

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

INTERIM STORAGE PARTNERS

(WCS Consolidated Interim Storage Facility)

Docket No. 72-1050

NRC STAFF'S CONSOLIDATED RESPONSE TO PETITIONS
TO INTERVENE AND REQUESTS FOR HEARING FILED BY:
SIERRA CLUB; DON'T WASTE MICHIGAN, CITIZENS'
ENVIRONMENTAL COALITION, CITIZENS FOR ALTERNATIVES
TO CHEMICAL CONTAMINATION, NUCLEAR ENERGY
INFORMATION SERVICE, PUBLIC CITIZEN, INC., SAN LUIS
OBISPO MOTHERS FOR PEACE, SUSTAINABLE ENERGY
AND ECONOMIC DEVELOPMENT COALITION AND LEONA MORGAN.

Sara B. Kirkwood
Joe I. Gillespie III
Emily Monteith
Alana M. Wase

Counsel for NRC Staff

December 10, 2018

TABLE OF CONTENTS

Introduction	1
Background.....	2
Discussion	3
I. Standing to Intervene.....	3
A. Applicable Legal Requirements	3
1. Traditional Standing Principles.....	4
2. Proximity Plus Standing	5
3. Organizational and Representational Standing	6
B. The Petitioners' Standing to Intervene	7
1. Don't Waste Michigan, et al. (Joint Petitioners)	7
2. The Sierra Club.....	11
II. Admissibility of the Petitioners' Proffered Contentions.....	11
A. Legal Requirements for Contentions	11
B. Analysis of the Petitioners' Proposed Contentions.....	15
1. Don't Waste Michigan, et al.....	15
(a) Don't Waste Michigan, Contention 1	15
(b) Don't Waste Michigan, Contention 2	19
(c) Don't Waste Michigan, Contention 3	24
(d) Don't Waste Michigan, Contention 4	27
(e) Don't Waste Michigan, Contention 5	32
(f) Don't Waste Michigan, Contention 6	43
(g) Don't Waste Michigan, Contention 7	47
(h) Don't Waste Michigan, Contention 8	49
(i) Don't Waste Michigan, Contention 9	53
(j) Don't Waste Michigan, Contention 10	56
(k) Don't Waste Michigan, Contention 11	56
(l) Don't Waste Michigan, Contention 12	62
(m) Don't Waste Michigan, Contention 13	67
(n) Don't Waste Michigan, Contention 14	70
(o) Don't Waste Michigan, Contention 15	75

2. Sierra Club.....	75
(a) Sierra Club, Contention 1.....	76
(b) Sierra Club, Contention 2.....	79
(c) Sierra Club, Contention 3.....	82
(d) Sierra Club, Contention 4.....	84
(e) Sierra Club, Contention 5.....	89
(f) Sierra Club, Contention 6.....	90
(g) Sierra Club, Contention 7.....	96
(h) Sierra Club, Contention 8.....	100
(i) Sierra Club, Contention 9.....	102
(j) Sierra Club, Contention 10.....	102
(k) Sierra Club, Contention 11.....	108
(l) Sierra Club, Contention 12.....	115
(m) Sierra Club, Contention 13.....	119
(n) Sierra Club, Contention 14.....	121
(o) Sierra Club, Contention 15.....	125
(p) Sierra Club, Contention 16.....	132
(q) Sierra Club, Contention 17.....	137
Conclusion.....	138

TABLE OF AUTHORITES

Judicial Opinions

<i>Bullcreek v. NRC</i> , 359 F.3d 536 (D.C. Cir. 2004)	66, 78
<i>Citizens Against Burlington, Inc. v. Busey</i> , 938 F.2d 190 (D.C. Cir. 1990).....	23, 49, 50
<i>City of Grapevine v. DOT</i> , 17 F.3d 1502 (D.C. Cir. 1994).....	36, 50, 110, 127
<i>Connecticut Bankers Ass'n v. Board of Governors</i> , 627 F.2d 245 (D.C. Cir. 1980).....	17
<i>Department of Transportation v. Public Citizen</i> , 541 U.S. 752 (2004).....	72, 88
<i>Illinois v. Gen. Elec. Co.</i> , 683 F.2d 206 (7 th Cir. 1982).....	66, 78
<i>Jersey Cent. Power & Light Co. v. Township of Lacy</i> , 772 F.2d 1103 (3d Cir. 1985).....	66, 78
<i>Kleppe v. Sierra Club</i> , 427 U.S. 390 (1976).....	passim
<i>Lujan v. Defenders of Wildlife</i> , 504 U.S. 555 (1992).....	4
<i>Metropolitan Edison Co. v. People Against Nuclear Energy</i> , 460 U.S. 766 (1983).....	72, 88
<i>N.J. Dep't. of Env'tl. Prot. v. NRC</i> , 561 F.3d 132 (3d Circuit 2009)	72, 88
<i>New York v. NRC</i> , 681 F.3d 471 (D.C. Cir. 2012).....	89
<i>Pac. Gas & Elec. Co. v. State Energy Res. Conservation & Dev Comm'n</i> , 461 U.S. 190 (1983)	66, 78
<i>San Luis Obispo Mothers for Peace v. NRC</i> , 449 F.3d 1016 (9 th Cir. 2006),	71
<i>Sierra Club v. Department of Energy</i> , 867 F.3d 189 (D.C. Cir. 2017)	86

Commission Legal Issuances

<i>Amergen Energy Co., L.L.C.</i> (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111 (2006)	13
<i>Amergen Energy Company, LLC</i> (Oyster Creek Nuclear Generating Station), CLI-07-8, 65 NRC 124 (2007).....	72, 86, 88
<i>Ariz. Pub. Serv. Co.</i> (Palo Verde Nuclear Generating Station, Unit Nos. 1, 2, and 3), CLI-91-12, 34 NRC 149 (1991).....	passim
<i>Baltimore Gas & Electric Co.</i> (Calvert Cliffs Nuclear Power Plant, Units 1 & 2), CLI-98-25, 48 NRC 325 (1998)	25
<i>Calvert Cliffs 3 Nuclear Project, LLC, & UniStar Nuclear Operating Services, LLC</i> (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911 (2009).....	4, 5

<i>Cleveland Elec. Illuminating Co.</i> (Perry Nuclear Power Plant, Unit 1), CLI-93-21, 38 NRC 87 (1993).....	5
<i>Commonwealth Edison Co.</i> (Dresden Nuclear Power Station, Unit 1), CLI-81-25, 14 NRC 616 (1981).....	13
<i>Commonwealth Edison Co.</i> (Zion Nuclear Power Station, Units 1 and 2), CLI-00-5, 51 NRC 90 (2000).....	5
<i>Commonwealth Edison Co.</i> (Zion Nuclear Power Station, Units 1 and 2), CLI-99-4,49 NRC 185 (1999).....	130
<i>Consumers Energy Co.</i> (Palisades Nuclear Power Plant), CLI-07-18, 65 NRC 399 (2007)	6
<i>Crow Butte Res., Inc.</i> (North Trend Expansion Project), CLI-09-12, 69 NRC 535 (2009)	14, 21, 116, 134
<i>Curators of the Univ. of Mo.</i> (TRUMP-S Project), CLI-95-8, 41 NRC 386 (1995).....	25
<i>Detroit Edison Co.</i> (Fermi Unit 3), CLI-09-4, 69 NRC 80 (2009).....	96
<i>Detroit Edison Company</i> (Fermi Power Plant Independent Spent Fuel Storage Installation), CLI-10-3, 71 NRC 49 (2010)	6
<i>Dominion Nuclear Conn., Inc.</i> (Millstone Nuclear Power Station, Unit 2), CLI-03-14, 58 NRC 207 (2003).....	14
<i>Dominion Nuclear Conn., Inc.</i> (Millstone Nuclear Power Station, Unit 3), CLI-09-5, 69 NRC 115 (2009).....	13
<i>Dominion Nuclear Conn., Inc.</i> (Millstone Nuclear Power Station, Units 2 & 3), CLI-01-24, 54 NRC 349 (2001).....	12, 87, 119
<i>Duke Energy Carolinas, LLC</i> (William States Lee III Nuclear Station, Units 1 and 2), CLI-16-19, 84 NRC 180 (2016).....	110
<i>Duke Energy Corp.</i> (McGuire Nuclear Station), CLI-02-14, 55 NRC 278 (2002).....	passim
<i>Duke Energy Corp.</i> (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-17, 56 NRC 1 (2002).....	110
<i>Duke Energy Corp.</i> (Oconee Nuclear Station, Units 1, 2, and 3) CLI-99-11, 49 NRC 328 (1999).....	passim
<i>EnergySolutions, LLC</i> (Radioactive Waste Import/Export Licenses), CLI-11-3, 73 NRC 613 (2011)	6
<i>Entergy Nuclear Generation Co.</i> (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC 287 (2010).....	19, 24, 86, 116
<i>Exelon Generation Co., LLC</i> (Early Site Permit for Clinton ESP Site), CLI-05-29, 62 NRC 801 (2005).....	13

<i>Fansteel, Inc.</i> (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195 (2003).....	passim
<i>Fla. Power & Light Co.</i> (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-15-25, 82 NRC 389 (2015).....	4, 5
<i>Fla. Power and Light Co.</i> (St. Lucie, Units 1 and 2), CLI-89-21, 30 NRC 325 (1989).....	5
<i>Ga. Institute of Tech.</i> (Georgia Tech Research Reactor), CLI-95-12, 42 NRC 111 (1995).....	5
<i>GPU Nuclear, Inc.</i> (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193 (2000)	21
<i>Gulf States Utilities Co.</i> (River Bend Station, Unit 1), CLI-94-10, 40 NRC 43 (1994).....	17
<i>Hydro Resources, Inc.</i> (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31 (2001).....	110
<i>Int'l Uranium (USA) Corp.</i> (White Mesa Uranium Mill), CLI-01-21, 54 NRC 247 (2001).....	4
<i>Long Island Lighting Co.</i> (Shoreham Nuclear Power Station, Unit 1), CLI-90-8, 32 NRC 201 (1991).....	110, 111
<i>Louisiana Energy Services</i> (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77 (1998)	passim
<i>Louisiana Energy Services, L.P.</i> (Claiborne Enrichment Center), CLI-97-15, 46 NRC 294 (1997).....	26
<i>NextEra Energy Seabrook, LLC</i> (Seabrook Station, Unit 1), CLI-12-5, 75 NRC 301 (2012)	14
<i>Northern States Power Co.</i> (Prairie Island Nuclear Generating Plant, Units 1 and 2), CLI-10-27, 72 NRC 481 (2010).....	13
<i>Nuclear Fuel Servs., Inc.</i> (Erwin, Tennessee), CLI-04-13, 59 NRC 244 (2004).....	5, 6
<i>Paina Hawaii, L.L.C.</i> (Materials License Application) CLI-10-18, 72 NRC 56 (2010).....	49
<i>Private Fuel Storage, L.L.C.</i> (Independent Irradiated Fuel Storage Installation), CLI-02-20, 56 NRC 147 (2002).....	36
<i>Private Fuel Storage, L.L.C.</i> (Independent Spent Fuel Storage Installation), CLI-00-13, 52 NRC 23 (2000).....	26
<i>Private Fuel Storage, L.L.C.</i> (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340 (2002).....	66, 72, 78, 88

<i>Private Fuel Storage, L.L.C.</i> (Independent Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125 (2004).....	passim
<i>Private Fuel Storage, L.L.C.</i> (Independent Spent Fuel Storage Installation), CLI-04-4, 59 NRC 31 (2004).....	21, 58, 78, 106
<i>Private Fuel Storage, L.L.C.</i> (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318 (1999).....	12
<i>Pub. Serv. Co. of New Hampshire</i> (Seabrook Station, Units 1 and 2), CLI-89-3, 29 NRC 234 (1989).....	15
<i>Sequoyah Fuels Corp. and General Atomics</i> (Gore, Oklahoma Site Decommissioning), CLI-01-02, 53 NRC 9 (2001).....	5
<i>Sequoyah Fuels Corp. and General Atomics</i> (Gore, Oklahoma Site), CLI-94-12, 40 NRC 64 (1994).....	4, 5, 6
<i>State of New Jersey</i> (Department of Law and Public Safety's Requests Dated October 8, 1993), CLI-93-25, 38 NRC 289 (1993).....	135
<i>Strata Energy, Inc.</i> (Ross In Situ Recovery Uranium Project), CLI-16-13, 83 NRC 566 (2016)	69
<i>System Energy Resources, Inc.</i> (Early Site Permit for Grand Gulf ESP Site), CLI-05-4, 61 NRC 10 (2005)	55, 112
<i>System Energy Resources, Inc.</i> (Early Site Permit for Grand Gulf ESP Site), CLI-07-10, 65 NRC 144 (2007).....	73, 89
<i>U.S. Army Installation Command</i> (Schofield Barracks, Oahu, Hawaii, and Pohakuloa Training Area, Island of Hawaii, Hawaii), CLI-10-20, 72 NRC 185 (2010)	6
<i>USEC, Inc.</i> (American Centrifuge Plant), CLI-05-11, 61 NRC 309 (2005).....	6
<i>USEC, Inc.</i> (American Centrifuge Plant), CLI-06-10, 63 NRC 451 (2006)	14, 120
<i>USEC, Inc.</i> (American Centrifuge Plant), CLI-06-9, 63 NRC 433 (2006)	11
<i>Vermont Yankee Nuclear Power Corp.</i> (Vermont Yankee Nuclear Power Station), CLI-00-20, 52 NRC 151 (2000).....	11
 Atomic Safety and Licensing Appeal Board Decisions	
<i>Houston Lighting and Power Co.</i> (Allens Creek Nuclear Generating Station, Unit 1), ALAB-535, 9 NRC 377 (1979)	6
<i>Philadelphia Elec. Co.</i> (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13 (1974).....	13, 137
<i>Pub. Serv. Co. of Ind., Inc.</i> (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-316, 3 NRC 167 (1976).....	13, 16

<i>Pub. Serv. Co. of New Hampshire</i> (Seabrook Station, Units 1 and 2), ALAB-899, 28 NRC 93 (1988)	116
<i>Trustees of Columbia University in the City of New York</i> , ALAB-50, 4 AEC 849 (1972).....	135
Atomic Safety and Licensing Board Decisions	
<i>Areva Enrichment Services, L.L.C.</i> (Eagle Rock Enrichment Facility), LBP-11-11, 73 NRC 455 (2011)	48
<i>Crow Butte Resources, Inc.</i> (In Situ Leach Facility, Crawford, Nebraska), LBP-15-15, 81 NRC 598.....	71, 118
<i>Detroit Edison Co.</i> (Fermi Power Plant ISFSI), LBP-09-20, 70 NRC 565 (2009).....	130
<i>Dominion Nuclear Connecticut, Inc.</i> (Millstone Nuclear Power Station, Unit 3), LBP-08-9, 67 NRC 421 (2008)	33, 44, 82, 108
<i>Dominion Nuclear Connecticut, Inc.</i> (Millstone Nuclear Power Station, Units 2 and 3), LBP-04-15, 60 NRC 81 (2004).....	15, 136
<i>Dominion Nuclear North Anna, L.L.C.</i> (Early Site Permit for North Anna Site), LBP-07-9, 65 NRC 539 (2007)	50
<i>Duke Power Company</i> (Catawba Nuclear Station, Units 1 and 2), LBP-82-51, 16 NRC 167 (1982).....	18
<i>Entergy Nuclear Vermont Yankee, LLC</i> (Vermont Yankee Nuclear Power Station), LBP-06-14, 63 NRC 568 (2006)	11
<i>Envirocare of Utah, Inc.</i> (Byproduct Material Waste Disposal License), LBP-92-8, 35 NRC 167 (1992).....	10
<i>Exxon Nuclear Company, Inc.</i> (Nuclear Fuel Recovery and Recycling Center), LBP-77-59, 6 NRC 518 (1977).....	10
<i>Florida Power & Light Company</i> (Turkey Point Nuclear Generating Plant, Units 6 and 7), LBP-17-2, 85 NRC 14 (2017).....	71
<i>Georgia Institute of Technology</i> (Georgia Tech Research Reactor), LBP-95-6, 41 NRC 281 (1995).....	17, 84, 100
<i>Hydro Resources, Inc.</i> (P.O. Box 777, Crownpoint, New Mexico 87313), LBP-06-19, 64 NRC 53 (2006).....	23
<i>Northern States Power Co.</i> (Pathfinder Atomic Plant, Byproduct Material License No. 22-08799-02), LBP-90-3, 31 NRC 40 (1990)	10
<i>Nuclear Mgmt. Co., LLC</i> (Palisades Nuclear Power Plant), LBP-06-10, 63 NRC 314 (2006)	74
<i>Pacific Gas & Electric Co.</i> (Diablo Canyon ISFSI), LBP-02-23, 56 NRC 413 (2002).....	11, 81

<i>Private Fuel Storage, L.L.C.</i> (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142 (1998).....	36, 58, 117, 128
<i>Private Fuel Storage, L.L.C.</i> (Independent Spent Fuel Storage Installation), LBP-99-34, 50 NRC 168 (1999).....	135
<i>Progress Energy Carolinas, Inc.</i> (Shearon Harris Nuclear Power Plant, Units 2 and 3), LBP-09-8, 69 NRC 736 (2009).....	17
<i>Sacramento Mun. Util. Dist.</i> (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 NRC 200 (1993).....	33, 44, 82, 108
<i>Shaw AREVA Enrichment Services, LLC</i> (Eagle Rock Enrichment Facility), LBP-11-26, 74 NRC 499 (2011).....	83
<i>South Carolina Electric & Gas Company</i> (Virgil C. Summer Nuclear Station, Units 2 and 3), LBP-09-2, 69 NRC 87 (2009).....	73
<i>Southern Nuclear Operating Co.</i> (Early Site Permit for Vogtle ESP Site), LBP-07-3, 65 NRC 237 (2007).....	passim

Statutes

Atomic Energy Act § 11, 42 U.S.C. § 2014, <i>Definitions</i>	48
Atomic Energy Act § 189a(1)(A), 42 U.S.C. § 2239(a)(1)(A), <i>Hearings and Judicial Review</i>	3

Regulations

10 C.F.R. § 2.309, <i>Hearing requests, petitions to intervene, requirements for standing, and contentions</i>	passim
10 C.F.R. § 2.335, <i>Consideration of Commission rules and regulations in adjudicatory proceedings</i>	passim
10 C.F.R. § 50.38, <i>Ineligibility of certain applicants</i>	47, 48
10 C.F.R. § 51.22, <i>Criterion for categorical exclusion; identification of licensing and regulatory actions eligible for categorical exclusion or otherwise not requiring environmental review</i>	88, 117
10 C.F.R. § 51.23, <i>Environmental impacts of continued storage of spent nuclear fuel beyond the licensed life for operation of a reactor</i>	passim
10 C.F.R. § 51.45, <i>Environmental report</i>	passim
10 C.F.R. § 51.52, <i>Environmental effects of transportation of fuel and waste</i>	19
10 C.F.R. § 51.61, <i>Environmental report—-independent spent fuel storage installation (ISFSI) or monitored retrievable storage installation (MRS) license</i>	16

10 C.F.R. Part 51, App. A, <i>Format for Presentation of Material in Environmental Impact Statements</i>	23, 80, 82
10 C.F.R. § 71.5, <i>Transportation of licensed material</i>	88
10 C.F.R. § 71.47, <i>External radiation standards for all packages</i>	136
10 C.F.R. § 71.73, <i>Hypothetical accident conditions</i>	87
10 C.F.R. § 72.22, <i>Contents of application: General and financial information</i>	26, 77
10 C.F.R. § 72.30, <i>Financial assurance and recordkeeping for decommissioning</i>	25, 27, 102
10 C.F.R. § 72.34, <i>Environmental report</i>	16
10 C.F.R. § 72.44, <i>License Conditions</i>	124
10 C.F.R. § 72.92, <i>Design basis external natural events</i>	113
10 C.F.R. § 72.122, <i>Overall requirements</i>	passim
10 C.F.R. Part 72, Subpart K, <i>General License for Storage of Spent Fuel at Power Reactor Sites</i>	29
10 C.F.R. § 73.37, <i>Requirements for physical protection of irradiated reactor fuel in transit</i>	74, 88
40 C.F.R. § 1502.13, <i>Unimportant quantities of source material</i>	22
40 C.F.R. § 1502.14, <i>Specific exemptions</i>	36
40 C.F.R. § 1502.23, <i>General license for carriers of transient shipments of natural uranium other than in the form of ore or ore residue</i>	54

Other Authorities

Changes to Adjudicatory Process, 69 Fed. Reg. 2182 (Jan. 14, 2004).....	12, 13, 71, 118
Continued Storage of Spent Nuclear Fuel, 79 Fed. Reg. 56,238 (Sep. 19, 2014).....	28
Delegated Authority to Order Use of Procedures for Access to Certain Sensitive Unclassified Information, 73 Fed. Reg. 10,978 (Feb. 29, 2008).....	96
<i>Environmental Assessment for 10 CFR Part 72 ‘Licensing Requirements for the Independent Storage of Spent Fuel and High-Level Radioactive Waste’, NUREG-1092 (Aug. 1984) (ML091050510)</i>	60, 105, 134
Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions and Related Conforming Amendments, 49 Fed. Reg. 9352 (Mar. 12, 1984).....	86, 117
<i>Environmental Review Guidance for Licensing Actions Associated with NMSS Programs</i> NUREG-1748 (Aug. 2003) (ML032450279).....	passim

Exec. Order 12,898, Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations, 59 Fed. Reg. 7629 (Feb. 16, 1994).....	passim
<i>Final Environmental Impact Statement for Construction and Operation of an Independent Spent Fuel Storage Installation on the Reservation of Skull Valley Band of Goshute Indians & Related Transportation Facility in Tooele County, Utah</i> , NUREG-1714 (Dec. 2001) (ML020150170 (package)).....	31, 86
<i>Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel</i> , NUREG-2157 (Sept. 2014) (ML14198A440 (package)).....	passim
Implementation of Procedural Provisions 43 Fed. Reg. 55,978 (Nov. 29, 1978).....	22
Interim Storage Partner’s Waste Control Specialists Consolidated Interim Storage Facility, 83 Fed. Reg. 44,070 (Aug. 29, 2018).....	2, 18, 33, 95
Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High-Level Radioactive Waste, 51 Fed. Reg. 19,106 (May 27, 1986) (proposed rule).....	60, 106, 134
Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High-Level Radioactive Waste, 53 Fed. Reg. 31,651 (Aug. 19, 1988) (final rule).....	60, 105, 134
Licensing Requirements for the Storage of Spent Fuel in an Independent Spent Fuel Storage Installation, 45 Fed. Reg. 74,693 (Nov. 12, 1980).....	48, 78
National Environmental Policy Act Regulations, 50 Fed. Reg. 32,234 (Aug. 9, 1985).....	86
Request for Public Comment on the U.S. Department of Energy Interpretation of High-Level Radioactive Waste, 83 Fed. Reg. 50,909 (Oct. 10, 2018).....	67
Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process, 54 Fed. Reg. 33,168 (Aug. 11, 1989).....	17, 50, 98
<i>Shipments of High Level Nuclear Power Plant Waste</i> , DD-84-9, 19 NRC 1087 (1984).....	106, 135
<i>Spent Fuel Transportation Risk Assessment</i> , NUREG-2125 (Jan. 2014) (ML14031A323).....	86
Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions, 69 Fed. Reg. 52,040 (Aug. 24, 2004).....	37, 38, 42, 128

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

INTERIM STORAGE PARTNERS

(WCS Consolidated Interim Storage Facility)

Docket No. 72-1050

NRC Staff's Consolidated Response to Petitions to Intervene and Requests for Hearing Filed by: Sierra Club; Don't Waste Michigan, Citizens' Environmental Coalition, Citizens For Alternatives to Chemical Contamination, Nuclear Energy Information Service, Public Citizen, Inc., San Luis Obispo Mothers For Peace, Sustainable Energy and Economic Development Coalition, and Leona Morgan

Introduction

Pursuant to 10 C.F.R. § 2.309, the U.S. Nuclear Regulatory Commission Staff hereby responds to the petitions to intervene and requests for hearing submitted by the Sierra Club¹ and a consortium consisting of Don't Waste Michigan, Citizens' Environmental Coalition, Citizens for Alternatives to Chemical Contamination, Nuclear Energy Information Service, Public Citizen, Inc., San Luis Obispo Mothers for Peace, Sustainable Energy and Economic Development Coalition, and Leona Morgan (collectively referred to as the Joint Petitioners).² As further discussed below, the Petition of the Sierra Club should be granted in part and the Petition of the Joint Petitioners should be rejected.

¹ *Petition to Intervene and Request for Adjudicatory Hearing by Sierra Club* (Nov. 13, 2018) (ADAMS Accession No. ML18317A411) (Sierra Club Petition).

² *Petition of Don't Waste Michigan, Citizens' Environmental Coalition, Citizens for Alternatives to Chemical Contamination, Nuclear Energy Information Service, Public Citizen, Inc., San Luis Obispo Mothers for Peace, Sustainable Energy and Economic Development Coalition, and Leona Morgan. Individually, to Intervene, and Request for an Adjudicatory Hearing* (Nov. 13, 2018) (ML18317A433) (Joint Petition).

Background

By letter dated April 28, 2016, Waste Control Specialists, LLC (WCS) tendered a specific license application under 10 C.F.R. Part 72, requesting authorization to construct and operate a consolidated interim storage facility (CISF) for spent nuclear fuel (SNF) and reactor-related Greater than Class C (GTCC) waste in Andrews County, Texas.³

On April 18, 2017, WCS requested that the NRC temporarily suspend all review activities associated with its application, and the next day WCS and the NRC Staff jointly requested that the then pending hearing opportunity be withdrawn.⁴

By letters dated June 8 and July 19, 2018, WCS requested that the NRC resume the review of its application, and it provided a revised application, reflecting, among other changes, a new applicant, Interim Storage Partners (ISP), a joint venture between WCS and Orano CIS, LLC.⁵ On August 29, 2018, a notice of opportunity to request a hearing and petition for leave to intervene for the Interim Storage Partners application was published in the *Federal Register*.⁶

³ Letter from J. Scott Kirk, WCS, to Mark Lombard, NRC, *License Application to Construct and Operate a Consolidated Interim Storage Facility for Spent Nuclear Fuel in Andrews County, Texas, Docket 72-1050* (Apr. 28, 2016) (ML16132A533).

