dispersion characteristics
  - Strategies to respond
    - Provide evaluation of wind characteristics
    - Wind roses
    - Dispersion characteristics and mixing heights
  - Data from:
    - Midwestern Regional Climate Center Hobbs, Lea County Airport Data
    - University of Toledo Atmospheric Stability Classification
HI-STORE ER RSI's

- **RSI's ER-6 through ER-9**
  - Requested information includes:
    - Additional information pertaining to ecological studies, construction waste sources and quantities, and alternative siting locations.
  - Strategies to respond
    - Further discussion and clarification of relevant subjects in their respective Environmental Report Chapters
      - Ecological study covers entire disturbed area, all phases
      - Construction timeline (ER-1) to present waste generation timeline
      - Clarification of alternative siting considerations
HI-STORE Chap. 2 RSIs

- **RSIs 2-9 & 2-10**
  - Requested information includes:
    - Detailed characterization of site subsurface material
    - Map of geotechnical exploration
    - Geological profiles
    - Groundwater mapping
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- **RSIs 2-9 & 2-10 (cont.)**
  - Strategies to respond
    - Boring plan generated using standard Holtec protocol
      - Protocol has been used at many other ISFSI sites (SONGS, BFN, CPS, WBN, Etc.)
    - 9 Standard Penetration Test (SPT) Borings
      - Cross-Hole Seismic Test
      - NUREG-1567 required laboratory testing
    - Groundwater observation wells
    - NUREG-0800 Section 3.2.7 COV values taken as 1
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• **RSI 2-11**
  - Requested information includes:
    - Liquefaction potential
    - Bearing Capacity
    - Settlement
    - Seismic pressures for below grade structures
    - Sliding Assessment
  - Strategies to respond
    - Soil borings and laboratory testing to determine in-situ soil properties
    - Modeling and Analyses using the inputs gathered from investigations
QUESTIONS?