⁴ *Joint Request to Withdraw the Federal Register Notice Providing an Opportunity to Submit Hearing Requests* (Apr. 19, 2017) (ML17109A480) (attaching letter to NRC Document Control Desk from Rod Baltzer, WCS (Apr. 18, 2017)).

⁵ Letter from Jeffery Isakson, ISP, to Document Control Desk, NRC (July 19, 2018) (ML18206A482); Letter from Jeffery Isakson, ISP, to Document Control Desk, NRC, *Submittal of License Application Revision 2 and Request to Restart Review of Application for Approval of the WCS CISF, Docket 72-1050* (June 8, 2018) (ML18166A003).

ISP's application materials are available at: <https://www.nrc.gov/waste/spent-fuel-storage/cis/wcs/wcs-app-docs.html>, also available at <https://go.usa.gov/xPJKr>. Unless otherwise specified, all of the NRC Staff's citations are to Revision 2 of the License Application (ML18221A397 (package)), Environment Report (ER) (ML18221A405 (package)), and Safety Analysis Report (SAR) (ML18221A408 (package)). Specific references to the proprietary version of the SAR Revision 2 are designated as such.

⁶ Interim Storage Partner's Waste Control Specialists Consolidated Interim Storage Facility, 83 Fed. Reg. 44,070 (Aug. 29, 2018), corrected, 83 Fed. Reg. 44,680 (Aug. 31, 2018) (noting that the correct deadline to file intervention petitions is October 29, 2018), 83 Fed. Reg. 45,288 (Sept. 6, 2018) (correcting the title of the August 31, 2018 correction).

On October 2, 2018, a number of organizations and individuals submitted a consolidated request for an extension of the hearing request deadline.⁷ On October 25, 2018, the Commission, by order of the Secretary, extended the deadline to request a hearing by 15 days for those individuals and groups who had requested the extension, to November 13, 2018.⁸ The NRC received petitions to intervene and requests for a hearing regarding the ISP application from the Sierra Club and Joint Petitioners on Nov. 13, 2018.⁹ The NRC Staff responds to these petitions below.

Discussion

In order for a petition to intervene and hearing request to be granted, a petitioner must demonstrate that it has standing to intervene in the proceeding and submit at least one admissible contention.¹⁰

I. Standing to Intervene

A. Applicable Legal Requirements

In accordance with the Atomic Energy Act (AEA), “the Commission shall grant a hearing upon the request of any person whose interest may be affected by the proceeding, and shall admit any such person as a party to such proceeding.”¹¹ The Commission will grant a request for hearing if the petitioner meets the standing requirements of 10 C.F.R. § 2.309(d) and submits

⁷ *Request for Extension on Deadline for Intervention* (Oct. 2, 2018) (ML18276A066).

⁸ *Order of the Secretary* (Oct. 25, 2018) (unpublished) (ML18298A335) (Extending deadline to request a hearing).

⁹ See Sierra Club Petition and Joint Petition.

¹⁰ 10 C.F.R. § 2.309(a).

¹¹ Hearings and Judicial Review, Atomic Energy Act § 189a(1)(A), 42 U.S.C. § 2239(a)(1)(A).

at least one admissible contention pursuant to 10 C.F.R. § 2.309(f).¹² The petitioner's hearing request must contain:

- (i) The name, address and telephone number of the requestor or petitioner;
- (ii) The nature of the requestor's/petitioner's right under the Act to be made a party to the proceeding;
- (iii) The nature and extent of the requestor's/petitioner's property, financial or other interest in the proceeding; and
- (iv) The possible effect of any decision or order that may be issued in the proceeding on the requestor's/petitioner's interest.¹³

1. Traditional Standing Principles

In addition to fulfilling the general standing requirements of 10 C.F.R. § 2.309(d)(1), a petitioner "must demonstrate that it has an interest that may be affected by the proceeding."¹⁴ The Commission applies contemporaneous judicial concepts of standing to evaluate whether the petitioner has demonstrated the requisite interest.¹⁵ To this end, "a petitioner must (1) allege an injury in fact that is (2) fairly traceable to the challenged action and (3) is likely to be redressed by a favorable decision."¹⁶ The injury claimed by the petitioner must be actual or threatened and both concrete and particularized.¹⁷ Further, the injury alleged must be "to an interest arguably within the zone of interests protected by the governing statute"—here, the AEA

¹² See 10 C.F.R. § 2.309(a).

¹³ 10 C.F.R. § 2.309(d).

¹⁴ See *Fla. Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-15-25, 82 NRC 389, 394 (2015).

¹⁵ See *id.*; see also *Calvert Cliffs 3 Nuclear Project, LLC, & UniStar Nuclear Operating Services, LLC* (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 915 (2009).

¹⁶ *Turkey Point*, CLI-15-25, 82 NRC at 394; see also *Sequoyah Fuels Corp. and General Atomics (Gore, Oklahoma Site)*, CLI-94-12, 40 NRC 64, 71–72 (1994); *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560–61 (1992).

¹⁷ *Int'l Uranium (USA) Corp.* (White Mesa Uranium Mill), CLI-01-21, 54 NRC 247, 250 (2001); see also *Sequoyah Fuels Corp.*, CLI-94-12, 40 NRC at 71 (stating that "standing has been denied when the threat of injury is too speculative").

or NEPA.¹⁸ The causation element of standing requires a petitioner to show “that the injury is fairly traceable to the proposed action.”¹⁹ The redressability element of standing “requires the intervenor to show that its actual or threatened injuries can be cured by some action of the tribunal.”²⁰ The petitioner has the burden to demonstrate standing requirements are met.²¹ However, a licensing board will “construe the [intervention] petition in favor of the petitioner” when making a standing determination.²²

2. Proximity Plus Standing

In cases involving reactor facilities, the Commission will apply a standing presumption based on proximity to the site.²³ No such automatic presumption exists for nuclear materials proceedings.²⁴ In such cases, to obtain standing based on geographic proximity to a facility, a petitioner must demonstrate that “the proposed action involves a significant source of radioactivity producing an obvious potential for offsite consequences.”²⁵ This “proximity-plus” standard is applied on a “case-by-case basis, taking into account the nature of the proposed action and the significance of the radioactive source.”²⁶ If “there is no ‘obvious’ potential for radiological harm at a particular distance frequented by the petitioner, it becomes the petitioner’s

¹⁸ *Calvert Cliffs*, CLI-09-20, 70 NRC at 915 (citing *Cleveland Elec. Illuminating Co.* (Perry Nuclear Power Plant, Unit 1), CLI-93-21, 38 NRC 87, 92 (1993) (internal quotations omitted)).

¹⁹ *Sequoyah Fuels Corp.*, CLI-94-12, 40 NRC at 75.

²⁰ *Sequoyah Fuels Corp. and General Atomics* (Gore, Oklahoma Site Decommissioning), CLI-01-02, 53 NRC 9, 15 (2001).

²¹ *See Commonwealth Edison Co.* (Zion Nuclear Power Station, Units 1 and 2), CLI-00-5, 51 NRC 90, 98 (2000).

²² *Turkey Point*, CLI-15-25, 82 NRC at 394 (quoting *Ga. Institute of Tech.* (Georgia Tech Research Reactor), CLI-95-12, 42 NRC 111, 115 (1995) (internal quotations omitted)).

²³ *See Fla. Power and Light Co.* (St. Lucie, Units 1 and 2), CLI-89-21, 30 NRC 325, 329 (1989).

²⁴ *See Nuclear Fuel Servs., Inc.* (Erwin, Tennessee), CLI-04-13, 59 NRC 244, 248 (2004).

²⁵ *Georgia Tech Research Reactor*, CLI-95-12, 42 NRC at 116.

²⁶ *Id.* at 116–17.

burden to show a specific and plausible means of how the challenged action may harm him or her.”²⁷ “[C]onclusory allegations about potential radiological harm” are insufficient for this showing.²⁸ Where a petitioner is unable to demonstrate “proximity-plus” standing to intervene, traditional standing principles will apply.²⁹

3. Organizational and Representational Standing

When an organization requests a hearing, it must demonstrate either organizational or representational standing. To demonstrate organizational standing, the petitioner must show an “injury-in-fact” to the interests of the organization itself.³⁰ Where an organization seeks to establish representational standing, it must demonstrate that at least one of its members would be affected by the proceeding and identify any such members by name and address. Also, the organization must show that the identified members would have standing to intervene in their own right, and that these members have authorized the organization to request a hearing on their behalf.³¹ In addition, the interests that the representative organization seeks to protect must be germane to its own purpose, and neither the asserted claim nor the required relief must require an individual member to participate in the organization's legal action.³²

²⁷ *USEC, Inc. (American Centrifuge Plant)*, CLI-05-11, 61 NRC 309, 311–12 (2005) (quoting *Nuclear Fuel Servs.*, CLI-04-13, 59 NRC at 248 (internal quotations omitted)).

²⁸ *Nuclear Fuel Servs.*, CLI-04-13, 59 NRC at 248.

²⁹ *See U.S. Army Installation Command (Schofield Barracks, Oahu, Hawaii, and Pohakuloa Training Area, Island of Hawaii, Hawaii)*, CLI-10-20, 72 NRC 185, 189 (2010).

³⁰ *See EnergySolutions, LLC (Radioactive Waste Import/Export Licenses)*, CLI-11-3, 73 NRC 613, 621 (2011).

³¹ *See Detroit Edison Company (Fermi Power Plant Independent Spent Fuel Storage Installation)*, CLI-10-3, 71 NRC 49, 51–52 (2010); *see also Sequoyah Fuels Corp.*, CLI-94-12, 40 NRC at 72 (citing *Houston Lighting and Power Co. (Allens Creek Nuclear Generating Station, Unit 1)*, ALAB-535, 9 NRC 377, 389–400 (1979)) (“An organization seeking representational standing on behalf of its members may meet the ‘injury-in-fact’ requirement by demonstrating that at least one of its members, who has authorized the organization to represent his or her interest, will be injured by the possible outcome of the proceeding.”).

³² *Consumers Energy Co. (Palisades Nuclear Power Plant)*, CLI-07-18, 65 NRC 399, 409 (2007).

B. The Petitioners' Standing to Intervene

Based on the specific allegations contained in each petition to intervene and request for hearing, the Sierra Club has made a sufficient showing to establish standing to intervene based on the NRC's requirements. On the other hand, Joint Petitioners (*i.e.*, Don't Waste Michigan et al.) have failed to make a sufficient showing.

1. Don't Waste Michigan, et al. (Joint Petitioners)

Don't Waste Michigan, Citizens' Environmental Coalition, Citizens for Alternatives to Chemical Contamination, Nuclear Energy Information Service, Nuclear Issues Study Group, Public Citizen, Inc., and San Luis Obispo Mothers for Peace, Sustainable Energy and Economic Development Coalition, and Leona Morgan have all submitted supporting declarations in an attempt to demonstrate the organizations' (and individual's) representational standing in this proceeding. However, these declarations do not demonstrate that any of the organizations' members will suffer a concrete and particularized injury-in-fact that is fairly traceable to the proposed construction and operation of the ISP CISF. Therefore, these organizations have not demonstrated representational standing and, as a result, their Joint Petition should be dismissed.

The majority of the submitted declarations use substantively identical language, *i.e.*, they appear to be form letters with the only differences between them being the declarant's name, address, organization affiliation, and distance to an alleged transportation route. The declarations all argue that the construction and operation of the CISF "will be stocked by delivery over hundreds or thousands of miles of at least 3,000 shipments of SNF-filled or GTCC waste-filled casks . . . by truck, barge and/or rail . . . over 20 years and . . . from nuclear plant fuel pool or dry cask storage locations in the eastern United States."³³ They all state that the

³³ See, *e.g.*, Declaration of Cemelli de Aztlan (in support of Public Citizen) at ¶ 3.

declarant has “studied the Rail Lines Map” in the ISP Environmental Report (ER) of transportation routes as well as the “Department of Energy maps of rail and highway transportation routes identified for the Yucca Mountain geological repository” and assert that a transportation route is within a specified distance of the declarant’s home and/or work and that the transportation route “will likely be used to transport many cargoes of SNF and/or GTCC wastes” to the proposed CISF.³⁴ They state that the declarant is concerned for his/her personal safety and that of others in his/her household, as well as for his/her property damage, from “radiation exposure in the event of a serious transportation accident, vandalism or a terrorist attack” that breaches a cask. They challenge the ER’s “rosy projections of error-free transport”³⁵ They fault the ER for not including a “public health impact assessment of the effects of the expected 20+ years of transports of SNF and GTCC waste” and for only providing “a superficial analysis of the risks from unbreached casks in transport.”³⁶ They assert that, if a cask is received at the CISF with a radiation leakage problem, it will be returned to the point of origin and, thus, “actively-leaking or damaged casks” will travel close to the declarant’s home, place of employment and/or places of recreation and that “the risks of a radiation accident . . . will be increased during such shipments.”³⁷ They state that the ER does not evaluate the scenario of a breached cask.³⁸ They discuss the possibilities of, in the vicinity of where the declarant lives or works or recreates, a cask “being so overweight that it derails or the truck trailer collapses and the cask sits for a length [of] time.”³⁹ They state that “[t]he potential for [] being stuck in traffic at a rail crossing or on a parallel highway near a cask containing SNF or GTCC causes me

³⁴ *Id.* ¶ 4

³⁵ *Id.* ¶ 5

³⁶ *Id.* ¶ 6

³⁷ *Id.* ¶ 7

³⁸ *Id.*

³⁹ *Id.* ¶ 8

concern for my health and safety” and that the declarant is concerned with cumulative exposure from transports.⁴⁰

The declaration of Charles L. Bowman includes the additional statements that, in New York State, most of the radioactive material will be traveling along CSX-owned tracks, that there were 13,870 trains per year along CSX-owned tracks, and that there were 38 rail accidents along CSX-owned tracks in 2017; therefore, Mr. Bowman concludes that there will be “1 accident for every 365 trains traveling along CSX tracks.”⁴¹ Mr. Bowman also states that, in 2014, the nationwide derailment rate was “1.63 derailments per million miles” and that, taking into consideration the number of shipments by rail and the distance of the shipments, “[t]he likelihood of a rail accident along CSX tracks in NY State is 1 accident every 38 days.”⁴² Mr. Bowman also posits an accident between a train carrying nuclear fuel and a train carrying “explosive Bakken crude oil.”⁴³ Mr. Bowman states that, “[e]ach day roughly 38 trains travel through the Amtrak Station in Depew NY, which is within 8.6 miles of [his] home in Getzville NY.”⁴⁴

The statements in these declarations do not satisfy contemporaneous judicial concepts of standing because they do not demonstrate that the declarants themselves will suffer a concrete and particularized injury-in-fact that is fairly traceable to the proposed construction and operation of the ISP CISF. Specifically, the declarations do not provide sufficient support for their assertions that the portions of the transportation routes to which the declarants claim proximity will be used to transport SNF or GTCC waste to the ISP facility. The speculative assertion that a railway or highway is within the proximity of a declarant’s home or work is not sufficient. Without

⁴⁰ *Id.* ¶ 9

⁴¹ Declaration of Charles L. Bowman (in support of Citizens’ Environmental Coalition) at ¶ 11.

⁴² *Id.*

⁴³ *Id.* at ¶ 10.

⁴⁴ *Id.* at ¶ 11.

a reasoned basis for claiming that SNF or GTCC waste will be transported to the ISP CISF along the specifically identified segment of railway or roadway or waterway, the alleged injuries to the declarants are not fairly traceable to the proposed construction and operation of the ISP CISF. In this regard, a “generalized grievance shared in substantially equal measure by all or a large class of citizens” is not sufficient to support standing.”⁴⁵

Northern States Power Co. (Pathfinder Atomic Plant, Byproduct Material License No. 22–08799–02), LBP-90-3, 31 NRC 40 (1990) is illustrative of this point. In that case, the petitioner relied specifically on “an extract from the [licensee’s] decommissioning plan” for its assertion that truck shipments of waste would move via a route within a mile of the residence of the individual that the petitioner was representing.⁴⁶ The Board determined that this provided a “reasonable likelihood” that the truck shipments of waste will move within the proximity of the individual’s residence.⁴⁷ The Board contrasted this with *Exxon Nuclear Company, Inc.* (Nuclear Fuel Recovery and Recycling Center), LBP-77-59, 6 NRC 518 (1977), in which the petitioner did not “establish[]” the “expected route of movement” of the waste.⁴⁸

In the instant proceeding, unlike in *Pathfinder* and like in *Exxon*, Joint Petitioners have not established that SNF and GTCC waste will actually move along the portions of the railways or roadways or waterways, the proximity to which their members rely upon for their claims of standing. The declarants state that they have “studied Department of Energy maps of rail and highway transportation routes”; however, unlike in *Pathfinder*, there is no indication that these maps are specific to shipments to the ISP facility. Instead, the declarants only provide the conclusory statement that the transportation route against which they measure their proximity

⁴⁵ *Envirocare of Utah, Inc.* (Byproduct Material Waste Disposal License), LBP-92-8, 35 NRC 167, 174 (1992).

⁴⁶ *Pathfinder*, LBP-90-3, 31 NRC at 42.

⁴⁷ *Id.* at 43.

⁴⁸ *Id.*

“will *likely* be used to transport many cargoes of SNF and/or GTCC wastes”⁴⁹ Therefore, the Joint Petitioners have not demonstrated representational standing and their hearing requests should be denied.

2. The Sierra Club

The NRC Staff does not oppose the Sierra Club’s demonstration of standing in this proceeding. The Sierra Club seeks representational standing on the basis of declarations submitted by its members. Also, the Sierra Club alleges that the proximity of its members to the proposed ISP facility is sufficient to grant them standing in this proceeding. In support, the Sierra Club proffers several declarations from its members residing as close as within 6 miles of the facility.⁵⁰ These members reside within a range previously determined by Atomic Safety and Licensing Boards to be sufficient to establish standing under the proximity presumption for similar proceedings.⁵¹ Accordingly, the NRC Staff does not oppose the standing of the Sierra Club here.

II. Admissibility of the Petitioners’ Proffered Contentions

A. Legal Requirements for Contentions

10 C.F.R. § 2.309(f)(1) establishes the “basic criteria that all contentions must meet in order to be admissible.”⁵² Pursuant to that section, a contention must:

⁴⁹ See, e.g., Declaration of Cemelli de Aztlan at ¶¶ 4.

⁵⁰ See Declarations of Gordon Dyer, Deanna Dyer, and Danielle Dyer.

⁵¹ See *Pacific Gas & Electric Co.* (Diablo Canyon ISFSI), LBP-02-23, 56 NRC 413, 428 (2002) (finding 17 miles sufficient and noting other agency rulings approving standing for petitioners located within 10 miles of facility for spent fuel pool expansion proceedings); see also *Vermont Yankee Nuclear Power Corp.* (Vermont Yankee Nuclear Power Station), CLI-00-20, 52 NRC 151, 163–64 (2000) (6 miles sufficient for standing in license transfer proceeding).

⁵² *Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), LBP-06-14, 63 NRC 568, 571–72 (2006); see also *USEC, Inc.* (American Centrifuge Plant), CLI-06-9, 63 NRC 433, 436–437 (2006) (stating that the Commission “will reject any contention that does not satisfy the requirements”).

- (i) provide a specific statement of the issue of law or fact to be raised or controverted;
- (ii) provide a brief explanation of the basis for the contention;
- (iii) demonstrate that the issue raised in the contention is within the scope of the proceeding;
- (iv) demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;
- (v) provide a concise statement of the alleged facts or expert opinions, including references to specific sources and documents, that support the petitioner's position and upon which the petitioner intends to rely at hearing; and
- (vi) provide information sufficient to show that a genuine dispute with the applicant/licensee exists in regard to a material issue of law or fact, including references to specific portions of the application that the petitioner disputes, or in the case of an application that is asserted to be deficient, the identification of such deficiencies and supporting reasons for this belief.⁵³

The failure to comply with any one of the 10 C.F.R. § 2.309(f)(1) requirements is grounds for the dismissal of a contention.⁵⁴

The contention admissibility requirements of 10 C.F.R. § 2.309(f)(1) are intended to “focus litigation on concrete issues and result in a clearer and more focused record for decision.”⁵⁵ The Commission has stated that it “should not have to expend resources to support the hearing process unless there is an issue that is appropriate for, and susceptible to, resolution in an NRC hearing” as indicated by a proffered contention that satisfies all of the 10 C.F.R. § 2.309(f)(1) requirements.⁵⁶ The Commission has emphasized that the 10 C.F.R. § 2.309(f)(1) requirements are “strict by design.”⁵⁷ Attempting to satisfy these requirements by

⁵³ See 10 C.F.R. § 2.309(f)(1).

⁵⁴ *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 325 (1999).

⁵⁵ Changes to Adjudicatory Process, 69 Fed. Reg. 2182, 2202 (Jan. 14, 2004).

⁵⁶ *Id.*

⁵⁷ *Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Units 2 & 3), CLI-01-24, 54 NRC 349, 358 (2001), *petition for reconsideration denied*, CLI-02-01, 55 NRC 1 (2002).

“[m]ere ‘notice pleading’ does not suffice.”⁵⁸ A contention must be rejected where, rather than raising an issue that is concrete or litigable, it reflects nothing more than a generalization regarding the petitioner’s view of what the applicable policies ought to be.⁵⁹

Pursuant to 10 C.F.R. § 2.309(f)(1)(iii), a proposed contention must be rejected if it raises issues beyond the scope of the proceeding as dictated by the Commission’s hearing notice.⁶⁰ Thus, a proposed contention that challenges a license amendment must confine itself to “health, safety or environmental issues fairly raised by [the license amendment].”⁶¹ The adequacy of the Staff’s review, as opposed to the adequacy of the application, cannot be challenged.⁶² Also, to show that a dispute is “material” pursuant to 10 C.F.R. § 2.309(f)(1)(iv) a petitioner must show that its resolution would make a difference in the outcome of the proceeding.⁶³

Further, pursuant to 10 C.F.R. § 2.309(f)(1)(v), a proposed contention must be rejected if it does not provide a concise statement of the facts or expert opinions that support the proposed contention together with references to specific sources and documents. Neither mere

⁵⁸ *Amergen Energy Co., L.L.C.* (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 119 (2006) (quoting *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), CLI-05-29, 62 NRC 801, 808 (2005)).

⁵⁹ *See Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125, 129 (2004) (citing *Philadelphia Elec. Co.* (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20–21 (1974)).

⁶⁰ *See Pub. Serv. Co. of Ind., Inc.* (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-316, 3 NRC 167, 170–71 (1976).

⁶¹ *Commonwealth Edison Co.* (Dresden Nuclear Power Station, Unit 1), CLI-81-25, 14 NRC 616, 624 (1981).

⁶² *See Northern States Power Co.* (Prairie Island Nuclear Generating Plant, Units 1 and 2), CLI-10-27, 72 NRC 481, 493 n.56 (2010) (“The contention . . . inappropriately focused on the Staffs [sic] review of the application rather than upon the errors and omissions of the application itself. Such challenges are not permitted in our adjudications.”); *Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Unit 3), CLI-09-5, 69 NRC 115, 123 n.39 (2009); 69 Fed. Reg. at 2202.

⁶³ *See Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3) CLI-99-11, 49 NRC 328, 333–34 (1999).

speculation nor bare or conclusory assertions, even by an expert, suffices to allow the admission of a proposed contention.⁶⁴ While a Board may view a petitioner's supporting information in a light favorable to the petitioner, if a petitioner neglects to provide the requisite support for its contentions, it is not within the Board's power to make assumptions or draw inferences that favor the petitioner, nor may the Board supply the information that a contention is lacking.⁶⁵ Additionally, simply attaching material or documents as a basis for a contention, without setting forth an explanation of that information's significance, is inadequate to support the admission of the contention.⁶⁶ The Board is not expected to sift through attached material and documents in search of factual support.⁶⁷

Finally, pursuant to 10 C.F.R. § 2.309(f)(1)(vi), a proposed contention must be rejected if it does not present a genuine dispute with the applicant on a material issue of law or fact.

The Commission has emphasized that "contentions shall not be admitted if at the *outset* they are not described with reasonable specificity or are not supported by some alleged fact or facts *demonstrating* a genuine material dispute" with the applicant.⁶⁸ The hearing process is reserved "for genuine, material controversies between knowledgeable litigants."⁶⁹

⁶⁴ See *USEC, Inc.* (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 472 (2006); *Fansteel, Inc.* (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 203 (2003).

⁶⁵ See *Crow Butte Res., Inc.* (North Trend Expansion Project), CLI-09-12, 69 NRC 535, 553–54 (2009); *Ariz. Pub. Serv. Co.* (Palo Verde Nuclear Generating Station, Unit Nos. 1, 2, and 3), CLI-91-12, 34 NRC 149, 155 (1991).

⁶⁶ See *Fansteel*, CLI-03-13, 58 NRC at 204–05.

⁶⁷ *NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1), CLI-12-5, 75 NRC 301, 332 (2012).

⁶⁸ *Id.* at 307 (quoting *Oconee*, CLI-99-11, 49 NRC at 335).

⁶⁹ *Seabrook*, CLI-12-5, 75 NRC at 307 (quoting *Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Unit 2), CLI-03-14, 58 NRC 207, 219 (2003)).

B. Analysis of the Petitioners' Proposed Contentions

1. Don't Waste Michigan, et al.

As discussed above, Joint Petitioners do not have standing to intervene in this proceeding. Thus, regardless of the admissibility of their contentions, the Joint Petitioners' Petition cannot be granted. Despite the lack of standing, the Staff has analyzed the admissibility of Joint Petitioners' contentions. Furthermore, Joint Petitioners' contentions contain a statement asserting that the Joint Petitioners "hereby incorporate all of the claims, allegations and assertions set forth above as if fully rewritten herein."⁷⁰ Supporting information for a proposed contention "must be specifically identified [and] a petitioner 'may not simply incorporate massive documents by reference as the basis for or as a statement of his contentions.'"⁷¹ To the extent this assertion of "incorporation by reference" is intended as a claim that the entire petition is "repeated" within each individual contention – and that the Board and parties are obligated to scrutinize the entire petition for potential arguments or support that is not actually identified and explained within the description of a particular contention – the contentions would certainly fail to "provide a *concise* statement of the alleged facts or expert opinions" supporting the petitioner's position, contrary to 10 C.F.R. 2.309(f)(1)(v).⁷²

(a) Don't Waste Michigan, Contention 1

NEPA Analysis of Transportation of SNF and GTCC Wastes Was Excluded from the Application and Comprises Unlawful Segmentation of the Project

In proposed Contention 1, Joint Petitioners assert that the application, and specifically the environmental report, excludes an analysis of transportation impacts, and therefore does not

⁷⁰ See, e.g., Joint Petition at 41, 49, 102.

⁷¹ *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), LBP-04-15, 60 NRC 81, 95 (2004) (quoting *Pub. Serv. Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-89-3, 29 NRC 234, 240–41 (1989)).

⁷² Emphasis added.

meet the NEPA standards for consideration of “connected actions.”⁷³ Joint Petitioners state that the claimed issue “creates a contention of omission” and that information on transportation is necessary for members of the public to “meaningfully participate” in the NEPA process.⁷⁴

The proposed contention is inadmissible because it fails to address and dispute the analysis of transportation impacts contained in the Environmental Report and therefore does not demonstrate a genuine dispute with the application as required by 10 C.F.R. § 2.309(f)(1)(vi). Additionally, to the extent that the Joint Petitioners assert that a CISF applicant is required to identify and receive approval of exact future transportation routes, they failed to demonstrate why the issue is within the scope of the proceeding or material to the findings the NRC must make on the CISF application, contrary to the requirements of 10 C.F.R. § 2.309(f)(1)(iii) & (iv).

Most notably, because the entire premise of the Joint Petitioners’ contention rests on excerpts of two general sentences from the application’s cover material, it is dispositive that the contention fails even to reference, much less contradict, the actual evaluation of transportation impacts that was provided in the Environmental Report.⁷⁵ The very same section of Chapter 1 of the application from which the Joint Petitioners excerpt the statement that “transportation...is not part of this license application” acknowledges that the applicant’s Environmental Report was submitted pursuant to 10 C.F.R. § 72.34 and 10 C.F.R. § 51.61.⁷⁶ And Section 4.2 of the ER does, in fact, contain an analysis of the environmental impacts of transportation, including the

⁷³ Joint Petition at 41–49.

⁷⁴ *Id.* at 43.

⁷⁵ *Id.* at 41.

⁷⁶ License Application at 1-2 to 1-3 (“Transportation of the spent nuclear fuel shipping casks from the originating commercial nuclear reactor to the CISF will be performed in accordance with 10 CFR Part 71 and the originating reactor licenses and is not part of this License Application.”). *See also Marble Hill*, ALAB-316, 3 NRC at 170–71 (holding that the scope of a hearing is dictated by the Commission’s hearing request).

applicant's analysis of representative routes and the associated environmental impacts.⁷⁷ The Environmental Report acknowledges that the exact agreements as to what material will be stored and its source are not currently known.⁷⁸ Instead, the applicant based its analysis in Section 4.2 on posited transportation from 12 different facilities and used what the applicant characterizes as a bounding, representative route approach to analyze the "[c]onnected transportation impacts."⁷⁹ The Joint Petitioners' failure to address the contents of that analysis and specify how it is deficient makes the contention inadmissible. To meet the standards of 10 C.F.R. § 2.309(f)(1)(vi), a petitioner "must make a minimal showing that material facts are in dispute, thereby demonstrating that an 'inquiry in depth' is appropriate."⁸⁰ Consistent with that threshold, an "erroneous assertion of an omission fails to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(vi)."⁸¹ Accordingly, because the ER discusses transportation impacts, Joint Petitioners' generalized claim to the contrary fails to show a genuine dispute.⁸²

Even if the Joint Petitioners had articulated some dispute with the analysis actually in the application, they fail to identify a legal basis for their apparent implication that future

⁷⁷ "WCS Consolidated Interim Spent Fuel Storage Facility Environmental Report," Rev. 2, Section 4.2 at 4-3 to 4-28 (ML18221A405 (package)) (ER).

⁷⁸ See ER at 1-2 ("Phase 1 construction would begin after issuance of the license and after ISP successfully enters into a contract for storage with the U.S. Department of Energy (DOE) or holders of the title to SNF at commercial nuclear power facilities (SNF Title Holder(s)).")

⁷⁹ See ER at 4-10.

⁸⁰ *Gulf States Utilities Co.* (River Bend Station, Unit 1), CLI-94-10, 40 NRC 43, 51 (1994) (citing Final Rule, Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process, 54 Fed. Reg. 33,168, 33,171 (Aug. 11, 1989), quoting *Connecticut Bankers Ass'n v. Board of Governors*, 627 F.2d 245, 251 (D.C. Cir. 1980)).

⁸¹ *Progress Energy Carolinas, Inc.* (Shearon Harris Nuclear Power Plant, Units 2 and 3), LBP-09-8, 69 NRC 736, 743 (2009) (finding that information in an existing design certification rule that is incorporated by reference into the application is not an omission, thus the contention of omission is inadmissible under 10 C.F.R. § 2.309(f)(1)(vi)); see *Georgia Institute of Technology* (Georgia Tech Research Reactor), LBP-95-6, 41 NRC 281, 300 (1995) ("A petitioner's imprecise reading of a reference document cannot serve to generate an issue suitable for litigation").

⁸² 10 C.F.R. § 2.309(f)(1)(vi).

transportation routes are required to be definitively established and approved as part of the CISF review. The license itself, as described in the related Federal Register notice, is an application for an interim storage facility under 10 C.F.R. Part 72, not a transportation license under 10 C.F.R. Part 71.⁸³ The Joint Petitioners cite no provision under either Part that requires contemporaneous regulatory approval of specific routes or shipments as a prerequisite to issuing a CISF license. As noted above, the Joint Petitioners ignore the range of routes and potential facilities the applicant has analyzed and described as both representative and bounding. And because specific customer agreements have not been finalized, and it is not yet certain from which facilities spent fuel may ultimately be received, there is no proposal actually pending for any individual shipment.⁸⁴ To the extent the contention asserts that a more prescriptive NEPA (or safety) analysis can or must be performed over hypothetical future shipments that it does not control, and that would necessarily already be subject to Part 71 requirements and oversight, the Joint Petitioners have failed to show that it is within the scope of this Part 72 proceeding or material to a finding the NRC must make to issue a CISF license.⁸⁵

In sum, the Joint Petitioners fail to demonstrate that the issue they raise contradicts the application, would be consistent with NEPA's rule of reason or is otherwise legally required. More research could always be performed, but NEPA does not require endless study and resources and agencies "must have some discretion to draw the line and move forward with

⁸³ 83 Fed. Reg. 44,070, 44,070 (Aug. 29, 2018). However, incident to the receipt of a specific license, NRC licensees do possess a general license for transportation under the provisions in 10 C.F.R. Subpart C.

⁸⁴ In that regard, the contention does not explain how there is currently any federal "action" distinct from the CISF that is sufficiently ripe to require more prescriptive analysis as a "connected" action. See *Duke Energy Corp.* (McGuire Nuclear Station), CLI-02-14, 55 NRC 278, 294–95 (2002); *Kleppe v. Sierra Club*, 427 U.S. 390 (1976).

⁸⁵ The Department of Transportation is responsible for overseeing vehicle safety, routing, shipping papers, emergency response, and shipper training. Challenges to DOT regulations and its regulatory scheme are plainly outside the scope of this proceeding. See *Duke Power Company* (Catawba Nuclear Station, Units 1 and 2), LBP-82-51, 16 NRC 167, 172 (1982).

decisionmaking.”⁸⁶ Aside from a bare assertion that “there must be complete disclosure of all probable transportation routes,” Joint Petitioners have not shown why the applicant’s approach in the ER is inadequate to satisfy NEPA and the analysis of transportation impacts contemplated by 72.108.⁸⁷ The NRC has repeatedly used representative routes to evaluate transportation impacts in past Environmental Impact Statements.⁸⁸ But while the Joint Petitioners allude to a wide range of possible transportation modes and routes that could theoretically be analyzed, they fail to state with more specificity why that spectrum renders the applicant’s approach in the Environmental Report an unreasonable method of analyzing and informing the public of the potential environmental effects of transportation of spent fuel to the facility.⁸⁹ As a result, the proposed contention does not meet the requirements of 10 C.F.R. § 2.309(f)(1)(vi) for admissibility.

(b) Don’t Waste Michigan, Contention 2

ISP’s ‘Start Clean/Stay Clean’ Policy Cherry-Picks Waste For Storage and Contradicts the Project’s Purpose And Need Statement

In Contention 2, the Joint Petitioners state that the proposed facility’s “Start Clean/Stay Clean” policy undermines the applicant’s proposed purpose and need by permitting only

⁸⁶ *Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station)*, CLI-10-11, 71 NRC 287, 315 (2010).

⁸⁷ Joint Petition at 43.

⁸⁸ See, e.g., Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel, NUREG-2157, at 5-52 (ML14196A105); Final Environmental Impact Statement for the Construction and Operation of an Independent Spent Fuel Storage Installation on the Reservation of the Skull Valley Band of Goshute Indians and the Related Transportation Facility in Tooele County, Utah, NUREG-1714, at 5-39 (ML020150217). See also 10 C.F.R. § 51.52, Table S-4 (deriving generic effects of transportation and fuel waste for one power reactor based on a survey of then-existing power plants).

⁸⁹ See *Palo Verde*, CLI-91-12, 34 NRC at 156 (rejecting petition when petitioner did not “explain the basis for the contention and read the relevant parts of the license application and show where the application is lacking”).

shipment and storage of those canisters that meet particular criteria.⁹⁰ The Joint Petitioners state that the applicant's Environmental Report accordingly does not address the environmental impacts of storage of spent fuel for canisters that do not meet the site requirements.

The proposed contention is inadmissible because it does not provide a supportable factual basis, nor does it demonstrate that the issue raised is material to the findings that the NRC must make or that it represents a genuine dispute with the application on a material issue of fact or law.⁹¹ Fundamentally, Joint Petitioners' contention relies on unsupported speculation that licensees' storing and transportation activities will not meet NRC regulations and an unexplained implication that such non-compliance means that the applicant's proposed site criteria will have a significant environmental impact. Additionally, because Joint Petitioners' contention ignores the totality of the applicant's discussion of purpose and need, it fails to demonstrate that the ER's purpose and need is unreasonably narrow.

(i) The Joint Petition does not provide sufficient facts to demonstrate the purpose and need will not be met.

The Joint Petitioners' claim relies on their observation that the Safety Analysis Report (SAR) provides criteria for canisters that will be received at the site. They assert that "[a]ggressive implementation of this policy will mean that problematic canisters will accumulate at reactor sites."⁹² The Joint Petitioners infer that if spent fuel is not accepted at the ISP CISF based on the SAR criteria, then some decommissioned facilities may not be able to fully transfer their fuel to the proposed independent spent fuel storage installation (ISFSI), which the Joint Petitioners state would undermine the ability of the facility to accomplish the proposed purpose and need.

⁹⁰ Joint Petition at 49–50.

⁹¹ 10 C.F.R. § 2.309(f)(1)(iv), (v), (vi).

⁹² Joint Petition at 51.

The Joint Petitioners do not explain how any of these inferences are based on anything more than speculation. Licensees are presumed to be able to meet the requirements of their license and the regulations, absent contrary evidence or allegations otherwise.⁹³ In *Private Fuel Storage*, a challenge was raised by the State of Utah over a proposed “Start Clean/Stay Clean” policy and the possibility of unacceptable levels of contamination on the external surfaces of a transportation package.⁹⁴ Despite this allegation, the Commission rejected the admissibility of the petition for failure to provide a genuine dispute for failure to “address [licensee] quality assurance measures, or explain why they are inadequate.” Similarly, when a contention did not allege a plausible scenario where leakage could occur, the Commission affirmed a denial based on a lack of factual support.⁹⁵

Proposed contention 2 similarly rests on the apparent premise that the existence of screening criteria in the ISP SAR means that canisters sent to the site would be “noncompliant, troublesome and nonconforming”⁹⁶ and that if such canisters are not accepted at the CISO it will result in accumulation of “deteriorated or damaged” canisters or casks at reactor sites.⁹⁷ The Joint Petitioners provide no factual support for any implication that canisters would be shipped or stored at reactor sites in violation of NRC regulations, much less explain why the possible non-acceptance of some casks under the site’s screening criteria could ultimately materially alter the conclusions of the environmental report. In other words, even if the application does

⁹³ See *GPU Nuclear, Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 207 (2000); *Crow Butte*, CLI-09-12, 69 NRC at 552 (“contentions based on little more than guesswork would waste the scarce adjudicatory resources of all involved”). See also *Private Fuel Storage*, CLI-04-22, 60 NRC at 138–39 (finding that a petitioner did not demonstrate a material dispute when it failed to acknowledge in its proposed contention the applicant’s quality assurance measures).

⁹⁴ *Private Fuel Storage*, CLI-04-22, 60 NRC at 137–39.

⁹⁵ *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-04-4, 59 NRC 31, 48 (2004).

⁹⁶ Joint Petition at 53.

⁹⁷ *Id.* at 54.

contemplate that some canisters *may* not meet the criteria of this license, that does not demonstrate why it is likely that canisters will not meet NRC regulations, that licensees *cannot* bring these canisters into compliance, or that the oversight of those canisters entails significant environmental impacts.⁹⁸

Like the contentions rejected in *Private Fuel Storage*, proposed contention 2 provides no facts which would upset the presumption of compliance by other ISFSI licensees, provide a credible scenario as to why currently operating ISFSIs are likely to be damaged or identify any issues with NRC-overseen quality assurance programs. The contention amounts to bare speculation that canisters with “obvious failures” will be “stranded” at sites with little “oversight, maintenance, or security.”⁹⁹ As such, the contention provides no factual basis for concluding that widespread damage to (and rejection of) canisters is plausible, let alone to the degree that would contradict the portion of the applicant’s proposed purpose and need regarding removal of SNF and returning sites to greenfield status. Consequently, the contention should be found inadmissible for failure to provide a sufficient factual basis.

(ii) Additionally, the proposed contention does not provide a genuine dispute with the application by disregarding the ER’s other stated purpose and its cost-benefit analysis.

As defined by the Council on Environmental Quality, a proposed action “shall briefly specify the underlying purpose and need.”¹⁰⁰ The purpose and need statement is used “among the factors that are weighed against the project’s costs in striking the cost-benefit balance

⁹⁸ For example, Proposed TS LCO 3.1.1 *would* permit the licensees to decontaminate the external surfaces of a cask to bring it within acceptable limits. See Proposed License, Appendix A at 3-3.

⁹⁹ Joint Petition at 52, 53, 54.

¹⁰⁰ 40 C.F.R. § 1502.13. See *also* Implementation of Procedural Provisions 43 Fed. Reg. 55,978, 55,983 (Nov. 29, 1978) (noting that purpose and need is used to identify and evaluate proposed alternatives and typically, should be done in one page or less).

required by NEPA.”¹⁰¹ The primary issue in evaluating a purpose and need is that it be defined “so unreasonably narrow that only one alternative from among the environmentally benign ones in the agency’s power would accomplish the goals of the agency’s action, and the EIS would become a foreordained formality.”¹⁰²

As noted by the Joint Petitioners, an applicant is required to include this brief statement in its ER.¹⁰³ NUREG-1748, Section 6.1 provides guidance on an ER’s purpose and need section. It states that this section “describes the underlying need for the proposed action and should not be written merely as a justification of the proposed action, nor to alter the choice of alternatives. . . . Examples of need include a benefit provided if the proposed action is granted or descriptions of the detriment that will be experienced without the approval of the proposed action. In short, the need describes what will be accomplished as a result of the proposed action.”¹⁰⁴

Here, even if the Joint Petitioners had explained a supportable dispute about the purpose and need of returning reactor sites to greenfield status, they fail to show that their disagreement ultimately constitutes a genuine dispute with the application. First, Joint Petitioners do not acknowledge or dispute the broader description of purpose and need provided by the applicant, which is not limited to the aim of restoring greenfield status. In addition to removal of fuel from decommissioned facilities, the application notes an economic benefit to a consolidated storage facility and the ability for the proposed facility to “serve the needs of the existing 99 operating commercial nuclear reactors in the U.S.”¹⁰⁵

¹⁰¹ *Hydro Resources, Inc.* (P.O. Box 777, Crownpoint, New Mexico 87313), LBP-06-19, 64 NRC 53, 83–84 (2006).

¹⁰² *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 196 (D.C. Cir. 1990).

¹⁰³ 10 C.F.R. § 51.45(b); 10 C.F.R. Part 51, App. A § 4.

¹⁰⁴ *Environmental Review Guidance for Licensing Actions Associated with NMSS Programs* NUREG-1748 (Aug. 2003), at 6-1 (ML032450279).

¹⁰⁵ ER at 1-6.

In any event, the Joint Petitioners fail to show in what way its asserted disagreement with the ER's stated purpose and need reveals any deficiency in the application's evaluation of a reasonable range of potential benefits or detriments of, and alternatives to, the proposed action. To the extent the Joint Petitioners suggest that the inability to fully return sites to greenfield status may represent an "undisclosed alternative," they have not explained how the present purpose and need forecloses reasonable alternatives to the proposed facility, nor have they disputed the Applicant's benefit-cost analysis described in Chapter 7 of the ER.¹⁰⁶ As a result, the contention fails to show how a challenge to this aspect of the purpose and need would be material to the NRC's environmental review or the ultimate findings in the EIS.

Accordingly, because the Joint Petitioners have failed to articulate factual support for the contention or to demonstrate that it represents a genuine dispute with the application, it is inadmissible.¹⁰⁷

(c) Don't Waste Michigan, Contention 3

The Project Has Inadequate Assurances of Financing

Joint Petitioners assert that, ISP as a matter of fact and law, has not provided reasonable assurance that it can or will obtain the necessary funds to cover the costs of construction, operation, maintenance, and decommissioning of the CISF.¹⁰⁸ Joint Petitioners assert that ISP intends for DOE to take title and assume liability for the fuel stored at ISP and

¹⁰⁶ Joint Petition at 54. Additionally, to the extent that Joint Petitioners challenge the purpose and need as per se unreasonable because of a lack of data, the Joint Petitioners are mistaken. NEPA does not require a "worst case analysis" or countless studies into the potential effect of every theoretical result of an action. *Pilgrim*, CLI-10-11, 71 NRC at 315.

¹⁰⁷ Additionally, to the extent Joint Petitioners challenge the ability of other licensees to comply with NRC regulations, or the adequacy of the NRC framework for regulating ISFSIs or spent fuel transportation, this represents an impermissible challenge to NRC regulations under 10 C.F.R. § 2.335(a). See Joint Petition at 53–54.

¹⁰⁸ Joint Petition at 55.

that such a plan is not reasonable and thus, there is no reasonable assurance of financing.¹⁰⁹

Joint Petitioners assert that Price-Anderson will not cover the project and thus the lack of insurance coverage means there is no reasonable assurance.¹¹⁰ Joint Petitioners assert that the exemption sought by ISP from 10 C.F.R. § 72.30 is not ‘authorized by law’.¹¹¹ To the extent Joint Petitioners challenge the basis for the requested exemption from § 72.30, the contention is admissible. In all other respects the contention is inadmissible in that it fails to raise a genuine dispute with the applicant and fails to identify how the issue raised is material to the NRC’s review of the application in contravention of 10 C.F.R. § 2.309(f)(1)(iv) & (vi).

Joint Petitioners assert that ISP’s plan had been for DOE to provide funding, but that in the latest revision of the application, ISP now states that it expects “to enter into a contract(s) with DOE or the SNF Title Holder(s) that will provide the funding for facility construction, operation and decommissioning.”¹¹² Joint Petitioners view this change from the applicant’s previous plan to the current version of the application as a material inconsistency. The Joint Petitioners quote the application’s funding provisions, but they do not appear to dispute them beyond the bare assertion that it is inconsistent with the applicant’s previous plans. However, an applicant is allowed to change its application. The mere fact that the applicant has done so does not form the basis for an admissible contention.¹¹³ Since the Joint Petitioners have not shown how the change from an earlier version of the application, rather than its current content,

¹⁰⁹ *Id.* at 56–58.

¹¹⁰ *Id.* at 58.

¹¹¹ *Id.* at 61–62.

¹¹² *Id.* at 37 (citing ER at § 7.3 at 7-15).

¹¹³ See, e.g., *Baltimore Gas & Electric Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 & 2), CLI-98-25, 48 NRC 325, 350 (1998) (an “application may be modified or improved as NRC review goes forward’ and that any view to the contrary ‘is incompatible with the dynamic licensing process followed in Commission licensing proceedings” (citing *Curators of the Univ. of Mo.* (TRUMP-S Project), CLI-95-8, 41 NRC 386, 395 (1995)).

is material to the NRC's review of the application, the contention is inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(iv).

Similarly Joint Petitioners assert that the Price-Anderson Act will not cover the activities at the site, and that this lack of coverage undermines the applicant's claims of reasonable assurance.¹¹⁴ Joint Petitioners appear to assume that liability coverage is part of the 10 C.F.R. § 72.22(e) finding of financial qualifications. However, that financial qualifications finding is that the applicant either possesses, or has reasonable assurance of obtaining the necessary funds to cover (1) construction costs; (2) operating costs; and (3) estimated decommissioning costs.¹¹⁵ The plain language of the regulation does not speak to liability coverage. Thus, regardless of whether or not Joint Petitioners are correct regarding whether and how Price-Anderson will cover activities at the site, they have not explained why this issue is material to the review of the application or even relates to their stated concern with financial qualifications. Accordingly, this portion of the contention is inadmissible.

Moreover, to the extent the Joint Petitioners are attempting to litigate the likelihood of the ISP facility ultimately being built absent a contract with the DOE, this contention is inadmissible. When there are license conditions that a facility cannot be built or operated if the applicant does not raise sufficient funds, the Commission need not find that financing is likely to occur.¹¹⁶ Here, the applicant has proposed license conditions very similar to the license conditions approved by the Commission in the *Private Fuel Storage* Proceeding. The Joint Petitioners do not challenge

¹¹⁴ Joint Petition at 58.

¹¹⁵ See 10 C.F.R. § 72.22(e).

¹¹⁶ See *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-00-13, 52 NRC 23, 31 (2000). See also *Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), CLI-97-15, 46 NRC 294, 308 (1997) ("But if [the intervenor] is correct and the project proves a failure in the marketplace, the lack of economic success will have no adverse effect on the public health and safety or the common defense and security. Under the commitments [the applicant] has made to the Commission, if the market does not allow [the applicant] to raise sufficient capital for construction or to obtain the promised advance purchase contracts, [the applicant] will not build or operate the [facility].").

the conditions, but simply assert that the condition is not likely to be fulfilled. However, such a challenge is not material to the findings the NRC must make and is thus inadmissible.

Joint Petitioners also identify the exemption requested in the application from 10 C.F.R. § 72.30(e), wherein the applicant requests an exemption from providing financial assurance for decommissioning based on the fact that it is seeking a contract with DOE guaranteeing decommissioning funds.¹¹⁷ The Joint Petitioners challenge whether this requested exemption is authorized by law. The Staff agrees that this portion of the contention is admissible.

Thus, the contention is admissible to the extent it challenges the requested exemption from 10 C.F.R. § 72.30(e). It is inadmissible in all other respects.

(d) Don't Waste Michigan, Contention 4

Low-Level Radioactive Waste Volumes And Repackaging Requirements Are Considerably Underestimated

In proposed Contention 4, Joint Petitioners claim that the Environmental Report fails to fully disclose the quantity and extent of low-level radioactive waste that will result from the proposed facility.¹¹⁸ They point to two waste streams that they claim have not been adequately addressed: (1) Waste generated from the repackaging of spent fuel and GTCC waste for final disposal¹¹⁹ and (2) low-level radioactive waste generated through activation of the concrete storage pad.¹²⁰ Additionally, the Joint Petitioners argue that the Environmental Report does not account for the cost of these facilities and waste streams.¹²¹

¹¹⁷ Joint Petition at 61.

¹¹⁸ *Id.* at 64.

¹¹⁹ *Id.* at Contention 4, Section A, C at 66–71, 74–76.

¹²⁰ *Id.* at Contention 4, Sections B, C at 72–76.

¹²¹ *Id.* at 74–76.

Contention 4 is inadmissible because the Joint Petitioners have not demonstrated that the issues raised are material the NRC Staff's review and because they have not put forward a sufficient factual basis to support their claims.

(i) *Repackaging of spent nuclear fuel for ultimate disposal has been generically addressed by the Continued Storage Generic Environmental Impact Statement.*

The Joint Petitioners' first challenge to the application is that the Environmental Report does not address the effects of repackaging. The Joint Petitioners claim that repackaging of spent nuclear fuel into smaller canisters is needed to meet DOE requirements for final disposal.¹²² They claim that to meet these requirements, there will be a need for a centralized repackaging facility which will lead to an increase in the amount of waste generated and result in increased costs.¹²³

Even if this were the case, the Joint Petitioners have not demonstrated that the issue is material to the findings the NRC must make on this application. 10 C.F.R. § 51.23 provides that an environmental report for an ISFSI does not need to discuss the environmental impacts of spent fuel storage for the period beyond the term of the license and incorporates the findings of the *Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel*, NUREG-2157 (Sept. 2014) (ML14198A440 (package)).¹²⁴ This EIS generically addresses the precise issue that Joint Petitioners seek to litigate here, namely, the environmental impacts of storage at a facility beyond the term of the 40-year license.¹²⁵ Long-term repackaging of waste

¹²² *Id.* at 66.

¹²³ *Id.* at 66, 70–71.

¹²⁴ 10 C.F.R. § 51.23.

¹²⁵ See *Continued Storage of Spent Nuclear Fuel*, 79 Fed. Reg. 56,238, 56,243 (Sep. 19, 2014); NUREG-2157, Vol. 2 at D-66 (“The analysis in this GEIS would only apply to any necessary environmental analysis of the environmental impacts of storing the spent fuel after the end of the facility’s license term.”). See also NUREG-2157, Vol. 2 at D-127 to D-128 (“An EIS for the licensing of an away-from-reactor ISFSI would evaluate the environmental impacts of building and operating the facility, including the impacts of moving spent fuel from reactors to the away-from-reactor ISFSI. . . .

for ultimate disposal is an environmental impact of continued storage that would take place beyond the term of the license, and as a result, 10 C.F.R. § 51.23 precludes further litigation on this issue.

Regardless, even if it did not apply, the Joint Petitioners have not demonstrated how the need for repackaging would be an impact attributable to this proposed action. Reactor licensees already possess a general license for the use of approved cask designs,¹²⁶ and the proposed facility is premised on the assumption that spent fuel will arrive at the site in an already-packaged form.¹²⁷ As a result, spent nuclear fuel that arrives at the facility will already be in a form that Joint Petitioners claim will need to be repackaged.¹²⁸ Therefore, even if repackaging is eventually needed to meet DOE requirements, repackaging would need to occur regardless of whether this facility is operated. As a result, the Joint Petitioners fail to demonstrate why the impact of repackaging is a likely impact attributable to this proposed action. Accordingly, the contention's claim regarding repackaging is inadmissible because it does not demonstrate that the claim, even if within the scope of the proceeding and taken as true, would materially alter the findings the NRC must make on this application.¹²⁹

The analysis would incorporate the impacts of continued storage of spent fuel beyond the licensed life of the away-from-reactor ISFSI as determined in the GEIS (NUREG-2157).").

¹²⁶ See 10 C.F.R. Part 72, Subpart K.

¹²⁷ ER at 1-6 ("ISP would use existing dry cask storage systems currently used at several operating commercial nuclear power plants in the U.S. and abroad.").

¹²⁸ Joint Petition at 66 ("There are at present zero approved transport canister types to haul the SNF from reactor sites to anticipated geological repository disposal.").

¹²⁹ In section C of the contention, the Joint Petitioners describe a challenge to what they label the applicant's "life cycle" cost analysis. Joint Petition at 74-76. This claim does not specify which part of the application it is seeking to challenge, which is a sufficient reason to dismiss it for failing to articulate a genuine dispute with the application. In any event, the assertion that the ER does not "adequately answer cost or quantitative questions," Joint Petition at 75, appears to stem from the contention's same underlying claim that the ER must consider repackaging capability and the higher volume of LLRW hypothesized by the Joint Petitioners. Because, as explained above, those topics fail to identify a material issue or a dispute with the application, the Joint Petitioners' argument that the ER must provide a more detailed consideration of the costs of those activities is inadmissible for the same reasons.

(ii) Joint Petitioners' assumptions on the quantity of low-level-radioactive-waste fail to provide a genuine dispute with the application.

In addition to the claims on repackaging, the Joint Petitioners also claim that the application significantly underestimates the quantity of low-level radioactive waste that will be generated through the activation of concrete.¹³⁰ The Joint Petitioners' argument relies primarily on the assumption that the entire storage pad will become low-level radioactive waste and that this would change the "very small" impacts found by the applicant because the Joint Petitioners' posited volume is multiple orders of magnitude greater than that posited in the Continued Storage GEIS, a corollary evaluation that provides a specific number.¹³¹ However, the Joint Petitioners have not demonstrated how the maximum value of LLRW they estimate (by assuming the contamination of the entire storage pad) is based on anything more than mere speculation. Because the contention provides no factual foundation for the implausible and

Additionally, to the extent Joint Petitioners premise their claim on noncompliance with Exec. Order 13,123, see Joint Petition at 74, this executive order does not provide a legal basis for admissibility. See Joint Petition at 74. Exec. Order 13,123 is not in effect, as it was revoked first by Exec. Order 13423 (Jan. 24, 2007). See 72 Fed. Reg. 3919, 3923 (Jan. 26, 2007). That executive order was then again revoked by Exec. Order 13,693 (Mar. 25, 2015), and now *that* executive order has been revoked by Exec. Order 13,834 (May 17, 2018). See 80 Fed. Reg. 15,871, 15,880 (Mar. 25, 2015); 83 Fed. Reg. 23,771, 23,773 (May 22, 2018). In any event, Exec. Order 13,123 was not binding on independent agencies, which were only "encouraged to comply with the provisions of [the] order." 64 Fed. Reg. 30,851, 30,858 (Jun. 8, 1999).

¹³⁰ Joint Petition at 72.

¹³¹ *Id.* at 72–74 ("There is an enormous discrepancy between the GEIS assumption of 630 cu. yds., and Petitioners' estimate of 104,432 cu. m. (a cubic meter is a larger volume measurement than a cubic yard)"). The Staff also notes that the 630 cubic yard estimate provided by Joint Petitioners is a result of the Continued Storage GEIS's findings at a single ISFSI for not just concrete activated waste, but *all* activities in the long-term timeframe, including waste as a result of repackaging, loading and unloading operations, compaction of canisters, and replacement of storage casks, storage modules, concrete pads, and a dry transfer system.

speculative assumption that all concrete in the storage pad will need to be disposed of as low-level radioactive waste, it fails to demonstrate a genuine dispute with the application.¹³²

In fact, the Joint Petitioners' reference to the Continued Storage GEIS, NUREG-2157, demonstrates the entirely speculative nature of its assumption. NUREG-2157 derives its estimates for low-level radioactive waste volumes for an away-from-reactor ISFSI directly from the Final Environmental Impact Statement for the Private Fuel Storage Facility, NUREG-1714.¹³³ In the Private Fuel Storage EIS, as reflected in the GEIS, 85,500 cubic meters of concrete was estimated to result in only 8.5 cubic meters of low-level radioactive waste, an amount determined to have a small environmental impact.¹³⁴

For further context, in the GEIS's evaluation of long-term storage impacts at an away-from-reactor facility, the NRC stated that "the total volume of LLW generated during the long-term timeframe from replacement of canisters and decontamination of casks, ISFSI pads, DTS, and canister transfer building is about 6,800 m³. . . ." Thus, when taking into account facilities that are not part of the current application, and LLRW volumes almost 1000 times higher than the estimate from Private Fuel Storage, the Commission still determined that the environmental impacts would be small.¹³⁵

Against that backdrop, even if the Joint Petitioners had provided more than unsupported speculation for their asserted disagreement with the applicant's estimates, they fail to show how the greater volume would be sufficiently environmentally significant to be material to the NRC

¹³² See *Fansteel*, CLI-03-13, 58 NRC at 203 (finding that "a petitioner may meet its pleading burden by providing 'plausible and adequately supported' claims that the data are either inaccurate or insufficient.").

¹³³ NUREG-2157 at 5-45.

¹³⁴ See *Id.* at 5-46 to 5-47; NUREG-1714 at xxxvi, 2-33 to 2-34 ("the neutron flux levels generated by the SNF would be sufficiently low that activation of the storage casks and pads would produce negligibly small levels of radioactivity, if any.").

¹³⁵ NUREG-2157 at 5-48.

impact determination. For these reasons, the contention's claim regarding the volume of LLRW does not demonstrate a genuine dispute and is inadmissible.

(e) Don't Waste Michigan, Contention 5

ISP Has Not Performed an Environmental Justice Investigation of Transportation Communities; the ISP CISF Will Cause Disparate Impacts From Routine and Non-Routine Transportation-Related Radiation Exposures Upon Minority and Low-Income Populations Along Hundreds of Miles of Transportation Corridors

In Contention 5, Joint Petitioners argue that the applicant improperly segmented the proposed action by excluding the transportation of the spent nuclear fuel shipping casks from the originating commercial nuclear reactor to the WCS CISF from the license application for the WCS CISF, and as a result, "compliance in the form of identification and analysis of potentially affected populations along the anticipated rail, truck and barge routes will be improperly excluded from disclosure in the NEPA document."¹³⁶ This contention is inadmissible because Joint Petitioners raise concerns outside the scope of the proceeding, as required by 10 C.F.R. § 2.309(f)(1)(iii); that are not material to the findings the Staff must make relative to the proposed action, as required by 10 C.F.R. § 2.309(f)(1)(iv); fail to provide adequate support for its claims, as required by 10 C.F.R. § 2.309(f)(1)(v); and fail to raise a genuine dispute with the Applicant, as required by 10 C.F.R. § 2.309(f)(1)(vi).

(i) Joint Petitioners Fail to Raise a Genuine Dispute with Their Concern Regarding Improper Segmentation of Transportation from Waste Storage

Joint Petitioners reference arguments raised in their Contention 1 regarding improper "segmentation of transportation from waste storage."¹³⁷ As the Staff explains in more detail in response to that contention, the applicant is seeking a license for an interim storage facility

¹³⁶ Joint Petition at 76–77.

¹³⁷ See *id.* at 77–79.

under 10 C.F.R. Part 72, not a transportation license under 10 C.F.R. Part 71.¹³⁸ Nevertheless, the applicant does in fact assess the potential impacts from transportation in Section 4.2 of the ER, including the applicant's analysis of potential transportation routes and associated environmental impacts.¹³⁹ The ER acknowledges that the exact agreements as to what material will be stored and its source are not currently known.¹⁴⁰ Accordingly, the applicant based its analysis in Section 4.2 on posited transportation from 12 different facilities and used what the applicant characterizes as a bounding, representative route approach.¹⁴¹ Yet in the entirety of Contention 5, the Joint Petitioners' only references to the ER are to a single sentence from Section 1.1 and a list of involved federal agencies in Section 1.3—Joint Petitioners do not reference or challenge the information presented in the ER with respect to either transportation or environmental justice.¹⁴² "Any contention that fails directly to controvert the application or that mistakenly asserts the application does not address a relevant issue can be dismissed" as a failure to raise a genuine dispute with the application on a material issue of law or fact in accordance with 10 C.F.R. § 2.309(f)(1)(vi).¹⁴³ Thus, as a threshold matter, the Joint Petitioners'

¹³⁸ See 83 Fed. Reg. 44,070, 44,070 (Aug. 29, 2018).

¹³⁹ ER Section 4.2 at 4-3 to 4-28.

¹⁴⁰ See *Id.* at 1-2 ("Phase 1 construction would begin after issuance of the license and after ISP successfully enters into a contract for storage with the U.S. Department of Energy (DOE) or holders of the title to SNF at commercial nuclear power facilities (SNF Title Holder(s)).")

¹⁴¹ See *Id.* at 4-10.

¹⁴² The applicant discusses socioeconomics and environmental justice in several places in the ER. In Section 3.10, the applicant provides summarized information about the socioeconomic conditions in the counties encompassing and adjoining the WCS CISF and refers to Appendix A of the ER for detailed information. Section 1.1.10 of Appendix A identifies minority and low-income populations that may be impacted by the proposed WCS CISF. The applicant subsequently evaluates the impact on these populations in ER Section 4.11 and Appendix A, Section 2.6.1. See ER at 3-63 – 3-65; Appendix A, at 1-39 – 1-44; 4-54. Joint Petitioners do not challenge these analyses in the ER.

¹⁴³ See *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 3), LBP-08-9, 67 NRC 421, 433 (2008) (citing *Sacramento Mun. Util. Dist.* (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 NRC 200, 247–48 (1993), *review declined*, CLI-94-2, 39 NRC 91 (1994)).

failure to state the contents of the analyses in the application, let alone specifically explain why those analyses are deficient, is dispositive of the entire contention.

(ii) Joint Petitioners Fail to Raise a Genuine Dispute on a Material Issue and to Adequately Support Their Concern Regarding Environmental Justice in Consideration of Transportation Routes

Building on their claim that the consideration of transportation impacts has been improperly excluded from the ER, Joint Petitioners argue “that the NRC must ensure, and find, that the rail routes ultimately selected for delivery from reactor sites to ISP will not pose the potential for, or cause, disparate environmental impacts on the minority and low-income populations found in those transportation corridors.”¹⁴⁴ They assert that the ER omits an analysis of environmental justice impacts for planned and alternative routes for the transportation of SNF and GTCC for the duration of the project.¹⁴⁵ Although the contention appears to be framed as a concern regarding the ER’s assessment of the “disparate impacts” of transportation on environmental justice, the bulk of Joint Petitioners’ arguments appear to relate to the alleged failure of the applicant to consider environmental justice in the consideration of transportation routes for the proposed CISF.

As support for their contention, Joint Petitioners rely upon *Louisiana Energy Services*, LBP-97-8, in which a licensing board required a further investigation into racial discrimination in siting of a proposed project, as providing “the pre-eminent analytical framework to decide EJ issues arising in nuclear licensing proceedings, including the need to avoid or mitigate discriminatory *effects* of the original site selection process.”¹⁴⁶ They also invoke Executive Order 12898, which directs federal agencies to identify and address “disproportionately high and

¹⁴⁴ Joint Petition at 78.

¹⁴⁵ *Id.* at 78–79.

¹⁴⁶ *Id.* (emphasis in original).

adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations.”¹⁴⁷ They argue that Executive Order 12898 requires “that in the application process for a license to store nuclear waste, the NRC must also consider all elements of the CISF proposal and not just the population characteristics of the region surrounding the storage site itself.”¹⁴⁸ Joint Petitioners also rely for their arguments upon Council on Environmental Quality (CEQ) guidance issued in 1999 on implementing Executive Order 12898 through the NEPA process.¹⁴⁹

As Joint Petitioners acknowledge, in *Louisiana Energy Services*, CLI-98-3,¹⁵⁰ the Commission overturned the licensing board’s determination that the Staff’s environmental review was inadequate because it did not consider racial discrimination in siting. Joint Petitioners argue that the Commission’s holding in CLI-98-3 only reversed the licensing board’s finding as applied to allegations of *intentional* discrimination in the siting of a project.¹⁵¹ This argument, however, misreads the Commission’s decision. As the Commission noted, “[t]he Board made no finding one way or the other on whether intentional racism in fact had tainted the decisional process, nor did it make clear the legal basis for its decision to order an investigation of possible racism in the selection of the site.”¹⁵² The Commission further noted that the testimony of the intervenors’ expert witness in that proceeding “[did] not hinge on claims of a deliberate and conscious intent to discriminate against” a minority population, but rather,

¹⁴⁷ Exec. Order 12,898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations*, 59 Fed. Reg. 7629 (Feb. 16, 1994) (E.O. 12898).

¹⁴⁸ Joint Petition at 81.

¹⁴⁹ See *id.* at 81–82 (quoting “Environmental Justice, Guidance Under the National Environmental Policy Act,” Council on Environmental Quality (Dec. 10, 1997)).

¹⁵⁰ 47 NRC 77 (1998).

¹⁵¹ Joint Petition at 79.

¹⁵² *Louisiana Energy Services*, CLI-98-3, 47 NRC at 101.

“on the claim that the *result* of the process and the siting criteria were discriminatory.”¹⁵³ The Commission found that the “disparate impact” analysis is the principal tool under NEPA for advancing environmental justice—not an inquiry into racial discrimination in siting, intentional or otherwise.¹⁵⁴

Regarding what NEPA requires of a site-selection process, the Commission observed that the site-selection process is used by the applicant to identify sites that can meet the stated goals of the proposed action, and NEPA requires that an EIS rigorously explore all reasonable alternatives to a proposed action, and “briefly discuss” those alternatives that have been eliminated from detailed study.¹⁵⁵ Where “a federal agency is not the sponsor of a project, the federal government’s consideration of alternatives may accord substantial weight to the preferences of the applicant and/or sponsor in the siting and design of the project.”¹⁵⁶ Having found that the licensing board’s decision to require the Staff to conduct an inquiry into the applicant’s site-selection process was unsupported by law, the Commission overturned the licensing board’s ruling with respect to discrimination in the site-selection process, but left in place the board’s ruling with respect to the need for an analysis of disparate impacts of the project on low-income and minority communities in the area in which the project was to be sited.¹⁵⁷

¹⁵³ *Id.* (emphasis added).

¹⁵⁴ *See id.* at 101, 103–05.

¹⁵⁵ *Id.* at 103–04 (quoting 40 C.F.R. § 1502.14(a)).

¹⁵⁶ *Id.* at 104 (quoting *City of Grapevine v. DOT*, 17 F.3d 1502, 1506 (D.C. Cir. 1994) (internal quotations omitted)).

¹⁵⁷ *Id.* at 100–10. *See also Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 203 (1998) (ruling inadmissible a contention seeking to litigate discrimination in site selection process which “is not a cognizable subject for agency licensing proceedings relative to compliance with NEPA”); *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-02-20, 56 NRC 147, 156 (2002) (environmental justice “means that the agency will make an effort under NEPA to become aware of the demographic and economic circumstances of local communities *where nuclear facilities are to be sited*, and take care to mitigate or avoid special impacts attributable to the special character of the community”) (emphasis added).

Joint Petitioners also assert that Executive Order 12898 “in effect requires that in the application process for a license to store nuclear waste, the NRC must also consider all elements of the CISF proposal and not just the population characteristics of the region surrounding the storage site itself.”¹⁵⁸ In other words, Joint Petitioners assert, an environmental justice investigation should not be limited to the area surrounding the CISF facility, but must extend to the “populations in the shipping corridors covering thousands of miles of rail, truck and barge routes used for delivering wastes” to the CISF, and this investigation must address “the question of whether WCS’s project will have the effect of unfairly targeting low-income and minority population concentrations in those corridors and cause them to bear an unequal burden of risk of accidents and routine as well as non-routine radiation exposures.”¹⁵⁹ However, Executive Order 12898 does not support this premise. The language cited by Joint Petitioners does not identify or impose requirements relating to the geographic scope of an environmental justice analysis conducted under NEPA. Further, in *Louisiana Energy Services*, the Commission explained that Executive Order 12898 establishes no new rights or remedies, and merely reinforces the requirements of existing applicable law—in this case, NEPA.¹⁶⁰

Subsequent to the Commission’s *Louisiana Energy Services* decision, the NRC adopted a policy statement on environmental justice.¹⁶¹ This policy incorporated the Commission’s rulings in *Louisiana Energy Services* and *Private Fuel Storage* and took into account the CEQ’s

¹⁵⁸ Joint Petition at 81.

¹⁵⁹ *Id.*

¹⁶⁰ *Louisiana Energy Services*, CLI-98-3, 47 NRC at 102; see also *Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions*, 69 Fed. Reg. 52,040, 52,043 (Aug. 24, 2004) (“it is the Commission’s position that [Executive Order 12898] itself does not provide a legal basis for contentions to be admitted in NRC licensing proceedings”).

¹⁶¹ *Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions*, 69 Fed. Reg. 52,040 (Aug. 24, 2004) [Environmental Justice Policy Statement].

guidance on environmental justice in the NEPA context.¹⁶² The policy states that “[r]acial motivation and fairness or equity issues are not cognizable under NEPA,” and explicitly recognizes that the consideration of racial discrimination in the siting of licensed facilities is outside the scope of the NEPA process.¹⁶³ Accordingly, the authorities on which Joint Petitioners rely are not adequate to show why an applicant’s evaluation of environmental justice impacts requires any more specific form of investigation or community outreach concerning the consideration of transportation routes for the WCS CISF or the site itself.

The NRC’s environmental justice policy statement commits the NRC to implementing the general principles in Executive Order 12898 through its existing NEPA process and guidance, including NUREG-1748.¹⁶⁴ NUREG-1748 provides that an ER should follow the detailed guidance in Appendix C, including “a discussion of the methods used to identify and quantify impacts on low-income and minority populations, the location and significance of any environmental impacts during construction on populations that are particularly sensitive, and any additional information pertaining to mitigation.”¹⁶⁵ Appendix C of NUREG-1748 in turn provides that an applicant should use a radius of approximately 4 miles (50 square miles) from the licensed facility for an assessment of environmental justice impacts from a rurally situated project.¹⁶⁶ The applicant’s assessment of environmental justice in the ER conforms to this guidance regarding the area for analysis.

¹⁶² Joint Petitioners quote extensively from this CEQ guidance as support for their contention, but fail to show how the quoted language supports a showing of the existence of a genuine dispute with the ER on a material issue of law or fact. The quoted language suggests that an agency preparing an EIS should assess the impacts of a project on environmental justice communities, consider disparate impacts in the agency’s assessment of the proposed action and alternatives, and engage in certain scoping outreach activities. See Joint Petition at 81–82. Joint Petitioners do not make clear how the ER’s assessment of environmental justice is inconsistent with these general recommendations.

¹⁶³ Environmental Justice Policy Statement, 69 Fed. Reg. at 52,047.

¹⁶⁴ *Id.* at 52,040, 52,046–47.

¹⁶⁵ NUREG-1748 at 6-25.

¹⁶⁶ *Id.* at C-4.

Joint Petitioners also suggest that the process of selecting transportation routes to the WCS CISF will have a disparate impact on minority and low-income populations located in transportation corridors, and that “[t]he failure to identify and evaluate all routes through an [e]nvironmental [j]ustice lens will also preclude a search for, and evaluation of, alternative routes through major urban zones.”¹⁶⁷ Although couched in terms of “disparate impacts,” Joint Petitioners fundamentally argue that this information is necessary for purposes of site-selection, as Joint Petitioners posit that transportation routes are an inseverable part of the proposed action. As stated above, however, this argument is not a cognizable basis for admission of a contention, and the Commission has made clear that an environmental justice assessment need only assess the disparate impacts of a proposed action and its reasonable alternatives.¹⁶⁸

In accordance with the NRC’s guidance for NMSS-licensed facilities, the area for assessment of environmental justice impacts is based on the location of the facility itself.¹⁶⁹ Where a licensing action may have impacts on the environment from transportation of materials, these impacts will be described in the section of the applicant’s ER or the Staff’s environmental review document pertaining to transportation impacts. The applicant describes the potential impacts from transportation in Section 4.2 of the ER.¹⁷⁰ Joint Petitioners appear to argue that the applicant should consider environmental justice impacts at a 50-mile radius along transport corridors, based upon the U.S. Department of Energy’s EIS for Yucca Mountain.¹⁷¹ But Joint Petitioners do not explain why the health and safety impacts presented by the Yucca Mountain project require an identical radius for assessment of environmental justice impacts from the

¹⁶⁷ Joint Petition at 87.

¹⁶⁸ See Environmental Justice Policy Statement, 69 Fed. Reg. at 52,047; *Louisiana Energy Services*, CLI-98-3, 47 NRC at 103–04.

¹⁶⁹ See NUREG-1748, Appendix C, at C-4 & n.3. This guidance document is applicable to all categories of facilities regulated by the Office of Nuclear Material Safety and Safeguards (NMSS) of the NRC.

¹⁷⁰ See ER at 4-3 to 4-28.

¹⁷¹ See Joint Petition at 87–88 & n.33.

WCS CISF, other than to suggest that the transported wastes “are nearly identical to those that would be delivered to an ultimate repository” and that similar “significant populations of low-income and minority people” would reside along transportation corridors to be used for shipping waste to the WCS CISF.¹⁷² Further, the excerpted articles Joint Petitioners rely on regarding historic relationships between segregation and railroad track location are inadequate support for this argument, as they raise only a speculative suggestion that environmental justice populations residing near railroad tracks could be impacted by the proposed action, but do not provide specific information to show why the applicant’s conformance with NRC guidance for conducting environmental justice reviews was inadequate.¹⁷³ The standing declarations by four individuals residing several hundred miles from the proposed facility likewise contain only speculative and conclusory statements regarding impacts to themselves as members of environmental justice communities.¹⁷⁴ “[N]either mere speculation nor bare or conclusory assertions, even by an expert, alleging that a matter should be considered will suffice to allow the admission of a proffered contention.”¹⁷⁵

(iii) Joint Petitioners Fail to Raise a Dispute on a Material Issue with Their Concern

Regarding Applicant’s Failure to Follow EPA Guidance

Joint Petitioners also argue that in “improperly segmenting the transportation component from the overall WCS proposal” the applicant “failed to follow the guidance of “Promising

¹⁷² *Id.* at 87–89.

¹⁷³ See *id.* at 88–89 & nn. 34–35. In any event, as summarized above, Joint Petitioners have failed to directly dispute the applicant’s analysis in the ER regarding the reasonableness of the representative routes it used for its analysis.

¹⁷⁴ See Declaration of Leona Morgan; Individual Member Declarations of Public Citizen, Inc. Additionally, simply attaching material or documents as a basis for a contention, without setting forth an explanation of that information’s significance, is inadequate to support the admission of the contention. See *Fansteel*, CLI-03-13, 58 NRC at 204–05.

¹⁷⁵ *Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), LBP-07-3, 65 NRC 237, 253 (2007) (citing *Fansteel*, CLI-03-13, 58 at 203).

Practices for EJ Methodologies in NEPA Reviews: Report of the Federal Interagency Working Group on Environmental Justice & NEPA Committee,” (March 2016).¹⁷⁶ Joint Petitioners assert that the EPA’s scoping comments advised the applicant to use this guidance and that it “is relevant to defining the geographic scope” of the proposal.¹⁷⁷ Joint Petitioners, however, do not show how any failure by the applicant to explicitly follow this EPA guidance demonstrates the existence of a genuine dispute on a material issue of law or fact.

Joint Petitioners acknowledge that this EPA guidance is not legally binding on the applicant and, as such, fail to show that the applicant’s compliance with this guidance document is material to the findings the NRC must make in relation to the application, as required by 10 C.F.R. § 2.309(f)(1)(iv).¹⁷⁸ Joint Petitioners also fail to clearly explain how the application’s assessment of environmental justice does not comport with it. For example, Joint Petitioners invoke a statement in the EPA guidance document that “[f]or some programmatic assessments, the scope may be regional or national,” but do not explain how this statement is relevant to a license for an interim storage facility issued under 10 C.F.R. Part 72.¹⁷⁹ Joint Petitioners quote language relating to recommendations that an agency consider minority and low-income populations that are likely to be affected by a proposed action in its assessment of alternatives or mitigation measures, but again, they do not show how these recommendations establish a genuine dispute with the application. The other statements invoked by Joint Petitioners from the EPA’s scoping comments or the EPA guidance document do not appear to establish any inconsistency between the recommendations in those documents and the application’s

¹⁷⁶ Joint Petition at 85.

¹⁷⁷ *Id.*

¹⁷⁸ *Id.* at 86.

¹⁷⁹ *See id.* at 85–86.

consideration of environmental justice—or, likewise, with NRC guidance that is directly applicable to the applicant’s review.¹⁸⁰

Joint Petitioners further assert that the applicant has failed to consider exposure pathways; ecological, aesthetic, historic, cultural, economic, social, and health consequences; and distribution of adverse and beneficial impacts from the proposed action. But Joint Petitioners do not cite to or controvert the discussions in the application where the applicant has conducted these assessments.¹⁸¹ Accordingly, Joint Petitioners have not shown that this EPA guidance supports a finding a genuine dispute with the application, as required by 10 C.F.R. § 2.309(f)(1)(vi).

(iv) Joint Petitioners Fail to Raise an Issue within the Scope of This Proceeding with Their Concern Regarding U.S. Department of Transportation Requirements

Finally, Joint Petitioners appear to assert that the ER fails to list several U.S. Department of Transportation regulations and one NRC regulation, and this failure contravenes 10 C.F.R. § 51.45(d) with respect to the transportation of waste to the WCS CISF.¹⁸² However, the applicant is applying for a specific ISFSI license under 10 C.F.R. Part 72, not a transportation certificate of compliance. Consequently, Joint Petitioners have not shown why the ER for this Part 72 license is required to provide a “mechanism by which [environmental justice] considerations will address the shipment of 3,000 anticipated shipments of SNF and GTCC waste through scores of major population centers.”¹⁸³ Further, as Joint Petitioners observe, the U.S. Department of

¹⁸⁰ See generally Environmental Justice Policy Statement; NUREG-1748.

¹⁸¹ See, e.g., ER Section 4 (assessing potential environmental impacts relating to, *inter alia*, transportation, public and occupational health, ecological resources, historic and cultural resources, visual and scenic resources, socioeconomics, environmental justice); Section 5 (mitigation measures); Section 6 (radiological monitoring, including environmental pathways); and Section 7 (cost-benefit analysis).

¹⁸² See Joint Petition at 90–97.

¹⁸³ *Id.* at 96.

Transportation maintains its own regulations and policies for assessing environmental justice in activities under its jurisdiction.¹⁸⁴ If, as Joint Petitioners assert, U.S. Department of Transportation “will be required by internal agency orders to require radioactive waste transport permits to account for [e]nvironmental [j]ustice concerns,”¹⁸⁵ it is not clear how this fact supports their premise that “segmenting” the project will leave environmental justice unconsidered for transportation routes or that this issue is within the scope of review of this licensing proceeding. In short, Joint Petitioners have not demonstrated that this concern is within the scope of the present proceeding or is material to the findings the NRC must make to support this licensing action, as required by 10 C.F.R. § 2.309(f)(1)(iii) and (vi).

For the foregoing reasons, because this contention does not meet the requirements of 10 C.F.R. § 2.309(f)(1)(iii)–(vi), this contention is inadmissible.

(f) Don’t Waste Michigan, Contention 6

Inadequate Disclosure of Oil and Gas Drilling Activity Beneath the WCS CISF Site.

Joint Petitioners assert that it is possible that fracking will be undertaken directly beneath the waste storage areas of the site. They state that there is no indication in either the ER or SAR of legal controls over oil and gas drilling directly beneath the site.¹⁸⁶ Joint Petitioners allege that fracking and waste well activity can cumulatively contribute to the potential for induced seismicity.¹⁸⁷ Joint Petitioners cite to several Part 72 regulations and assert that these regulations have not been addressed in the ER.¹⁸⁸ The contention is inadmissible in that it fails to dispute relevant portions of the application thereby failing to raise a genuine dispute with the

¹⁸⁴ See *id.* at 90–97.

¹⁸⁵ *Id.* at 96–97.

¹⁸⁶ *Id.* at 98.

¹⁸⁷ *Id.* at 99.

¹⁸⁸ *Id.* at 99–102.

applicant, and it fails to demonstrate how the issues it raises are material to the findings the NRC must make in contravention of 10 C.F.R. § 2.309(f)(1)(iv), (vi).

As a threshold matter, while the proposed contention asserts that the SAR and the ER are deficient, the contention does not contain a single citation to the SAR, nor (other than two sentences of background information) does it cite any aspect of the ER's actual analysis or environmental conclusions on any of the topics in the contention. As explained further below, this failure to acknowledge, must less dispute, the relevant portions of the application is sufficient grounds to conclude that the contention fails to meet 10 C.F.R. § 2.309(f)(1)(vi). Joint Petitioners speculate that fracking or waste well activity might take place directly underneath the site. However, the explanation they provide for why fracking or waste well activity would be of significance is that it can contribute to the potential for induced seismicity.¹⁸⁹ Any contention that fails directly to controvert the application or that mistakenly asserts the application does not address a relevant issue can be dismissed."¹⁹⁰ The "Seismic Hazard Evaluation for WCS CISF" is included in the proprietary version of the SAR as Attachment D to Chapter 2, "Site Characteristics."¹⁹¹ In the Seismic Hazard Evaluation, the SAR describes the site-specific probabilistic seismic hazard analysis performed for the proposed CIS Facility site. Induced seismicity is specifically discussed in Section 4.3 of this study. The Seismic Hazard Evaluation is also summarized in the publicly-available portion of the SAR in its discussion of vibratory ground

¹⁸⁹ The Joint Petition also includes a vague reference to 'groundwater movement.' The Joint Petitioners do not explain, however, how any potential changes in groundwater movement could either impact, or be an impact from the CISF. Moreover, they do not cite to or otherwise dispute the discussion of the hydrology of the site found in either the SAR, sections 2.4 and 2.5, or the discussion of water resources in section 3.4 of the ER.

¹⁹⁰ See *Millstone*, LBP-08-9, 67 NRC at 433 (citing *Rancho Seco*, LBP-93-23, 38 NRC at 247–48, *review declined*, CLI-94-2, 39 NRC 91 (1994)).

¹⁹¹ "WCS Consolidated Interim Storage Facility System Safety Analysis Report," Rev. 2 (Proprietary Version) at D-1.

motion at subsection 2.6.2.¹⁹² This subsection describes the objectives of the seismic hazard analysis and states that "... the low to moderate rate of background seismicity, even that associated with petroleum recovery activities, results in relatively low seismic hazard at the [site]."¹⁹³ This same description regarding the site's seismic hazard also appears in the publicly-available SAR regarding site design criteria and structural safety in the discussion of design response spectra.¹⁹⁴ Since the SAR does in fact take into account induced seismicity, and the Joint Petitioners fail to controvert that discussion, the potential for induced seismicity cannot form a basis for their claim that fracking or waste well activity have not been sufficiently discussed. Accordingly, Joint Petitioners have failed to establish in what way their arguments regarding the potential for fracking or waste well activity beneath the site dispute the application or are otherwise material to the findings the NRC must make. Similarly, the Joint Petitioners allege that waste disposal injection wells may enable groundwater movement which could alter the geological support.¹⁹⁵ However, they fail to cite to or controvert section 2.5.1 of the SAR which discusses the potential for site dissolution, or the report in Attachment F of the application referenced in section 2.5.1.¹⁹⁶

The remainder of the contention appears to consist of citing to various different safety regulations and criticizing the ER for not addressing these safety regulations. However, the discussion of the referenced Part 72 regulations is expected to be in the SAR, not in the ER. The Joint Petitioners have failed to show why the safety design criteria and site investigations required by Part 72 must be described in the ER, and thus have failed to show how the issue

¹⁹² "WCS Consolidated Interim Storage Facility System Safety Analysis Report," Rev. 2 (Public Version) at 2-28 – 2-29 (ML18221A408 (package)) (SAR).

¹⁹³ *Id.*

¹⁹⁴ *Id.* at 3-9.

¹⁹⁵ Joint Petition at 100.

¹⁹⁶ SAR at 2.5.1, Attachment F.

they raise is material to the findings the NRC must make in contravention of 10 C.F.R. § 2.309(f)(1)(iv).

Specifically, Joint Petitioners first cite to 10 C.F.R. § 72.120(d) and state that the ER has not taken into account the potential corrosive properties of the soil.¹⁹⁷ However, Joint Petitioners fail to cite to, or otherwise controvert, the discussion of soils found in Sections 2.6.4 and 2.7 of the SAR.

Joint Petitioners next cite to 10 C.F.R. § 72.103(e) and (f) and allege that these investigations of the site have not been performed.¹⁹⁸ However, they do not cite to, or otherwise controvert the discussion of geology and seismology in section 2.6 and 2.7 of the SAR.

Joint Petitioners cite to 10 C.F.R. § 72.90, and assert that site characteristics investigations have not been described in the ER.¹⁹⁹ However, they do not cite to, or otherwise controvert the discussion of these investigations in sections 2.1; 2.2; 2.3; 2.4; or 2.6 of the SAR. Similarly, Joint Petitioners cite to 10 C.F.R. § 72.94 and state that “inquiries imposed by” that regulation are missing from the ER, but they do not cite to or otherwise controvert the discussion found in section 2.2 of the SAR that provides the applicant’s analysis of the potential for and severity of man-induced events.

Since Joint Petitioners erroneously assume that these Part 72 regulations should be discussed in the ER, and fail to cite to or otherwise dispute the sections of the SAR that contain the allegedly missing information, the contention is inadmissible for failure to demonstrate that the issue raised is material to the findings the NRC must make and failure to show a genuine dispute with the application.

¹⁹⁷ Joint Petition at 100.

¹⁹⁸ *Id.* at 101.

¹⁹⁹ *Id.*

(g) Don't Waste Michigan, Contention 7

Disqualifying Foreign Ownership of Interim Storage Partners

In Proposed Contention 7, Joint Petitioners assert that ISP is a majority controlled foreign corporation, and as such, is “barred by statute and regulation from seeking or receiving a license” from the NRC.²⁰⁰ Joint Petitioners point to Section 103d of the AEA, which states that the Commission may not issue certain licenses to an entity that is owned, controlled, or dominated by a foreign entity. Joint Petitioners also points to 10 C.F.R. § 50.38, which applies the section 103(d) prohibition on foreign ownership for production and utilization facilities licensed under 10 C.F.R. Part 50.²⁰¹

The Joint Petitioners’ claim rests on a misunderstanding regarding which sections of the AEA and NRC regulations apply to this 10 C.F.R. Part 72 proceeding. Accordingly, contrary to 10 C.F.R. § 2.309(f)(1)(iii) and (iv), they fail to demonstrate that the issue they raise is within the scope of the proceeding and material to the findings the NRC must make.

Joint Petitioners assert that “[t]here is no dispute that 42 U.S.C. §§ 2133 and 2134 are applicable to this proceeding,”²⁰² but they do not provide any legal or factual authority for this assertion. Sections 103 and 104 of the AEA, on which Joint Petitioners rely, apply to production and utilization facilities.²⁰³ A CISF is not a production or utilization facility, but a license to

²⁰⁰ *Id.* at 102.

²⁰¹ *Id.* at 102–103.

²⁰² *Id.* at 104.

²⁰³ Section 11 of the AEA defines a “production facility” as “(1) any equipment or device determined by rule of the Commission to be capable of the production of special nuclear material in such quantity as to be of significance to the common defense and security, or in such manner as to affect the health and safety of the public; or (2) any important component part especially designed for such equipment or device as determined by the Commission.” As defined by Section 11 of the AEA, a “utilization facility” is “(1) any equipment or device, except an atomic weapon, determined by rule of the Commission to be capable of making use of special nuclear material in such quantity as to be of significance to the common defense or security, or in such manner as to affect the health and safety of the public, or peculiarly adopted for making use of atomic energy in such quantity as to be of significance to the common defense and security, or in such manner as to affect the health and safety

possess nuclear material pursuant to the requirements of Part 72.²⁰⁴ In turn, in contrast to the Part 50 regulation quoted by the Joint Petitioners, which applies to production and utilization facilities such as power reactors, Part 72 does not contain any prohibition on foreign ownership. Because there is no blanket prohibition on foreign ownership for a CISF, as there is for a power reactor, the issue raised by Joint Petitioners in Proposed Contention 7 is outside the scope of this proceeding.

Joint Petitioners additionally claim that the application lacks a negation action plan, and thus does not comply with 10 C.F.R. § 50.38 or the Staff Standard Review Plan on Foreign Ownership, Control, or Domination. But for the reasons explained above, Joint Petitioners fail to demonstrate why these claims are relevant. Because the application is for a CISF pursuant to Part 72, not a power reactor pursuant to Part 50, neither § 50.38 nor the FOCD Standard Review Plan apply to this proceeding. Since there is no blanket prohibition on a Part 72 CISF applicant's foreign ownership, and thus no inherent requirement for a negation action plan, Joint Petitioners fail to demonstrate why the lack of a negation action plan is material to the findings the NRC must make in this proceeding.

Since the Joint Petitioners have failed to show that the proposed contention is within the scope of the proceeding and material to the findings the NRC must make, the proposed contention should not be admitted.

of the public; or (2) any important component part especially designed for such equipment or device as determined by the Commission.” Definitions, Atomic Energy Act § 11, 42 U.S.C. § 2014.

²⁰⁴ See, e.g., Final Rule, Licensing Requirements for the Storage of Spent Fuel in an Independent Spent Fuel Storage Installation, 45 Fed. Reg. 74,693, 74,694 (Nov. 12, 1980) (“The licensing of spent fuel storage in an ISFSI under Part 72 is a material type of license; however, Part 72 includes requirements for an ISFSI that are conditions under which a license to possess spent fuel will be issued.”); cf. *Areva Enrichment Services, L.L.C.* (Eagle Rock Enrichment Facility), LBP-11-11, 73 NRC 455, 488–89 (2011) (noting that AEA section 103, including its FOCD prohibition, does not apply to an enrichment facility).

(h) Don't Waste Michigan, Contention 8

The Discussion of Alternatives to the Proposed Project Is Inadequate Under NEPA

Contention 8 asserts that the ER's discussion of the "no action alternative" is deficient because it does not discuss the NRC's Continued Storage Rule or the use of "safer storage methods at reactor sites" like hardened on-site storage (HOSS).²⁰⁵ Joint Petitioners fail to demonstrate why either discussion is material to the NRC's environmental review.²⁰⁶ In addition, Contention 8 alleges that the ER should have considered five other alternatives.²⁰⁷ With respect to these alternatives, Joint Petitioners have failed to demonstrate a genuine dispute with the application on a material issue.²⁰⁸

An ER's discussion of alternatives must be "sufficiently complete" to aid the NRC in developing and exploring appropriate alternatives in the EIS and must also be presented in comparative form.²⁰⁹ The ER should also include consideration of the economic, technical, and other benefits and costs of the proposed action and its alternatives.²¹⁰ NRC guidance requests that applicants address the "no-action alternative," which is a discussion of the results from a lack of action, to serve as a "baseline" for comparing alternatives.²¹¹

An agency need only discuss alternatives that are feasible, or reasonable.²¹² The applicant's selection of alternatives is subject to a "rule of reason."²¹³ Ultimately,

²⁰⁵ Joint Petition at 107.

²⁰⁶ 10 C.F.R. § 2.309(f)(1)(iv).

²⁰⁷ *Id.* at 107.

²⁰⁸ 10 C.F.R. § 2.309(f)(1)(vi).

²⁰⁹ 10 C.F.R. § 51.45(b)(3).

²¹⁰ *Id.* § 51.45(c).

²¹¹ NUREG-1748 at Section 3.4.4 (3-9) and Section 5.2.3 (5-6).

²¹² *Citizens Against Burlington*, 938 F.2d at 195.

²¹³ See *Paina Hawaii, L.L.C.* (Materials License Application) CLI-10-18, 72 NRC 56, 74-75 (2010).

which alternatives are considered reasonable is determined by the project's goals.²¹⁴ These goals are decided by the applicant—not the NRC—and may also include the applicant's economic goals.²¹⁵

Here, the ER provides a summary of the no-action alternative.²¹⁶ Compared to the no-action alternative, the ER concludes that the proposed action's "primary economic benefit" would be the "net reduction of federal reimbursements to the operators of nuclear power plants for their costs associated with prolonged storage of spent fuel."²¹⁷ Also, the ER contains a comparative analysis of the expenditures to a subset of plant operators for the proposed action and the no-action alternative.²¹⁸ The ER also provides that "[o]ther anticipated economic benefits from the proposed action are related to the repurposing of land at most of the plant sites."²¹⁹

Joint Petitioners fail to demonstrate in Contention 8 how the inclusion of the Continued Storage Rule or other storage methods like HOSS would be material to the NRC staff's evaluation of alternatives. An issue is "material" if its resolution would make a difference in the outcome of the licensing proceeding.²²⁰ Here, Joint Petitioners' arguments regarding the NRC's Continued Storage Rule are unavailing. Namely, Contention 8 makes the misleading claims that the Continued Storage Rule "conclude[d] that waste can be safely stored at reactor sites

²¹⁴ See *Dominion Nuclear North Anna, L.L.C.* (Early Site Permit for North Anna Site), LBP-07-9, 65 NRC 539, 607–08 (2007) (citations omitted).

²¹⁵ *Id.* (citing *City of Grapevine, 17 F.3d at 1506, cert. denied, 513 U.S. 1003* (1994); see also *Citizens Against Burlington, 938.F.2d at 199, cert. denied, 502 U.S. 994* (1991) (noting that "[a]n agency cannot redefine the goals of the proposal that arouses the call for action").

²¹⁶ ER at 2-1.

²¹⁷ *Id.* at 7-4.

²¹⁸ *Id.* at 7-7 to 7-8.

²¹⁹ *Id.* at 7-4.

²²⁰ *Oconee, CLI-99-11, 49 NRC at 333–34* (citing 54 Fed. Reg. 33,168, 33,172).

indefinitely” and also “found no advantage to CISF storage.”²²¹ Simply put, the Continued Storage GEIS made no such conclusions. Rather, the GEIS simply analyzed the *environmental impacts* of continuing to store spent fuel after the end of the licensed life for operations of a reactor.²²² Indeed, in responding to public comments in the GEIS, the NRC expressly stated that it was “not making a safety determination under the Atomic Energy Act (AEA) to allow for the continued storage of spent fuel.”²²³ The NRC clarified that the lack of a safety finding did “not imply that spent fuel cannot be stored safely.”²²⁴ Rather, the GEIS was “predicated on the ability to store spent fuel safely” throughout the timeframes analyzed in the GEIS based on the technical feasibility of such storage.²²⁵ Here, Contention 8 appears to conflate the NRC’s assumptions regarding the technical feasibility of continued storage with the NRC’s ultimate approval of such storage.

In addition, Joint Petitioners’ allegations regarding the failure to discuss HOSS in the no-action alternative also miss the mark. In this case, the ER’s discussion of the no-action alternative evaluates the status quo—*i.e.*, the environmental impacts resulting from the proposed facility not being constructed.²²⁶ Joint Petitioners do not make any effort to explain why the status quo in this case would foreclose the possibility of at-reactor storage options like HOSS. And nowhere in Contention 8 do Joint Petitioners explain how evaluating HOSS in the ER would impact the NRC’s analysis with respect to alternatives, including the no-action alternative. Accordingly, Joint Petitioners have failed to demonstrate that the issues raised in

²²¹ Joint Petition at 107, 109.

²²² Continued Storage GEIS at 1-1.

²²³ GEIS at D-9.

²²⁴ *Id.*

²²⁵ *Id.*

²²⁶ ER at 2-63.

Contention 8 are material to the findings the NRC must make to support its review of the ISP application.²²⁷

To the extent Contention 8 alleges that the ER failed to consider specific alternatives, Joint Petitioners have failed to demonstrate a genuine dispute with the application on a material issue.²²⁸ Joint Petitioners proffer five alternatives that the ER allegedly failed to consider, including: (1) the establishment of a Dry Transfer System (DTS), or equivalent, to repackage SNF at the ISP site; (2) modification of the ISP Emergency Response Plan to include preparations for emissions mitigation; (3) modification of the ISP design to prevent “malevolent” acts; (4) federal control of the ISP facility; and (5) implementation of HOSS at reactor sites.²²⁹ However, Joint Petitioners make absolutely no effort to describe why these “alternatives” are feasible and/or would align with the purpose of the proposed CISF. Further, regarding the construction of a DTS facility, Joint Petitioners fail to discuss how the ability to repackage fuel at the ISP site—something the license application specifically states would not be required²³⁰—would serve as an “alternative” to the proposed CISF. And, and as previously noted, Joint Petitioners fail to demonstrate what difference the consideration of HOSS would make with respect to the ER’s analysis of the no-action alternative, which provides an evaluation of on-site storage. Joint Petitioners’ other alternatives fare no better. For example, as for the “modification” alternatives to the Emergency Response Plan or ISFSI design, there is simply no way to discern what Joint Petitioners are specifically referring to, let alone evaluate the reasonableness of such modifications. And Contention 8’s allegation that the ER also failed to consider federal control of the CISF is incoherent given the Joint Petitioners’ position earlier in

²²⁷ 10 C.F.R. § 2.309(f)(1)(iv).

²²⁸ 10 C.F.R. § 2.309(f)(1)(vi).

²²⁹ Joint Petition at 107–108.

²³⁰ See SAR at 11-4.

its Petition that there is no legal authority for DOE to even take title or possession of SNF.²³¹ In light of the above, Joint Petitioners have failed their burden to establish how these proffered alternatives are reasonable in demonstrating a potential genuine dispute with the ER.²³²

Finally, Joint Petitioners' assert that the ER provides "no demonstration" of the costs and benefits of the proposed CISF.²³³ To the contrary, the ER does contain a comparative analysis of the expenditures to a subset of nuclear power plant facilities and for the proposed action and the no-action alternative.²³⁴ Because Joint Petitioners neither cite to nor dispute this analysis, they have failed to demonstrate a genuine dispute on a material issue, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

(i) Don't Waste Michigan, Contention 9

ISP Misrepresents the Financial Benefits to the Federal Government From Opening and Operating A CISF

In this contention Joint Petitioners take issue with ISP's conclusion regarding the project's potential financial benefits to the federal government, stating that "[t]here is considerable dispute over whether the proposed action of opening a CISF at ISP's site in west Texas will provide over \$5 billion of net economic benefit to the U.S. Government."²³⁵ As the basis for their contention, Joint Petitioners excerpt a portion of the "Discussion and Summary" section discussing the proposed action alternative that describes ISP's estimate of the economic benefits from the proposed action.²³⁶ Joint Petitioners assert, referencing ER Table 7.4-1, that "the ISP Environmental Report provides no 'benefit-cost' analysis...it only depicts the

²³¹ See Joint Petition at 40.

²³² 10 C.F.R. § 2.309(f)(1)(vi).

²³³ Joint Petition at 111.

²³⁴ ER at 7-7 to 7-8.

²³⁵ Joint Petition at 112.

²³⁶ *Id.*

purported benefits from the development of the ISP CISF” and not the federal government’s costs.²³⁷ Joint Petitioners argue that “ISP’s Table 7.4-1 does not quantify readily-quantifiable environmental impacts and values, namely, there is no explanation of the cost burden that would be shouldered by the DOE irrespective of the geographical location of SNF storage facilities,” which they claim conflicts with the requirements of 10 C.F.R. § 51.45 and 40 C.F.R. § 1502.23.²³⁸ They conclude by noting that “NEPA does not require a cost-benefit analysis; but an agency choosing to ‘trumpet’ an action’s benefits has a duty to disclose its costs” and that “misleading information about economic impacts can defeat the ‘hard look’ function an EIS must fulfill.”²³⁹

This contention is inadmissible because the Joint Petitioners have failed to demonstrate that the issue raised is material to the findings the NRC must make, as required by 10 C.F.R. § 2.309(f)(1)(iv), or show that a genuine dispute exists with the applicant on an issue of material fact or law in accordance with 10 C.F.R. § 2.309(f)(1)(vi).

To address the requirement in 10 C.F.R. § 51.45(c) that an ER “include consideration of the economic, technical, and other benefits and costs of the proposed action and its alternatives,” Chapter 7 of ISP’s ER addresses numerous quantitative and qualitative costs and benefits.²⁴⁰ ISP also explains the methodology it used to calculate the benefit of a net reduction in the federal government’s liability for nuclear waste storage costs.²⁴¹

Joint Petitioners focus on the absence of cost information from Table 7.4-1 “Summary of Quantified Benefits from CISF over 40-Year Licensure (Not Discounted);” but given that Table 7.4-1 is explicitly to summarize benefits, cost information would be unlikely to be there. Rather,

²³⁷ *Id.* at 112–13.

²³⁸ *Id.* at 113.

²³⁹ *Id.* at 114.

²⁴⁰ See ER Section 7.2 “Benefits Analysis” and ER Section 7.3 “Costs Analysis.”

²⁴¹ See *Id.* Section 7.2.

cost information is included throughout chapter 7 of the ER. The text immediately following Table 7.4-1, for example, states “[a] summary of the estimated economic costs of the proposed action, which were discussed in Section 7.3 and detailed in Tables 7.3-1 through 7.3-10, is provided in Table 7.4-2.”²⁴² Joint Petitioners did not address the presence of this information and, therefore, cannot show a genuine dispute with its adequacy. While they point out that the information they seek is not in Table 7.4-1, they do not explain 1) why NEPA or NRC regulations require it to be there and 2) what effect its absence from the table has on the applicant’s overall cost benefit analysis.²⁴³

In any event, the ER acknowledges that the posited benefit is not the complete elimination of federal reimbursements, simply a reduction. And the applicant explains in ER Section 7.2.1 and illustrates in Figure 7.2-1 “Comparison of Cumulative Federal Expenditures for Spent Fuel Storage Liabilities at Stranded Sites between the Proposed Action and the No Action Scenarios”²⁴⁴ the assumed extent of those savings, an analysis the contention neither acknowledges nor specifically disputes. So to the extent Joint Petitioners are asserting that the ER must contain a detailed analysis of a category of costs that the ER already acknowledges would remain under both the proposed action and the no action alternative, they fail to explain how this represents a genuine dispute with the ER’s cost-benefit analysis.

Accordingly, Joint Petitioners have not shown that their contention alleging the omission of particular cost information from Table 7.4-1 presents an issue that is material to the findings that the NRC must make on the application or that a genuine dispute exists with the applicant on a material issue of fact or law. Therefore, this contention should be dismissed.

²⁴² *Id.* at 7-30.

²⁴³ See *System Energy Resources, Inc.* (Early Site Permit for Grand Gulf ESP Site), CLI-05-4, 61 NRC 10, 13 (2005) (“At NRC licensing hearings, petitioners may raise contentions seeking correction of significant inaccuracies and omissions in the ER. Our boards do not sit to ‘flyspeck’ environmental documents or to add details or nuances.”)

²⁴⁴ ER at 7-44.

(j) Don't Waste Michigan, Contention 10

The Predicted Lengths of the Period of Operation of the CISF Warrants Scrutiny Under NEPA of Storage Exceeding 100 Years

Contention 10 claims that the ER must address the contingency of the proposed ISP CISF becoming a *de facto* repository if a permanent repository is not constructed.²⁴⁵ But the NRC's Continued Storage Rule expressly states that the ER is "not required to discuss the environmental impacts of spent nuclear fuel storage in . . . an ISFSI for the period following the term of the . . . ISFSI license." 10 C.F.R. § 51.23(b). Joint Petitioners rely on a report from Dr. Gordon Thompson, which discusses risks associated with permanent storage at a CISF like the proposed ISP facility.²⁴⁶ The Continued Storage GEIS analyzed the environmental impacts of the continued storage of spent fuel at away-from-reactor ISFSIs as well as reactor sites. Absent a waiver pursuant to 10 C.F.R. § 2.335, this proceeding is an improper forum to challenge any alleged flaws in the GEIS's analysis of continued storage at the proposed CISF.²⁴⁷ The contention is therefore outside the scope of this proceeding and must be dismissed.²⁴⁸

(k) Don't Waste Michigan, Contention 11

Having No Dry Transfer System And No Radioactive Emissions Mitigation Plan For ISP's CISF Are Impermissible Omissions Under the AEA And Must Be Addressed Under NEPA

²⁴⁵ Joint Petition at 115.

²⁴⁶ *Id.* at 115–16.

²⁴⁷ See 10 C.F.R. § 2.335(a) ("no rule or regulation of the Commission, or any provision thereof . . . is subject to attack by way of discovery, proof, argument, or other means in any adjudicatory proceeding" without a petition for a waiver as provided for elsewhere in that section). Indeed, responding to public comments in the GEIS, the NRC stated that "if a participant in an NRC proceeding later seeks to revisit these generic analyses in an individual licensing proceeding based on asserted site-specific differences, it is appropriate to require the petitioner to satisfy the waiver requirements in the NRC regulations." NUREG-2157 at D-35.

²⁴⁸ 10 C.F.R. § 2.309(f)(1)(iii).

The Joint Petitioners' proposed Contention 11 claims that the application's lack of a dry transfer facility is contrary to the law and presents an impermissible risk beyond what is mandated by the Atomic Energy Act and is inadequately addressed in the ER. The proposed contention asserts that such a facility is needed because canisters could become damaged, either through transportation of damaged packages²⁴⁹, damage to cladding during long-term storage of high burnup fuel²⁵⁰, slow degradation of assemblies and canisters, canister accidents, or attack²⁵¹. The contention also asserts that there "is no plan for radiation emissions mitigation or radioactive releases at the CISF site."²⁵²

Contention 11 is inadmissible because it fails to demonstrate a genuine dispute with the application or that the issue raised is material to the findings the NRC must make, or raises issues outside the scope of the proceeding, contrary to the requirements of 10 C.F.R. § 2.309(f)(1)(vi) and (iii). Fundamentally, Joint Petitioners have neither engaged with relevant contents of the application nor pled a plausible event that would result in consequences from operation of the facility, relying instead on speculation.²⁵³ Although Contention 11 hypothesizes various generalized ways that canisters might become damaged, the contention (including the referenced portions of the Alvarez report or the Thompson declaration) fails to actually cite or dispute any portions of the application that address the CISF's safety analyses, aging management plans, or quality assurance programs. That alone is sufficient basis to dismiss the contention under 10 C.F.R. § 2.309(f)(1)(vi).

²⁴⁹ Joint Petition at 124.

²⁵⁰ *Id.* at 120–121.

²⁵¹ *Id.* at 124.

²⁵² *Id.* at 118. *See also* expert declarations of Dr. Gordon Thompson and Robert Alvarez.

²⁵³ *See Fansteel*, CLI-03-13, 58 NRC at 203 (finding that "a petitioner may meet its pleading burden by providing 'plausible and adequately supported' claims that the data are either inaccurate or insufficient.").

With respect to the canisters, NRC regulations require SNF to be packaged in a matter that “allows handling and retrievability without the release of radioactive materials to the environment.”²⁵⁴ The ISP SAR states that “[s]torage and handling systems are designed to allow ready retrieval of the canisters” and “the cask/canister handling systems are designed . . . to ensure adequate safety under normal and accident conditions.”²⁵⁵ The SAR also provides that “[n]o repackaging of individual SNF assemblies [will be] performed at the [ISP] CISF.”²⁵⁶ The Joint Petitioners nevertheless opine that damaged SNF assemblies and containers may arrive at the site and that the absence of repackaging capability creates various potential dangers.²⁵⁷

In *Private Fuel Storage*, the Board held that a similar claim was inadmissible.²⁵⁸ That ruling was upheld by the Commission, which stated the “contention[] lack[ed] a factual foundation because it does not present any plausible scenario requiring special planning for a breached cask.”²⁵⁹ Where a petitioner is alleging a deficiency that it claims would produce significant safety or environmental consequences, to the point that it claims an entire repackaging facility is required, the contention must articulate a factual foundation as to why such an event is at least plausible. Here, Joint Petitioners provide only a cursory overview of different topics that are either addressed in the application or are addressed by the

²⁵⁴ 10 C.F.R. § 72.122(h)(5); see also 10 C.F.R. § 72.122(l) (requiring storage systems to be designed to allow “ready retrieval” of fuel “for further processing or disposal”).

²⁵⁵ SAR at 3-20.

²⁵⁶ *Id.* at 11-4.

²⁵⁷ Joint Petition at 124–25.

²⁵⁸ *Private Fuel Storage*, LBP-98-7, 47 NRC at 228–229. See also *id.* at 186–187 (rejecting contention alleging need for repackaging to inspect condition of fuel).

²⁵⁹ *Private Fuel Storage*, CLI-04-4, 59 NRC at 48. See also *Private Fuel Storage*, CLI-04-22, 60 NRC at 139 (upholding board denial of contention alleging that lack of repackaging facility would lead to an environmental consequence when no basis was provided that would demonstrate need for opening of canisters).

Commission's regulations. Speculation, even by an expert, is insufficient to meet the requirements for a hearing.²⁶⁰

For example, with respect to the likelihood of receipt of a damaged transportation package, the Joint Petitioners appear to assume that containers that are being shipped would fail to meet Part 71 transportation requirements and result in significant consequences to the public. However, a shipment's failure to meet the proposed site requirements would not inherently contravene standards in 10 C.F.R. § 71.47 for radiation levels at the external surface of the package.²⁶¹ Additionally, Joint Petitioners' own citation to the "Start Clean/Stay Clean" policy undermines the plausibility of such a scenario because it would further limit the likelihood of a damaged canister being shipped.²⁶² Accordingly, the Joint Petitioners fail to show that the wording of the application implies a conflict with Part 71 or DOT regulations, much less a plausible and significant unanalyzed risk. Their assumption that such a practice would be implemented in a manner contrary to Part 71 and DOT requirements is simply unsupported speculation and fails to demonstrate a genuine dispute with the applicant on a material issue.²⁶³

²⁶⁰ See *Vogtle*, LBP-07-3, 65 NRC at 253 ("[N]either mere speculation nor bare or conclusory assertions, even by an expert, alleging that a matter should be considered will suffice to allow the admission of a proffered contention.") (citing *Fansteel*, CLI-03-13, 58 NRC at 203).

²⁶¹ For example, the confinement boundary for the MP-197 transportation package is part of the cask, not the boundary of the canister. So long as other conditions of the transportation package certificate are met, material inside the package can be shipped. See NUHOMS-MP197, Certificate No. 9302, Revision 8 (ML17143A256) ("No credit is taken for the DSC as a containment boundary.").

²⁶² Additionally, the contention fails to explain why a licensee's quality assurance program (either at the CISF or a reactor site) would not discover any such errors. See *Private Fuel Storage*, CLI-04-22, 60 NRC at 138–39 (upholding a rejection of a contention when it failed to acknowledge the applicant's quality assurance measures). The SAR also discusses both surveillance activities and routine maintenance of the casks to identify and resolve any issues. See generally SAR at 5-5 (Section 5.1.3.2, "Surveillance of the Storage Overpacks"); 5-5 to 5-6 (Section 5.1.3.5, "Maintenance Operations"); 5-7 (Section 5.1.5.5, "Maintenance Techniques"). The contention does not identify or dispute these analyses either.

²⁶³ See *Private Fuel Storage*, CLI-04-22, 60 NRC at 138–139.

Similarly, with respect to the contention's statements regarding high burnup fuel, the Joint Petitioners fail to show how the issues raised present a safety concern that could constitute a dispute with the application. As the Joint Petitioners point out, the proposed license requires that high burnup fuel be canned inside the canister.²⁶⁴ Canning of spent nuclear fuel, especially in the case of damaged fuel, is a method of compensating for damaged cladding, the exact issue that is raised by the Joint Petitioners.²⁶⁵ Nowhere does the proposed contention demonstrate how canning would be insufficiently protective or otherwise affect the likelihood or consequences of a cladding failure.²⁶⁶

With respect to its other concerns, such as slow degradation of assemblies or canister accidents, the Joint Petitioners have not alleged any non-speculative basis why it is likely that events, especially events beyond the cask and canister design basis events, would occur or plausibly result in significant safety or environmental consequences.²⁶⁷ The SAR states that,

²⁶⁴ Joint Petition at 120; License Application, Chapter 13 "Proposed License Conditions," Attachment A at 2.

²⁶⁵ See *Environmental Assessment for 10 CFR Part 72 'Licensing Requirements for the Independent Storage of Spent Fuel and High-Level Radioactive Waste'*, NUREG-1092 (Aug. 1984), at I-4 (ML091050510) ("Furthermore, the assessment shows that for the long-term storage of spent fuel the cladding integrity need not be maintained if additional confinement is provided.").

See also *Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High-Level Radioactive Waste*, 53 Fed. Reg. 31,651, 31,655 (Aug. 19, 1988) (final rule) (noting that the insertion of canning in 72.122(h)(1) was specifically to provide an alternative means for confinement of fuel material, a function otherwise accomplished by the cladding); *Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High-Level Radioactive Waste*, 51 Fed. Reg. 19,106, 19,108 (May 27, 1986) (proposed rule).

²⁶⁶ For example, Mr. Alvarez's references to a 2010 NWTRB evaluation and a May 2016 letter to DOE generically refer to uncertainties about fuel storage over time. Joint Petition at 120–21. But the contention does not explain how such vague possibilities or rhetorical questions reveal a plausible event scenario, much less any deficiency in the application's proposed license requirements or standards for canning.

²⁶⁷ In particular, the referenced portions of the Thompson Declaration contain nothing but bare assertions that the lack of a DTS or "emissions mitigation" plan would produce a list of generic and unquantified "likely events" and "expected impacts." Joint Petition at 124–26, citing Declaration at 17–19. And as noted above, even if the Declaration had explained why these events or impacts are plausible, it fails to explain how these analyses contradict the safety or impact conclusions in the application.

based on the safety analysis associated with the storage systems to be utilized at the ISP facility, “there are no credible accident scenarios for the [ISP] CISF which would result in a loss of confinement accident or a radiological release in excess” of NRC requirements.²⁶⁸ ISP specifically claims that the design and operational considerations of the casks and CISF “preclude the release of radioactive materials from the canisters under all normal, off-normal, and credible accident conditions.”²⁶⁹ But the contention does not cite, let alone specifically dispute, any of the applicant’s safety analyses, aging management plans, or its quality assurance program.²⁷⁰

Additionally, with respect to the contention’s implication that the application must evaluate a DTS or repackaging because of preparations for permanent disposal,²⁷¹ these are challenges to the Continued Storage Rule in 10 C.F.R. § 51.23 because they fundamentally call for analysis of spent fuel storage impacts beyond the term of the license. The Continued Storage GEIS assumed that a DTS would be built during the long-term storage timeframe (*i.e.*, 160 years after the licensed life for reactor operations) and noted that “[a] license would have to request authorization from the NRC to build and operate the DTS, during initial licensing of the ISFSI, or as a later, separate action.”²⁷² ISP does not seek to build a DTS during the CISF’s initial 40-year license term; neither the GEIS nor NRC regulations require otherwise, and the Continued Storage Rule makes clear that the ISP ER is not required to evaluate the impacts of storage beyond the term of the proposed license.²⁷³ Finally, regarding the contention’s

²⁶⁸ SAR 1-16.

²⁶⁹ *Id.* at 6-2.

²⁷⁰ *See, e.g.*, SAR Section 1.4.4.3; SAR Section 3.3, or SAR Chapter 11.

²⁷¹ Joint Petition at 121 (raising concern about canister compatibility with future transport and repository requirements for disposal), 122 (“the repackaging quandary caused by the imperatives of geological disposal”).

²⁷² GEIS at 5-4 & n.2 (Section 5.0).

²⁷³ 10 C.F.R. § 51.23(b). In any event, the contention does not demonstrate how Dr. Thompson’s references to a general statement in the GEIS (noting that actions like repackaging could reduce

predictions regarding damage due to “likely modes of attack,” the Commission has made clear that NEPA consideration of impacts from terrorism is outside the scope of a hearing.²⁷⁴

In sum, the Joint Petitioner has neither disputed the pertinent portions of the application nor alleged sufficient information to establish that the identified scenarios reveal any plausible unanalyzed risks that would require a repackaging facility or additional “emissions mitigation” plans. Accordingly, the contention fails to show a genuine material dispute with the application under 10 C.F.R. § 2.309(f)(1)(vi).

(I) Don’t Waste Michigan, Contention 12

IS[P]/WCS Is Disqualified From And/Or Has Waived Applicability Of The Continued Storage Generic Environmental Impact Statement To the Licensing Review

Contention 12 avers that the ER “does not qualify for the exclusions from NEPA scrutiny conferred by” the Continued Storage Rule and GEIS.²⁷⁵ In Joint Petitioners’ view, generic impact findings of the NRC’s Continued Storage Rule do not apply to the ISP facility; therefore, ISP must conduct a site-specific analysis of certain environmental impacts.²⁷⁶ Joint Petitioners are correct to the extent they are asserting that the ISP ER is required to provide a site-specific analysis for impacts during the term of the proposed CISF license (as it does). The NRC’s Continued Storage Rule does not require otherwise. Therefore, Contention 12 fails to demonstrate a genuine dispute with the application on a material issue of law or fact.²⁷⁷

future risks posed by damaged fuel), and to a DOE “recommendation” for incorporation of repackaging capability into future storage facilities, represent legal requirements or a deficiency in the application. Joint Petition at 122–23 (citing Declaration at 6–7).

²⁷⁴ See *infra* at 71–73 (Don’t Waste Michigan, Contention 14).

²⁷⁵ Joint Petition at 127.

²⁷⁶ See *Id.* at 46. Joint Petitioners’ initial statement of the contention specifically requests site-specific analysis of “severe accident mitigation during transportation” as well as waste “storage and management operations” at the site. Because Petitioners fail to even mention these two specific topics again in Contention 4, let alone provide supporting bases, the Board must likewise find these claims inadmissible. See 10 C.F.R. § 2.309(f)(1)(ii) & (v).

²⁷⁷ See 10 C.F.R. § 2.309(f)(1)(vi).

The NRC's Continued Storage Rule permits an applicant's ER to omit from discussion "the environmental impacts of spent nuclear fuel storage in . . . an ISFSI for the period following the term of the . . . ISFSI license."²⁷⁸ In the NRC's Generic Environmental Impact Statement (GEIS) in support of the Continued Storage Rule, the NRC generically evaluated the impacts of continued storage of spent nuclear fuel beyond the licensed life for operation of a reactor.²⁷⁹ The impact determinations in the GEIS are "deemed incorporated" in any relevant EIS authored by the Staff.²⁸⁰ Importantly, the Continued Storage Rule provides that it "does not alter any requirements to consider the environmental impacts of spent fuel storage during the term of . . . a license for an ISFSI in a licensing proceeding."²⁸¹

Joint Petitioners claim that the ISP CISF would differ from the generic evaluation of away-from-reactor storage in the Continued Storage GEIS. Of course it does. The GEIS evaluated the environmental impacts of away-from-reactor storage and made certain assumptions, including that an away-from-reactor ISFSI would have a similar storage capacity to the previously-licensed Private Fuel Storage (PFS) facility and also that the construction of a dry transfer system (DTS) would take place "sometime after the ISFSI is built."²⁸² In explaining these assumptions, the GEIS specifically acknowledged the need for site-specific analysis for impacts occurring during the construction and operation of a specifically licensed storage facility, which are distinct from the timeframe and activities analyzed by the GEIS:

While the NRC assumes that any proposed away-from-reactor ISFSI would likely be similar to the assumed generic facility . . . from the standpoint of the size, operational characteristics, and location of the facility, *the NRC would*

²⁷⁸ *Id.* § 51.23(b).

²⁷⁹ "Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel, Final Report," NUREG-2157 Vol. 1 (ML14196A105) ("Continued Storage GEIS"); see 10 C.F.R. § 51.23(a).

²⁸⁰ 10 C.F.R. § 51.23(b).

²⁸¹ *Id.* § 51.23(c).

²⁸² Continued Storage GEIS at 5-1, 5-2 (Section 5.0).

evaluate the site-specific impacts of the construction and operation of any proposed facility as part of that facility's licensing process. This review would not reanalyze the impacts of continued storage of the spent fuel, but would incorporate the impact determinations of this GEIS, as stated in 10 C.F.R. 51.23(b).²⁸³

The Continued Storage Rule and GEIS assess only generic issues—leaving site-specific impacts, like the impacts during facility operations for initial licensing reviews, for consideration in the environmental reviews of individual licensing proceedings. These site-specific issues include the funding for the facility, which Joint Petitioners allege differs from the PFS facility used by the Continued Storage GEIS as a representative away-from-reactor ISFSI in generically evaluating the impacts the continued storage of SNF at such a facility.²⁸⁴ Because the ER does (as it must) evaluate the site-specific impacts from the proposed ISFSI, Contention 12 fails to demonstrate a genuine dispute with the application on a material issue.

Joint Petitioners also allege that the ER's site-specific analysis somehow "disqualifies" the proposed CISF from the Continued Storage Rule because it does not discuss the construction of a Dry Transfer Storage (DTS) facility as a method to address "cask problems from the earliest stages of facility operations."²⁸⁵ The GEIS assumed that a DTS would be built during the long-term storage timeframe (*i.e.*, 160 years after the licensed life for reactor operations) and noted that "[a] license would have to request authorization from the NRC to build and operate the DTS, during initial licensing of the ISFSI, or as a later, separate action."²⁸⁶ As Joint Petitioners note, ISP does not seek to build a DTS during the CISF's initial 40-year license term. Neither the GEIS nor NRC regulations require otherwise. In this case, the

²⁸³ *Id.* at 5-2 (Section 5.0) (emphasis added).

²⁸⁴ Joint Petition at 133–34.

²⁸⁵ *Id.* at 129.

²⁸⁶ GEIS at 5-4 & n.2 (Section 5.0).

Continued Storage Rule makes clear that the ISP ER is not required to evaluate the impacts of storage beyond the term of the proposed license.²⁸⁷

Further, Joint Petitioners fail to provide any factual support for their apparent assumption that the ISP CISF will need “the ability to handle leaky, contaminated or structurally” unsound canisters. The SAR states that, based on the safety analysis associated with the storage systems to be utilized at the ISP facility, “there are no credible accident scenarios for the WCS CISF which would result in a loss of confinement accident or a radiological release” in excess of NRC requirements.²⁸⁸ ISP specifically claims that the design and operational considerations of the casks and CISF “preclude the release of radioactive materials from the canisters under all normal, off-normal, and credible accident conditions.”²⁸⁹ Without further support, there is no basis in Contention 12 to conclude that there will be environmental consequences of any compromised canisters at the proposed CISF.²⁹⁰ In light of the above, Contention 12 fails to demonstrate a genuine dispute with the ISP application contrary to 10 C.F.R. § 2.309(f)(1)(vi).

Joint Petitioners’ legal arguments in support of Contention 12 are also inapposite. Namely, Joint Petitioners claim that the NWPA does not authorize the proposed CISF, that it is not an ISFSI, and that it is therefore not “covered” by the Continued Storage GEIS. With respect to Joint Petitioners’ claim that the NWPA authorizes an ISFSI only at a reactor site, because NRC regulations in Part 72 provide for the licensing of away from reactor ISFSIs,²⁹¹ this argument amounts to a generic challenge to NRC regulations that is precluded by 10 C.F.R.

²⁸⁷ 10 C.F.R. § 51.23(b).

²⁸⁸ SAR 1-16.

²⁸⁹ *Id.* at 6-2.

²⁹⁰ See *Private Fuel Storage*, CLI-04-22, 60 NRC at 139 (emphasis in original) (concluding that the mere possibility of repacking of fuel was “not enough to suggest that there were undiscussed NEPA ‘consequences’ to the storage facility”).

²⁹¹ See generally 10 C.F.R. Part 72; see also *id.* §§ 72.32(a) & 72.46(d) (specifically referring to requirements related to ISFSIs not co-located with a power reactor).

§ 2.335 and is thus beyond the scope of this proceeding.²⁹² Moreover, this issue has already been ruled upon by the D.C. Circuit, which held that the NRC has the authority to license privately owned away-from-reactor spent nuclear fuel storage facilities pursuant to the AEA, and that the NWPA neither repealed nor superseded that licensing authority.²⁹³ Therefore, the Joint Petitioners' implicit challenge to the NRC's authority to license all away-from-reactor ISFSIs is outside the scope of the proceeding. For the same reason, with respect to the Joint Petitioners' claim that the Continued Storage Rule does not cover ISFSIs, this too amounts to a generic challenge to NRC regulations: 10 C.F.R. § 51.23(b) makes clear that an ER for an ISFSI need not address the impacts of SNF storage beyond the licensed term, and the provision the Joint Petitioners cite with emphasis in § 51.23(c) simply makes clear that ISFSI applicants are still to consider impacts for the term of the license.

In sum, because Contention 12 is premised on Joint Petitioners' misapprehension of the application of the NRC's Continued Storage Rule to the ISP license application (and because it fails to contradict the ER's site-specific impact analysis for the period of ISP's proposed licensed activity), Contention 12 raises claims outside the scope of the proceeding and fails to raise a genuine dispute with the ER on a material issue of law or fact.²⁹⁴ The Board should therefore dismiss the contention.

²⁹² 10 C.F.R. §§ 2.335, 2.309(f)(1)(iii); see *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 392 (2002) ("Congress, in enacting the Atomic Energy Act (AEA), gave the NRC authority to license privately owned, away-from-reactor (AFR) facilities.").

²⁹³ See *Bullcreek v. NRC*, 359 F.3d 536, 543 (D.C. Cir. 2004). The D.C. Circuit observed that although "the AEA does not specifically refer to the storage or disposal of spent nuclear fuel, it has long been recognized that the AEA confers on the NRC authority to license and regulate the storage and disposal of such fuel. *Id.* at 538 (citing *Pac. Gas & Elec. Co. v. State Energy Res. Conservation & Dev Comm'n*, 461 U.S. 190, 207 (1983); *Illinois v. Gen. Elec. Co.*, 683 F.2d 206, 214–215 (7th Cir. 1982); *Jersey Cent. Power & Light Co. v. Township of Lacy*, 772 F.2d 1103, 1112 (3d Cir. 1985).

²⁹⁴ 10 C.F.R. §§ 2.309(f)(1)(iii) & (vi).

(m) Don't Waste Michigan, Contention 13

Any Anticipated Nuclear Reprocessing Activity Must Be Disclosed in the EIS and Included in Cumulative Effects Analysis.

In this contention, the Joint Petitioners assert that nuclear reprocessing is a “likely pursuit” that must be discussed under NEPA as a cumulative impact of the WCS CISF development.²⁹⁵ As evidence of future reprocessing, the Joint Petitioners reference a 2015 slide show given by a Holtec representative to the New Mexico State Legislature;²⁹⁶ a 2017 newspaper article;²⁹⁷ a 2008 “Draft Global Nuclear Energy Partnership Programmatic Environmental Impact Statement” completed by the Department of Energy;²⁹⁸ a 2014 report by the Texas Commission on Environmental Quality entitled, “Assessment of Texas’s High Level Radioactive Waste Storage Options;”²⁹⁹ and a 2018 DOE request for public comment on its interpretation of the definition of HLW as set forth in the AEA and NWPA.³⁰⁰ According to the Joint Petitioners, aggregating SNF in west Texas would provide a stockpile of spent fuel for purposes of reprocessing, and because Joint Petitioners assert that spent fuel reprocessing is supported by the Texas Commission on Environmental Quality and there is “business

²⁹⁵ Joint Petition at 138.

²⁹⁶ *Id.* at 135 (citing to John Heaton, Chairman ELEA, LLC, “A Centralized Interim Storage Facility for Used Nuclear Fuel,” <https://www.nmlegis.gov/handouts/RHMC%20080216%20Item%205%20Interim%20Storage--Eddy-Lea%20County%20Alliance.pdf>, *also available at* <https://bit.ly/2REDT2m>) (“Holtec Slideshow”).

²⁹⁷ *Id.* (citing Ralph Vartabedian, *1,800 Tons of Radioactive Waste has an Ocean View and Nowhere to Go*, LA Times (Jul. 2, 2017, 3:00 AM), <http://www.latimes.com/local/california/la-me-stranded-nuclear-waste-20170702-htmistory.html>, *also available at* <https://lat.ms/2t5EfEI> (“LA Times article”).

²⁹⁸ *Id.* at 136 (citing DOE, “Draft Global Nuclear Energy Partnership Programmatic Environmental Impact Statement (GNEP PEIS; DOE/DIS-0396),” (Oct. 2008), https://www.energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/EIS-0396-DEIS-2008.pdf, *also available at* <https://go.usa.gov/xP9ry> (“DOE/EIS-0396”).

²⁹⁹ *Id.* at 137 (citing Texas Commission on Environmental Quality, “Assessment of Texas’s High Level Radioactive Waste Storage Options,” (Mar. 2014); ER, Attachment 1-2).

³⁰⁰ *Id.* at 137–38. *See also* Request for Public Comment on the U.S. Department of Energy Interpretation of High-Level Radioactive Waste, 83 Fed. Reg. 50,909 (Oct. 10, 2018).

community support,” they assert that once the WCS CISF commences operation, reprocessing will follow such that its environmental impacts should be discussed as a cumulative impact under NEPA.³⁰¹

This contention is inadmissible because the Joint Petitioners have failed to show that a genuine dispute exists with the applicant on an issue of material fact or law in accordance with 10 C.F.R. § 2.309(f)(1)(vi). Although the Joint Petitioners correctly note that “[u]nder NEPA, an EIS must analyze not only the direct impacts of a proposed action, but also indirect and cumulative impacts of past, present, and reasonably foreseeable future actions,³⁰² this requirement is not without its limits. In *Kleppe v. Sierra Club*, the Supreme Court explained that an environmental impact statement need only include other related actions when those actions have been formally proposed and are pending before an agency.³⁰³ Specifically, the Supreme Court stated, NEPA “speaks solely in terms of Proposed actions; it does not require an agency to consider the possible environmental impacts of less imminent actions when preparing the impact statement on proposed actions.”³⁰⁴

The Commission has also long recognized this ripeness requirement and held that, consistent with NEPA’s “rule of reason,” projects that are not concrete or reasonably certain, but are instead “merely contemplated,” do not warrant consideration in the cumulative impact analysis.³⁰⁵ And the Commission recently reiterated that a possible future action must “be in a sufficiently advanced stage to be considered a ‘proposal’ for action that ‘bring[s] NEPA into

³⁰¹ Joint Petition at 135, 137–38.

³⁰² *Id.* at 138 (internal quotations omitted).

³⁰³ 427 U.S. 390, 410 (1976).

³⁰⁴ *Id.* at 410 n. 20. The Supreme Court further explained, “Should contemplated actions later reach the stage of actual proposals, impact statements on them will take into account the effect of their approval upon the existing environment; and the condition of that environment presumably will reflect earlier proposed actions and their effects.” *Id.*

³⁰⁵ *McGuire/Catawba*, CLI-02-14, 55 NRC at 295.

play.”³⁰⁶ The *McGuire/Catawba* license renewal proceeding provides an instructive example of an unripe future action. In that case, the Commission reversed a Licensing Board’s decision that the possible future use of mixed oxide fuel (MOX) in the McGuire and Catawba reactors was sufficiently ripe as to require consideration under NEPA.³⁰⁷ Although the licensee had a contractual arrangement to purchase MOX fuel for the reactors, no license amendment application to use the fuel was pending.³⁰⁸ The Commission held that the possible future use of the fuel was speculative and “too inchoate to rise to the level of a ‘proposal’ within the meaning of *Kleppe* and its progeny.”³⁰⁹

At best, the evidence proffered by the Joint Petitioners reflects speculation about the potential for (or benefits of) future reprocessing activities. However, they identify no pending proposal for a reprocessing facility that would meet the Commission’s standard for ripeness. The Holtec slide show merely notes that the CISF “Provides the most flexibility for recycling, research, and disposal.”³¹⁰ Additionally, the “Draft Global Nuclear Energy Partnership Programmatic Environmental Impact Statement” makes clear that it is but “a first, important step in deciding whether and how to recycle spent nuclear fuel. . . . [And] [a]t this time, DOE is not proposing project-specific or site-specific actions. . . .”³¹¹ Similarly, the Texas Commission on Environmental Quality specifies that reprocessing “is *not* available in the U.S.” but “should still be considered as a *possible future* choice.”³¹² The LA Times article offers no additional detail

³⁰⁶ *Strata Energy, Inc.*, (Ross In Situ Recovery Uranium Project), CLI-16-13, 83 NRC 566, 577 (2016) (quoting *McGuire/Catawba*, CLI-02-14, 55 NRC at 295).

³⁰⁷ *McGuire/Catawba*, CLI-02-14, 55 NRC at 295.

³⁰⁸ *Id.* at 294–96.

³⁰⁹ *Id.* at 296.

³¹⁰ Holtec Slideshow at 4.

³¹¹ DOE/EIS-0396 at S-2.

³¹² ER, Attachment 1-2 at 10 (emphasis added). Contrary to Joint Petitioners’ assertion, this report actually casts more doubt than certainty on the prospects for a reprocessing facility in the United States. The report notes that “no economic driver exists for commercial reprocessing in the U.S. since the one-time use fuel cycle is cheaper than the projected costs of reprocessing.” *Id.* at 9. It also

except to suggest a political appetite for such a project in the area.³¹³ And the DOE request for public comment adds no additional certainty for the prospects of reprocessing. These expressions of interest fall far short of a pending proposal as required by *Sierra Club v. Kleppe* and the Commission's application of the *Kleppe* standard.

For the reasons discussed above, the Joint Petitioners have failed to demonstrate that the applicant's cumulative impacts analysis must consider the environmental impacts of a potential reprocessing facility. Because the Joint Petitioners fail to raise a genuine dispute with the ER on an issue of material fact or law in accordance with 10 C.F.R. § 2.309(f)(1)(vi), this contention is inadmissible.

(n) Don't Waste Michigan, Contention 14

NEPA Requires Significant Security Risk Analyses for the Spent Nuclear Fuel and Greater-Than-Class-C Wastes Proposed for Interim Storage, And Associated Transportation Component, at ISP/WCS's Texas Facility

Contention 14 raises a variety of issues related to the WCS CISF application, claims which appear to rely primarily on a wide-ranging report by Dr. James Ballard and the declaration of Dr. Gordon Thompson. The Joint Petitioners' main assertion appears to be that the ER does not adequately address the threat of terrorism, but the contention also identifies a wide range of additional areas that the Joint Petitioners claim constitute legal deficiencies with the application.

Read as a whole, the proposed contention consists of generalized concerns with the adequacy of the NRC's regulatory structure, not a dispute with this application's compliance with relevant laws and regulations. Contention 14 is inadmissible because the Joint Petitioners raise

describes a tumultuous history of political support for and opposition to reprocessing in the United States. *Id.* at 8–10.

³¹³ The article quotes the mayor of Hobbs, Sam Cobb, as stating "We believe if we have an interim storage site, we will be the center for future nuclear fuel reprocessing."

issues that are outside the scope of the proceeding, challenge the Commission's rules, and fail to articulate a genuine dispute with the application.

As the Commission noted in its 2004 change to 10 C.F.R. Part 2, the contention admissibility rules exist to "focus litigation on concrete issues and result in a clearer and more focused record for decision."³¹⁴ Imprecision in a contention will "render[] it impermissible pursuant to the specificity requirement in 10 C.F.R. § 2.309(f)(1)(i)[.]"³¹⁵ Here, the Joint Petitioners have raised concerns about the impacts of terrorism along with a lengthy list labeled as "Specific Additional Areas" for analysis.³¹⁶ The Joint Petitioners do not clearly explain how these varied "additional" claims and recommendations relate to, let alone support, the contention's declared subject of NEPA "Security Risk Analyses." But whether these concerns are considered individually or as a whole, the contention is inadmissible.

(i) NEPA evaluation of impacts of terrorism is outside the scope of the proceeding

The primary issue raised by the Joint Petitioners, in Sections A, B, and C of the contention as well as in several of the "Additional Areas" listed in Section D, is that a terrorist attack must be addressed in the environmental review process.³¹⁷ Yet Commission precedent directs that this is an issue outside the scope of the proceeding, contrary to 10 C.F.R. § 2.309(f)(1)(iii). In particular, although the Joint Petitioners describe the findings of the U.S. Court of Appeals for the Ninth Circuit in *San Luis Obispo Mothers for Peace v. NRC*,³¹⁸ the Commission has made clear that outside licensing actions in the Ninth Circuit, the NRC is not

³¹⁴ Changes to Adjudicatory Process, 69 Fed. Reg. 2182, 2202 (Jan. 14, 2004). See also *Crow Butte Resources, Inc.* (In Situ Leach Facility, Crawford, Nebraska), LBP-15-15, 81 NRC 598, 601.

³¹⁵ *Florida Power & Light Company* (Turkey Point Nuclear Generating Plant, Units 6 and 7), LBP-17-2, 85 NRC 14, 31 (2017).

³¹⁶ Joint Petition at 152.

³¹⁷ See, e.g., Joint Petition Contention 14, Sections A, B, and C, Additional Area 1, 2, 4, 5, 9, 12, 14, 16, 17, 20, 23, and 25.

³¹⁸ 449 F.3d 1016 (9th Cir. 2006).

required to consider terrorism in its NEPA analysis.³¹⁹ In *Oyster Creek*, the Commission reaffirmed its prior holdings that the “proximate cause” test for a “reasonably close causal relationship” between federal agency action and the environmental consequences is the appropriate test for the necessity of a NEPA analysis.³²⁰ Specifically, the Commission held that an NRC licensing action is not a proximate cause of a terrorist act, and as a result, “NEPA does not require the NRC to consider the environmental consequences of hypothetical terrorist attacks on NRC-licensed facilities.”³²¹

This decision was then affirmed by the U.S. Court of Appeals for the Third Circuit, which, in light of potential hypothetical aircraft attacks on a facility, noted that the “NRC controls whether equipment within a facility is suitable for continued operation or could withstand an accident, but it has no authority over the airspace above its facilities.”³²² In light of this, the Court held that this lack of control, in combination with the other intervening events that would predicate an attack, makes the “causation chain too attenuated to require NEPA review.”³²³

In *Oyster Creek*, the Commission noted that its decision was based on the same reasoning articulated in its prior decisions, including *Private Fuel Storage*, CLI-02-25, 56 NRC 340 (2002). In *Private Fuel Storage*, the Commission held that a license for a specific-license ISFSI does not make a terrorist attack reasonably foreseeable and thereby necessitate a review under NEPA.³²⁴ The Commission has likewise reiterated its intention to follow this approach in

³¹⁹ *Amergen Energy Company, LLC* (Oyster Creek Nuclear Generating Station), CLI-07-8, 65 NRC 124, 129 (2007).

³²⁰ *Id.* at 129–30 (citing *Metropolitan Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766, 772–75 (1983) and *Department of Transportation v. Public Citizen*, 541 U.S. 752, 767 (2004)).

³²¹ *Oyster Creek*, CLI-07-8, 65 NRC at 129–30.

³²² *N.J. Dep’t. of Env’tl. Prot. v. NRC*, 561 F.3d 132, 140 (3d Cir. 2009).

³²³ *Id.*

³²⁴ *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 348 (2002) (the claimed impact is too attenuated to find the proposed federal action to be the ‘proximate cause’ of that impact.”).

new reactor construction projects.³²⁵ For these reasons, and given that the proposed facility is not within the Ninth Circuit, the Joint Petitioners have not demonstrated that environmental analysis of the risk of terrorism is an issue within the scope of findings the NRC must make, and therefore, the contention should be held inadmissible under 10 C.F.R. § 2.309(f)(1)(iii).

(ii) The contention's other claims and recommendations fail to demonstrate genuine and material disputes with the application or raise challenges to the Commission regulations

Beyond the overarching lack of clarity regarding the nexus to “security risk analyses” and the out-of-scope NEPA terrorism concerns described above, which are sufficient reasons to dismiss the contention, the varied “sub-contentions” exhibit similar deficiencies with respect their demonstration that the issues raised are within the scope of the proceeding and constitute genuine disputes with the application on material topics. For example, the Joint Petitioners’ concern that the “WCS licensing proposal does not address the potential that a permanent repository may never open”³²⁶ is a generic challenge to the NRC’s Continued Storage Rule at 10 C.F.R. § 51.23 and is accordingly barred by 10 C.F.R. § 2.335(a).³²⁷ Other concerns, such as the assertion that the NRC or applicant should define the precise shipments expected if the facility becomes operational³²⁸ or should impose requirements on the use of trains and other

³²⁵ *System Energy Resources, Inc.* (Early Site Permit for Grand Gulf ESP Site), CLI-07-10, 65 NRC 144, 146–47 (2007).

³²⁶ Joint Petition at 146.

³²⁷ As another example, several of the Joint Petitioners’ “Additional Areas” amount to arguments that the NRC should impose stricter requirements than regulations currently provide; these are not issues appropriate for adjudication and instead are generic challenges that would entail rulemaking. See, e.g., Joint Petition at 155 (requesting heightened requirements on funding and training for communities); Joint Petition at 158 (challenging adequacy of design basis events). See *South Carolina Electric & Gas Company* (Virgil C. Summer Nuclear Station, Units 2 and 3), LBP-09-2, 69 NRC 87, 103 (2009) (finding that a challenge to the adequacy of the design basis threat was outside the scope of the proceeding).

³²⁸ Joint Petition at 154.

operational security details³²⁹ are already addressed by other regulations such as 10 C.F.R. § 73.37 and DOT regulations in Title 49.

Most notably, aside from the out-of-scope arguments concerning terrorism, in all of proposed Contention 14, the Joint Petitioners never refer to any sections of the SAR or ER to explain how the “Additional Areas” constitute a dispute with the analysis already in the application.³³⁰ Rather, the contention alludes to numerous issues in passing without describing the specific position of the applicant or otherwise controverting the application, contrary to the requirements of 10 C.F.R. § 2.309(f)(1)(vi). For example, the Joint Petitioners express concern over “routine radiation exposures the public will face per shipment and over the lifespan of the CISF,”³³¹ but Joint Petitioners fail to cite the ER’s analysis in Section 4.2.6 that addresses this precise issue. The contention refers to various other issues involving spent fuel transportation, but likewise, neither references nor specifically contradicts any of the portions of the application in which transportation impacts are analyzed. A basic assertion that the application is inadequate or insufficient does not meet the standard of 10 C.F.R. § 2.309(f)(1)(vi), and “a contention that does not directly controvert a position taken by the applicant is subject to dismissal.”³³² Other areas merely seek to reiterate issues raised in other contentions or summarize the recommendations made by Dr. Ballard in his report, again without demonstrating

³²⁹ *Id.*

³³⁰ In the text of the contention, the sole reference to the content of the application is to a single page of the SAR, in connection with the overarching claim that the application inadequately considers terrorism and sabotage. Joint Petition at 142–43. The Ballard report contains no references to the application at all, and the only references to the application in the Thompson declaration likewise appear to concern topics unrelated to those listed in Contention 14 (i.e., ISP’s statement of purpose and need.)

³³¹ Joint Petition at 146.

³³² *Nuclear Mgmt. Co., LLC* (Palisades Nuclear Power Plant), LBP-06-10, 63 NRC 314, 340–42 (2006).

in what way the analysis in the application fails to meet a legal requirement.³³³ It is the obligation of a petitioner to “read the relevant parts of the license application and show where the application is lacking.”³³⁴ Similarly, while the proposed contention includes a reference to the declaration of Dr. Thompson, it does not articulate in what way that document supports any aspects of the contention other than those regarding terrorism or sabotage.³³⁵ As a result, when read as a whole, the contention amounts to a series of observations or recommendations for the environmental review process (and an impermissible challenge to the Commission’s longstanding legal determination that impacts of terrorism need not be considered in the NEPA review of licensing actions), rather than concrete issues that are appropriate for adjudication.

For the reasons above, the Joint Petitioners have not satisfied its obligation to provide a clear discussion of issues or demonstrated that the concerns raised are appropriate for a hearing. Consequently, Contention 14 is inadmissible under 10 C.F.R. § 2.309(f)(1)(iii) and (vi).

(o) Don’t Waste Michigan, Contention 15

Adoption of Sierra Club Contentions by Joint Petitioners.

The NRC Staff has no objection to this request.

2. Sierra Club

As further explained below, the NRC Staff views some of the contentions proffered by the Sierra Club to be admissible in part, and thus the Petition of the Sierra Club should be granted in part.

³³³ See *Vogtle*, LBP-07-3, 65 NRC at 253 (“[N]either mere speculation nor bare or conclusory assertions, even by an expert, alleging that a matter should be considered will suffice to allow the admission of a proffered contention.”) (*citing Fansteel*, CLI-03-13, 58 NRC at 203).

³³⁴ *Palo Verde*, CLI-91-12, 34 NRC at 156.

³³⁵ See *Fansteel*, CLI-03-13, 58 NRC at 204 (affirming that Petitioners must provide analysis and supporting evidence, not just refer to voluminous documents).

(a) Sierra Club, Contention 1

The NRC has no authority to license the ISP CIS facility under the NWPA nor the AEA. ISP has said DOE must take the title to the waste, but the NWPA does not authorize DOE to take title to spent fuel in an interim storage facility. The AEA has no provision for licensing a CIS facility.

The Petitioner asserts that the intent of the applicant is for DOE to take title to the spent fuel stored at the CISF.³³⁶ The Petitioner describe the statements in the application that the nuclear power plant owners could retain title as an attempt to ‘cloud the issue’ and a ‘smokescreen’.³³⁷ Finally, the Petitioner asserts that the NRC lacks authority to license any ISFSI away from the site of a reactor.³³⁸ The contention is inadmissible in that the Petitioner has failed to raise a genuine dispute with the applicant, failed to identify how the issue they raise is material to the Staff’s review, and challenge a regulation of the Commission, which is outside the scope of this proceeding.³³⁹

The Petitioner acknowledges that the application currently states that funding for the proposed facility may come either from DOE or from nuclear plant owners.³⁴⁰ Indeed, the Petitioner explains that although earlier versions of the ISP application and past statements by the applicant referred solely to DOE taking title or possession of spent fuel, the existing application does not.³⁴¹ The Petitioner thus appears to be arguing that notwithstanding these statements in the application, in the future, the applicant will only enter into a contract with DOE. However, because speculation regarding the potential future plans of the applicant does not

³³⁶ Sierra Club Petition at 15.

³³⁷ *Id.* at 16, 20.

³³⁸ *Id.* at 20.

³³⁹ See 10 C.F.R. § 2.309(f)(1)(vi), (iv), (iii).

³⁴⁰ Sierra Club Petition at 16.

³⁴¹ *Id.* at 15.

present a genuine dispute regarding the actual content of the current application, this claim is inadmissible.³⁴²

The Petitioner also references 10 C.F.R. § 72.22(e) and assert that the application should be required to analyze funding assurance for “both scenarios separately” - whether DOE takes title or the nuclear plant owners retain title. The applicant’s discussion of its compliance with 10 C.F.R. § 72.22(e) is found in Section 1.6 of the license application. Because the Petitioner fails to cite to, much less dispute this portion of the application, they fail to demonstrate any genuine dispute with the applicant regarding its funding assurance or the role of DOE.³⁴³

Furthermore, the Petitioner fails to explain how the issue raised is material to the Staff’s review. While Petitioner asserts that the applicant should be required to fully disclose its future “intent” regarding who has title to the spent fuel, the contention does not specify why or in what way any regulatory finding the NRC must make is dependent on what entity has title to the spent fuel. The contention thus also fails to meet the requirements of 10 C.F.R. § 2.309(f)(1)(iv).

Finally, Petitioner broadly asserts that the AEA and the NWPA do not allow away-from-reactor ISFSIs and thus any consolidated interim storage facility application (regardless of who may have title to the stored spent fuel) is illegal. This claim is inadmissible as a challenge to NRC regulations. As NRC regulations in Part 72 provide for the licensing of away from reactor ISFSIs,³⁴⁴ this argument amounts to a generic challenge to NRC regulations that is precluded

³⁴² See, e.g., *McGuire/Catawba*, CLI-02-14, 55 NRC at 294 (contentions that are based on projected changes to a license, not currently before the NRC in any proceeding or application, are not sufficient to support admission of a contention).

³⁴³ See 10 C.F.R. § 2.309(f)(1)(vi).

³⁴⁴ See generally 10 C.F.R. Part 72; see also *id.* §§ 72.32(a) & 72.46(d) (specifically referring to requirements related to ISFSIs not co-located with a power reactor).

by 10 C.F.R. § 2.335 and is thus beyond the scope of this proceeding.³⁴⁵ Petitioner erroneously asserts that the NRC's licensing authority under the AEA is limited to 42 U.S.C. § 2133, which provides for the licensing of production and utilization facilities.³⁴⁶ However, the AEA also gives the NRC the authority to license possession of special nuclear material, source material and byproduct material.³⁴⁷ In the Statements of Consideration for Part 72, the Commission noted that the licensing of a spent fuel storage in an ISFSI is a materials type of license.³⁴⁸ Petitioner asserts that it is not challenging Part 72, but rather challenging the NRC's jurisdiction to license an away-from-reactor nuclear waste storage facility.³⁴⁹ However, given that Part 72 sets forth the NRC jurisdiction to license away from reactor ISFSIs, a challenge to this authority is a challenge to the rule. Contentions challenging NRC regulations, or determinations made by the NRC during the rulemaking process, are inadmissible absent a waiver.³⁵⁰ Moreover, this issue has already been ruled upon by the D.C. Circuit, which held that the NRC has the authority to license privately owned away-from-reactor spent nuclear fuel storage facilities pursuant to the AEA, and that the NWPA neither repealed nor superseded that licensing authority.³⁵¹ Therefore, the Sierra Club's challenge to the NRC's authority to license all away-from-reactor ISFSIs is outside the scope of the proceeding.

³⁴⁵ 10 C.F.R. §§ 2.335, 2.309(f)(1)(iii); see *Private Fuel Storage*, CLI-02-25, 56 NRC at 392 (“Congress, in enacting the Atomic Energy Act (AEA), gave the NRC authority to license privately owned, away-from-reactor (AFR) facilities.”).

³⁴⁶ Sierra Club Petition at 21.

³⁴⁷ See AEA Chapter 6, 7 and 8, 42 U.S.C. §§ 2071– 2114.

³⁴⁸ Licensing Requirements for the Storage of Spent Fuel In an Independent Fuel Spent Storage Installation, 45 Fed. Reg. 74,693, 74,694 (Nov. 12, 1980).

³⁴⁹ Sierra Club Petition at 23.

³⁵⁰ See *Private Fuel Storage*, CLI-04-4, 59 NRC at 38–39.

³⁵¹ See *Bullcreek*, 359 F.3d at 543. The D.C. Circuit observed that although “the AEA does not specifically refer to the storage or disposal of spent nuclear fuel, it has long been recognized that the AEA confers on the NRC authority to license and regulate the storage and disposal of such fuel.” *Id.* at 538 (citing *Pac. Gas*, 461 U.S. at 207; *Gen. Elec.*, 683 F.2d at 214–215; *Jersey Cent.*, 772 F.2d at 1112).

For the reasons above, proposed Contention 1 fails to meet the requirements of 10 C.F.R. § 2.309(f)(1)(iii), (iv), and (vi), and is therefore inadmissible.

(b) Sierra Club, Contention 2

The ISP environmental report, in attempting to describe the purpose and need for this project, claims that CIS is safer and more secure than storing the waste at the reactor site. However, the environmental report cites no evidence or data to support this assertion. An agency cannot rely on self-serving statements, especially ones with no supporting data, from the prime beneficiary of the project.

In Contention 2, Sierra Club asserts that the ER contains self-serving statements about the safety and security of CIS that are unsubstantiated. The Petitioner asserts that the agency cannot rely on those statements and argues that the ER and subsequent EIS must examine the relative safety of HOSS at reactor sites.³⁵² In addition, the Sierra Club asserts that the ER does not describe a “need” for the facility but merely “the desire or preference for reactor owners and operators to remove the waste to an off-site storage facility.”³⁵³ In support of its contention, the Sierra Club relies on the declaration of Dr. Gordon Thompson and his 2003 report, “Robust Storage of Spent Nuclear Fuel: A Neglected Issue of Homeland Security.”³⁵⁴ The Sierra Club concludes that “[a]t this point, until an environmental impact statement (EIS) is prepared by the NRC, the statement of purpose and need in the ER is inadequate.”³⁵⁵

This contention is inadmissible as the Petitioner has failed to provide sufficient information to show that a genuine dispute exists on a material issue of law or fact and has failed to demonstrate that the issue raised is material to the findings the NRC must make in accordance with 10 C.F.R. § 2.309(f)(1)(vi) and (iv), respectively.

³⁵² Sierra Club Petition at 24–27.

³⁵³ *Id.* at 26.

³⁵⁴ *Id.* at 26–28.

³⁵⁵ *Id.* at 29.

An applicant is required to include in its ER, and an agency is required to include in its NEPA analysis, a brief statement on the purpose and need of a proposed action.³⁵⁶ NUREG-1748, Environmental Review Guidance for Licensing Actions Associated with NMSS Programs, Section 6.1 provides guidance on an ER's purpose and need section. It states that this section "describes the underlying need for the proposed action and should not be written merely as a justification of the proposed action, nor to alter the choice of alternatives. . . . Examples of need include a benefit provided if the proposed action is granted or descriptions of the detriment that will be experienced without approval of the proposed action. In short, the need describes what will be accomplished as a result of the proposed action."³⁵⁷

However, when the Applicant's purpose and need section is reviewed in context, the Petitioner fails to show that their disagreement constitutes a genuine dispute with the application on a material issue of fact or law. The ER notes several purposes for the proposed CISF. It explains that "[m]any policymakers and stakeholders in the communities that host shutdown reactors want to have the SNF removed to complete decommissioning of the site and to allow for more beneficial uses of the land. . . . so that the remaining lands can be returned to Greenfield status."³⁵⁸ It states that "[a]t present, 3 power plants have been shut down and 9 nuclear power plants across the U.S. have been decommissioned . . . to levels that would allow for unrestricted release of the site in accordance with the NRC's License Termination Rule."³⁵⁹ And the ER identifies other potential objectives as well, including alleviating significant costs to surveil, maintain, and provide emergency preparedness and physical security at ISFSIs.³⁶⁰ In short, the ER asserts a range of potential objectives describing what will "be accomplished as a

³⁵⁶ 10 C.F.R. § 51.45(b); 10 C.F.R. Part 51, App. A § 4.

³⁵⁷ NUREG-1748 at 6-1.

³⁵⁸ ER at 1-5.

³⁵⁹ *Id.*

³⁶⁰ *Id.*

result of the proposed action.”³⁶¹ In that context, the Petitioner fails to explain why these potential objectives are unreasonable expressions of a need for the facility.³⁶² Moreover, Petitioner fails to show how a disagreement solely with the ER’s statement of safer storage renders the purpose and need section deficient as a basis for evaluating a reasonable range of potential benefits or detriments of, and alternatives to, the proposed action. For example, the Petition does not articulate how its posited lack of support for that particular assertion could adversely affect the reasonableness of any of the alternatives actually considered in the application.³⁶³ The contention thus does not establish a genuine and material dispute with the totality of the ER’s statement of purpose and need.

The contention also asserts that the ER must therefore evaluate the relative safety of implementing “HOSS” at reactor sites, to “substantiate” the purpose and need for the project. However, because the Petitioner has not demonstrated the materiality of its challenge to the purpose and need statement (for the reason stated above), the Petition likewise does not demonstrate that such substantiation via analysis of HOSS is material to the Staff’s environmental review or otherwise required by NEPA. And to the extent this aspect of the Petitioner’s claim could be interpreted as an argument that HOSS must be considered as an alternative to the proposed action, it fails to reference or challenge the discussion of alternatives in Chapters 2, 4 or 7 of the ER and thus would not meet the standards for an admissible challenge. “Any contention that fails directly to controvert the application or that mistakenly asserts the application does not address a relevant issue can be dismissed,” as a failure to raise

³⁶¹ NUREG-1748 at 6-1.

³⁶² The Petitioner further implies that an applicant must demonstrate that the need for the project is “compelling” or based on “urgency,” Sierra Club Petition at 27, but fails to identify the basis for such a standard.

³⁶³ See *Diablo Canyon*, LBP-02-23, 56 NRC at 450 (denying the admission of a contention that alleged an inadequate purpose and need section in an ER for a proposed ISFSI) (“[W]e fail to see how an application that accurately describes what the proposed capacity will be and provides a logical basis for that capacity is deficient so as to create a material dispute for contention admission purposes.”).

a genuine dispute with the application on a material issue of law or fact in accordance with 10 C.F.R. § 2.309(f)(1)(vi).³⁶⁴

For these reasons, the Petitioner has failed to show that a genuine dispute exists on a material issue of law or fact and have failed to demonstrate that the issue raised is material to the findings the NRC must make in accordance with 10 C.F.R. § 2.309(f)(1)(vi) and (iv). Therefore, the contention is inadmissible.

(c) Sierra Club, Contention 3

The statement in the ER that CIS is safer and more secure than storage at a reactor site contradicts the NRC's Continued Storage Rule, which concludes that spent radioactive fuel can be safely stored at a reactor site indefinitely. Therefore, there is no basis for accepting the statement in the ER, and there is no purpose and need for the ISP project.

In Contention 3, the Sierra Club claims that the ER's "Purpose and Need" statement contradicts the NRC's Continued Storage Rule and thereby undercuts any purpose or need for the ISP facility. No such contradiction exists. Moreover, Contention 3 overlooks several purposes of the proposed ISP facility set forth in the ER's "Purpose and Need" statement. Accordingly, Contention 3 fails to demonstrate a claim material to the staff's review and fails to demonstrate a genuine dispute of law or fact with the Applicant.³⁶⁵

NRC regulations require an EIS to include a description of the purpose of, and a discussion of the need for, a proposed action.³⁶⁶ NRC Staff guidance regarding the preparation of the purpose and need analysis in the ER and the NRC staff's EIS states that an applicant and Staff's treatment of this subject should explain "why the proposed action is needed," going on to indicate that the discussions should describe the underlying need for the proposed action and

³⁶⁴ See *Millstone*, LBP-08-9, 67 NRC at 433 (citing *Rancho Seco*, LBP-93-23, 38 NRC at 247–48).

³⁶⁵ See 10 C.F.R. § 2.309(f)(1)(vi).

³⁶⁶ 10 C.F.R. Part 51, App. A. § 4.

“should not be written merely as a justification of the proposed action, nor to alter the choice of alternatives.”³⁶⁷ In short, an applicant should describe what will be accomplished as a result of the proposed action.³⁶⁸

Here, the applicant’s ER notes the recent shutdown of several nuclear power plants and the decommissioning of others to “levels that would allow for unrestricted release of the site.”³⁶⁹ With respect to these sites, the ER states that “[m]any policymakers and stakeholders in the communities that host shutdown reactors want to have the SNF removed to complete decommissioning of the site and to allow for more beneficial uses of the land.”³⁷⁰ The ER concludes that the proposed CISF is needed to permit the removal of SNF at commercial reactor sites so that those sites can be returned to greenfield status.³⁷¹ Finally, the ER notes that “nuclear power utilities continue to remain responsible for the surveillance, maintenance, emergency preparedness, and physical security of the SNF stored at their ISFSI” and the proposed CISF would alleviate some of these costs.³⁷²

Contention 3 challenges the applicant’s statement in the ER that the ISP CISF would provide a safer and more secure centralized storage location. The contention alleges a contradiction between ISP’s statement and the NRC’s Continued Storage Rule and GEIS. Then the contention concludes, incorrectly, that the Continued Storage Rule “determined that on site storage was safe” based solely on the GEIS’s discussion of the environmental impacts of at-reactor storage for each of the timeframes evaluated in the GEIS.³⁷³ But the Continued Storage

³⁶⁷ NUREG-1748 at 5-2 (Section 5.1.1).

³⁶⁸ *Id.*; see *Shaw AREVA Enrichment Services, LLC* (Eagle Rock Enrichment Facility), LBP-11-26, 74 NRC 499, 524 (2011).

³⁶⁹ ER at 1-5.

³⁷⁰ *Id.* at 1-5.

³⁷¹ *Id.* at 1-5.

³⁷² *Id.*

³⁷³ Sierra Club Petition at 30 (citing GEIS at 4-97, 4-98).

GEIS did not perform any qualitative analysis of the safety benefits of at-reactor vs. away-from-reactor consolidated storage, nor did it endorse any particular storage method. Rather, the GEIS analyzed the environmental effects of the continued storage of spent fuel at both reactor sites and away-from-reactor ISFSIs. Therefore, because the Sierra Club fails to demonstrate how Contention 3's assertion of a contradiction is material to the Staff's environmental review, the contention is inadmissible.³⁷⁴

In addition, Contention 3 avers that ISP's statement regarding the safety and security of centralized storage "unjustifiably prejudices the choice of alternatives."³⁷⁵ Not only does the contention fail to specifically allege how ISP's alternatives analysis is "prejudiced" here, but it further fails to acknowledge—let alone dispute—the accompanying considerations described by the Applicant as the bases for its purpose and need. These considerations include the return of decommissioned reactor sites to greenfield status and the reduction of safety and security costs at these sites.³⁷⁶ Thus, even if Contention 3 had identified a material contradiction in the ER regarding the asserted safety benefits, it fails to demonstrate a genuine and material dispute with ISP's purpose and need discussion.³⁷⁷

(d) Sierra Club, Contention 4

Operation of the CIS site as proposed by ISP would necessitate the transportation of the radioactive waste from reactor sites to the CIS facility. Transportation from the reactors to the CIS site carries substantial risks. These risks must be evaluated in the ER.

³⁷⁴ 10 C.F.R. § 2.309(f)(1)(iv); see *Georgia Tech Research Reactor*, LBP-95-6 , 41 NRC at 300 ("A petitioner's imprecise reading of a reference document cannot serve to generate an issue suitable for litigation").

³⁷⁵ Sierra Club Petition at 30.

³⁷⁶ ER at 1-5.

³⁷⁷ 10 C.F.R. § 2.309(f)(1)(vi).

Sierra Club Contention 4 asserts that the radiological risks of transportation accidents are inadequately addressed in ISP's environmental report.³⁷⁸ In support of their claim, Sierra Club asserts multiple challenges to the ISP Environmental Report, in particular, that:

- The Environmental Report underestimates the radiological consequences of severe transportation accidents.³⁷⁹
- The Environmental Report does not include estimates of the financial costs for decontamination of severe transportation accidents.³⁸⁰
- The Environmental Report underestimates the likelihood of severe rail accidents.³⁸¹
- The Environmental Report does not take into account the potential consequences of a sabotage event.³⁸²

The NRC Staff does not oppose the admission of this contention insofar as the Contention alleges a dispute with the ER's evaluation of the radiological consequences of severe transportation accidents. However, the contention is inadmissible to the extent it seeks to challenge the application with respect to the cost of cleanup and the likelihood of such severe accidents because Petitioner has not demonstrated how the asserted monetary impacts are material to the NRC's review and it has not demonstrated a genuine dispute with the application.³⁸³ Additionally, Sierra Club has not demonstrated that its challenge regarding the likelihood of transportation sabotage is within the scope of this proceeding because the

³⁷⁸ Sierra Club Petition at 31–32.

³⁷⁹ *Id.* at 33–39.

³⁸⁰ *Id.* at 37–38.

³⁸¹ *Id.* at 39–41.

³⁸² *Id.* at 41.

³⁸³ 10 C.F.R. § 2.309(f)(1)(vi).

Commission has held that the impacts of a hypothetical terrorist attack are outside the scope of NEPA.³⁸⁴

Regarding the monetary consequences of a severe transportation accident, even taking as true the Petitioner's assertion of the financial costs associated with remediation of such an event, the contention contains no explanation of how such costs, especially in conjunction with the very low probability of occurrence, could plausibly affect the ultimate decision whether to license the proposed facility.³⁸⁵ NEPA and the Council on Environmental Quality regulations do not require a "worst case analysis" or unlimited studies into the potential effect of every theoretical result of an action.³⁸⁶ Here, where the cost analysis sought by the Petitioner concerns the consequences of cleanup for a hypothetical accident associated with offsite transportation, an activity that is not even being directly licensed by this action, the Petitioner fails to explain why this concern is within NEPA's rule of reason rather than merely speculative.³⁸⁷ Given the very low likelihood of an event, the Petitioner's failure to articulate how such an estimate could reasonably impact the conclusions in the Environmental Report makes this aspect of the contention inadmissible.³⁸⁸

³⁸⁴ See *Oyster Creek*, CLI-07-8, 65 NRC at 129.

³⁸⁵ See Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions and Related Conforming Amendments, 49 Fed. Reg. 9352, 9,374–9,376 (Mar. 12, 1984) (noting that DOT, as the primary regulator for transportation safety of radioactive materials, found that highway risks of transportation are so low that regulations authorizing transport will have no significant environmental impact). See also *Spent Fuel Transportation Risk Assessment*, NUREG-2125 (Jan. 2014), Figure PS-8 at xxxvi (ML14031A323).

³⁸⁶ National Environmental Policy Act Regulations, 50 Fed. Reg. 32,234, 32,234 (Aug. 9, 1985) (codified at 40 C.F.R. Part 1502) ("CEQ is concerned that the requirement to prepare a 'worst case analysis' in certain circumstances has been the impetus for judicial decisions which require federal agencies to go beyond the 'rule of reason' in their analysis of potentially severe impacts"); *Pilgrim*, CLI-10-11, 71 NRC at 315.

³⁸⁷ See NUREG-1714, 5-52 to 5-53 (ML020150217) (describing the speculative nature of any attempts to calculate the economic costs of such an accident); *Sierra Club v. Department of Energy*, 867 F.3d 189, 198–99 (D.C. Cir. 2017) (noting that indirect effects of an action are not reasonably foreseeable where further analyses would only be speculative).

³⁸⁸ 10 C.F.R. § 2.309(f)(1)(iv).

With respect to the likelihood of severe accidents, Sierra Club refers to specific scenarios which it claims would constitute a fire exceeding the thermal conditions that casks are required to withstand (in accordance with the testing requirements of 10 C.F.R. § 71.73(c)(4)).³⁸⁹ However, even assuming arguendo that the accident conditions in 10 C.F.R. § 71.73 do not bound the posited events, the Sierra Club does not explain why it is reasonable under NEPA to assume such scenarios both would occur and result in release of radioactive material and only makes the conclusory assertion that such events are “not hypothetical or speculative.”³⁹⁰

In any event, the WCS Environmental Report, in Section 4.2.8, includes an evaluation of accidents that result in a release or a loss of shielding along with their established frequency of such an event at 10^{-10} per kilometer.³⁹¹ Because the Sierra Club does not acknowledge or dispute the accident probability used by the applicant, it fails to directly contradict the application and articulate a genuine dispute.³⁹² Similarly, while the Petition describes a disagreement with the “DOE’s 2008 risk assessment,”³⁹³ The applicant does not appear to rely on or even reference such a document in support of its accident rate.³⁹⁴ As a result, with respect to the likelihood of an accident, Petitioner has not demonstrated a genuine dispute with the applicant under 10 C.F.R. § 2.309(f)(1)(vi).³⁹⁵

³⁸⁹ Sierra Club Petition at 38–40. 10 C.F.R. § 71.73, Hypothetical Accident Requirements, requires a *sequence* of tests to be performed on packages to determine the *cumulative* effect on a transportation package.

³⁹⁰ *Id.* at 40.

³⁹¹ See ER Section 4.2.8.2 at 4-24 to 4-25.

³⁹² See *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 & 3), CLI-01-24, 54 NRC 349, 358 (2001).

³⁹³ The Petitioner does not provide an exact reference. However, the Staff infers this is a reference to DOE/EIS-0250F, “Final Supplemental Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada” (ML081750191 (package)).

³⁹⁴ See ER Table 4.2-2 at 4-14.

³⁹⁵ Additionally, the Petitioner does not articulate how these historical accidents could result in a higher likelihood of an accident during spent fuel transportation given the NRC and DOT’s regulatory

Lastly, the Petitioner also advances a claim that the Environmental Report must discuss potential sabotage events and that an analysis of such an event is not included in the application.³⁹⁶ Yet Commission precedent directs that this is an issue outside the scope of the proceeding, contrary to 10 C.F.R. § 2.309(f)(1)(iii). The Commission has made clear that outside licensing actions in the Ninth Circuit, the NRC is not required to consider terrorism in its NEPA analysis.³⁹⁷ In *Oyster Creek*, the Commission reaffirmed its prior holdings that the “proximate cause” test for a “reasonably close causal relationship” between federal agency action and the environmental consequences is the appropriate test for the necessity of a NEPA analysis.³⁹⁸ Specifically, the Commission held that an NRC licensing action is not a proximate cause of a terrorist act, and as a result, “NEPA does not require the NRC to consider the environmental consequences of hypothetical terrorist attacks on NRC-licensed facilities.”³⁹⁹

In *Oyster Creek*, the Commission noted that its decision was based on the same reasoning given prior decisions, including the decision made in *Private Fuel Storage*, CLI-02-25, 56 NRC 340 (2002). In *Private Fuel Storage*, the Commission held that a license for a specific-license ISFSI does not make a terrorist attack reasonably foreseeable, necessitating a review under NEPA.⁴⁰⁰ The Commission has likewise reiterated its intention to follow this approach in

framework. NRC regulations require that routes be approved before shipment, and these approvals are already subject to a categorical exclusion under NEPA. See 10 C.F.R. § 73.37(b)(1); 10 C.F.R. § 51.22(c)(12)(iv). In addition, DOT regulations that place heightened requirements on spent fuel shipments may further reduce the likelihood of such accidents. See 10 C.F.R. § 71.5 (identifying specific DOT regulations that apply to radioactive material shipments). Petitioner has provided no information to explain why the transportation accident-related deficiencies it asserts in the ER are reasonable in the context of this regulatory framework.

³⁹⁶ Sierra Club Petition at 41, 43.

³⁹⁷ *Oyster Creek*, CLI-07-8, 65 NRC at 129 (upheld by *N.J. Dep’t. of Env’tl. Prot.*, 561 F.3d at 140). The proposed facility is located in the Fifth Circuit.

³⁹⁸ *Id.* at 129–30 (citing *Metropolitan Edison*, 460 U.S. at 772–75 and *Public Citizen*, 541 U.S. at 767).

³⁹⁹ *Oyster Creek*, CLI-07-8, 65 NRC at 129–30.

⁴⁰⁰ *Private Fuel Storage*, CLI-02-25, 56 NRC at 348 (the claimed impact is too attenuated to find the proposed federal action to be the ‘proximate cause’ of that impact.”).

new reactor construction projects.⁴⁰¹ For these reasons, and given that the proposed facility is not within the Ninth Circuit, the Sierra Club has not demonstrated that environmental analysis of terrorism or sabotage is an issue within the scope of findings the NRC must make, and therefore, the contention should be held inadmissible under 10 C.F.R. § 2.309(f)(1)(iii).

Consequently, while Sierra Club has pled an admissible contention to the extent it disputes the ER's evaluation of the radiological consequences of a severe transportation accident, the contention is otherwise inadmissible for failing to meet the requirements of 10 C.F.R. § 2.309(f)(1)(iv) with respect to the contention's claims concerning monetary impacts, 10 C.F.R. § 2.309(f)(1)(vi) with respect to accident probability, and 10 C.F.R. § 2.309(f)(1)(iii) with respect to sabotage and terrorism impacts.

(e) Sierra Club, Contention 5

The ER states that waste would be stored at the CIS facility for 60-100 years until a permanent repository is found. The ER and the subsequent EIS must address the purpose and need and the environmental impacts if a permanent repository is not found, and the ISP facility becomes a de facto permanent repository.

Sierra Club Contention 5 claims that the ER must address the contingency of the proposed ISP CISF becoming a *de facto* repository if a permanent repository is not constructed.⁴⁰² The Petitioner relies on the D.C. Circuit's decision in *New York v. NRC*.⁴⁰³ That decision upheld a challenge to the NRC's "Waste Confidence Decision," finding that the NRC's NEPA evaluation was deficient for failing to consider, *inter alia*, the "environmental effects of failing to secure permanent storage" of spent nuclear fuel.⁴⁰⁴ In response to the ruling, which remanded the matter to the NRC, the agency developed its Continued Storage Rule and GEIS. The Continued Storage Rule expressly states that the ER is "not required to discuss the

⁴⁰¹ *Grand Gulf ESP*, CLI-07-10, 65 NRC at 146–47.

⁴⁰² Sierra Club Petition at 44.

⁴⁰³ *Id.* (citing *New York v. NRC*, 681 F.3d 471 (D.C. Cir. 2012)).

⁴⁰⁴ *New York v. NRC*, 681 F.3d at 471.

environmental impacts of spent nuclear fuel storage in . . . an ISFSI for the period following the term of the . . . ISFSI license.” 10 C.F.R. § 51.23(b). Because Contention 5 asks for the exact discussion the Continued Storage Rule forecloses (“The ER must therefore discuss and analyze the impacts of indefinite storage at the ISP CIS facility”),⁴⁰⁵ the contention represents a straightforward—and inadmissible—challenge to the NRC’s Continued Storage Rule.⁴⁰⁶ The Sierra Club also relies on a declaration from Dr. Gordon Thompson, which challenges the GEIS’s discussion of institutional controls and the construction of a Dry Transfer Storage (DTS) facility, to “demonstrate why indefinite storage at the ISP facility must be evaluated in the ER.”⁴⁰⁷ However, the ER contains a site-specific analysis of the environmental impacts of the proposed facility during the license term—pursuant to a requirement that the Continued Storage Rule expressly left unaltered⁴⁰⁸—and this proceeding is an improper forum to challenge any alleged flaws in the GEIS’s analysis of continued storage absent a waiver pursuant to 10 C.F.R. § 2.335.⁴⁰⁹ The contention is therefore outside the scope of this proceeding, and must be dismissed.⁴¹⁰

(f) Sierra Club, Contention 6

The ER and the subsequent EIS must evaluate the potential for earthquakes at the ISP site and the environmental impact of earthquakes. Likewise, the Safety Analysis Report (SAR) must adequately evaluate the earthquake potential of the proposed site. Both the ER and SAR are inadequate in this respect.

⁴⁰⁵ Sierra Club Petition at 45–46.

⁴⁰⁶ See 10 C.F.R. § 2.335(a) (“no rule or regulation of the Commission, or any provision thereof . . . is subject to attack by way of discovery, proof, argument, or other means in any adjudicatory proceeding” without a petition for a waiver as provided for elsewhere in that section).

⁴⁰⁷ Sierra Club Petition at 48.

⁴⁰⁸ See 10 C.F.R. §51.23(c).

⁴⁰⁹ Indeed, responding to public comments in the GEIS, the NRC stated that “if a participant in an NRC proceeding later seeks to revisit these generic analyses in an individual licensing proceeding based on asserted site-specific differences, it is appropriate to require the petitioner to satisfy the waiver requirements in the NRC regulations.” NUREG-2157 at D-35.

⁴¹⁰ 10 C.F.R. § 2.309(f)(1)(iii).

The Sierra Club's Contention 6 asserts (1) an environmental claim and (2) a safety claim. As explained below, both are inadmissible because, in contravention of 10 C.F.R. § 2.309(f)(1)(vi), the Sierra Club does not provide sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact.

(i) *The Environmental Claim is Inadmissible*

With respect to its environmental claim, the Sierra Club asserts that the ER must evaluate the potential for earthquakes at the CIS Facility site as part of its description of the environment affected and its discussion of the environmental impact of the proposed action.⁴¹¹ The Sierra Club states that the ER “essentially dismisses the likelihood of earthquakes in the area and does not mention any environmental impacts from earthquakes.”⁴¹² The Sierra Club further states that documented earthquakes have occurred “in the area in and around the ISP site,” and it specifically faults the ER because it “makes no mention of induced earthquakes.”⁴¹³

The Sierra Club's assertion that the ER must evaluate “the environmental impact of earthquakes” is incorrect.⁴¹⁴ The ER must evaluate the environmental impact of the proposed action, pursuant to NEPA and the regulations applicable to the ER.⁴¹⁵

Importantly, and contrary to the Sierra Club's assertions, the ER does, in fact, describe the environment affected and the impact of the proposed action on this environment with respect to earthquakes and the release of radioactive materials. In Chapter 3, “Affected Environment,” the ER states that significant earthquakes of magnitude 5 or greater have occurred in the region of the proposed ISP facility site, including a magnitude 5 earthquake in

⁴¹¹ Sierra Club Petition at 49.

⁴¹² *Id.*

⁴¹³ *Id.* at 50, 52.

⁴¹⁴ *Id.* at 49.

⁴¹⁵ See 42 U.S.C. § 4332(C) (requiring “a detailed statement . . . on . . . the environmental impact of the proposed action . . .”) (emphasis added); 10 C.F.R. § 51.45(b) (requiring an environmental report to discuss “the impact of the proposed action on the environment”) (emphasis added).

1992 that occurred about 30 kilometers from the proposed site.⁴¹⁶ The ER specifically discusses “occurrences of induced seismicity” within the vicinity of the site that are “spatially correlated” to oil and gas activity in the region.⁴¹⁷ The ER states that the site area is a “relatively low seismic hazard,” according to the 2014 U.S. Geological Survey National Hazard Maps, and “lies in a region with crustal properties that indicate minimum risk due to faulting and seismicity.”⁴¹⁸ Furthermore, the ER states that the “absence of late-Quaternary faulting and the low to moderate rate of background seismicity, even that associated with petroleum recovery activities, results in relatively low seismic hazard” at the proposed site.⁴¹⁹ The ER provides a map showing seismic activity for the Texas regional area from 1973 to 2015, which includes the area of the proposed ISP facility.⁴²⁰ Although the Sierra Club references sections of the ER that discuss this information, the Sierra Club does not explain how any of the documents or claims about “induced seismicity” cited in its contention actually contradict the ER’s descriptions regarding earthquakes, and thus fails to establish a material dispute with the applicant.

Using the affected environment baseline established in Chapter 3, the ER at Chapter 4, “Environmental Impacts,” evaluates the environmental impacts of the construction and operation of the CIS Facility, including the environmental impact with respect to earthquakes and the release of radioactive materials. Specifically, the ER states that construction and operation activities should be limited to 10 feet below ground and “should not produce any induced seismic activity or affect subsurface faults in a way that may result in the accidental discharge of radioactive materials or other contaminants into the groundwater table and surrounding

⁴¹⁶ ER at 3-12.

⁴¹⁷ *Id.*

⁴¹⁸ *Id.* at 3-11 to 3-12.

⁴¹⁹ *Id.* at 3-11.

⁴²⁰ *Id.* at 3-96.

areas.”⁴²¹ The ER also addresses earthquake considerations regarding facility construction, stating that loose soil and damaged sedimentary rock, called caliche, “would be removed prior to installation of foundations for seismically designed structures.”⁴²² Further, according to the ER, the proposed CIS Facility would store the SNF using dry cask storage systems currently licensed by the NRC in accordance with 10 C.F.R. Part 72.⁴²³ The Sierra Club, again, does not explain how any of its claims about induced seismicity actually contradict this information in the ER about earthquakes and seismic activity, and thus fails to establish a material dispute with the applicant.

Given this evaluation in Chapters 3 and 4 of the ER, the Sierra Club’s statements that the ER “essentially dismisses the likelihood of earthquakes in the area and does not mention any environmental impacts from earthquakes”⁴²⁴ and “makes no mention of induced earthquakes”⁴²⁵ are incorrect. The ER discusses the potential for earthquakes in the vicinity of the CIS Facility site and that the area is one of relatively low seismic hazard.⁴²⁶ The ER discusses “occurrences of induced seismicity” related to oil and gas activity in the region, and that the area’s faulting and background seismicity, even that related to oil recovery activities, results in relatively low seismic hazard at the site.⁴²⁷ The ER also indicates that the applicant will design structures with seismicity in mind to reduce the effects of potential earthquakes, however they are caused.⁴²⁸

⁴²¹ *Id.* at 4-29.

⁴²² *Id.* at 4-1.

⁴²³ *Id.* at 1-6 to 1-7. See also Table 1-1 for a list of the NRC-approved storage systems to be used at the proposed CIS facility, at ER, 1-22. Additionally, as noted on page 2-5 of the ER, detailed descriptions of facility components and design features are found in Chapter 4 of the SAR.

⁴²⁴ Sierra Club Petition at 49.

⁴²⁵ *Id.* at 52.

⁴²⁶ ER at 3-11.

⁴²⁷ *Id.*

⁴²⁸ *Id.* at 4-1.

(ii) The Safety Claim is Inadmissible

With respect to its safety claim, the Sierra Club states that 10 C.F.R. § 72.103(f) applies to the CIS Facility site and that this regulation requires that the geological, seismological, and engineering characteristics of the site be investigated in sufficient scope and detail to provide sufficient information to support evaluations performed to arrive at estimates of the design earthquake ground motion.⁴²⁹ The Sierra Club states that the applicant does not comply with this regulation because it does not “undertake the required seismological analysis” and the publicly-available part of the SAR does not show that the applicant “adequately evaluated the earthquake potential as required by 10 C.F.R. § 72.103(f)(1).”⁴³⁰ Specifically, the Sierra Club asserts that the Seismic Hazard Evaluation in the SAR is not publicly available, and, therefore, the Sierra Club “cannot address the contents of that evaluation.”⁴³¹ The “Seismic Hazard Evaluation for WCS CISF” is included in the proprietary version of the SAR as Attachment D to Chapter 2, “Site Characteristics.”⁴³²

In the Seismic Hazard Evaluation, the SAR describes the site-specific probabilistic seismic hazard analysis performed for the proposed CIS Facility site. Induced seismicity is specifically discussed in Section 4.3 of this study. The Seismic Hazard Evaluation is also summarized in the publicly-available portion of the SAR in its discussion of vibratory ground motion at subsection 2.6.2.⁴³³ This subsection describes the objectives of the seismic hazard analysis and states that “... the low to moderate rate of background seismicity, even that associated with petroleum recovery activities, results in relatively low seismic hazard at the

⁴²⁹ Sierra Club Petition at 50.

⁴³⁰ *Id.* at 52–53.

⁴³¹ *Id.* at 52.

⁴³² SAR (proprietary version) at D-1.

⁴³³ SAR at 2-28 to 2-29.

[site].”⁴³⁴ This same description regarding the site’s seismic hazard also appears in the publicly-available SAR regarding site design criteria and structural safety in the discussion of design response spectra.⁴³⁵

As with its environmental claim, the Sierra Club’s safety claim is inadmissible because, contrary to 10 C.F.R. § 2.309(f)(1)(vi), it does not demonstrate why it represents a genuine dispute with the applicant. The Seismic Hazard Evaluation in Attachment D of the SAR provides a detailed description of the site-specific probabilistic seismic hazard analysis used to assess the site’s earthquake potential, including the potential of induced earthquakes. The Sierra Club does not specify how its contention actually contradicts any aspect of this analysis, and accordingly fails to articulate in what way the SAR analysis is deficient. Therefore, the Contention 6 safety claim is inadmissible.

The Sierra Club states that it “cannot address the contents” of the seismic hazard analysis because it was withheld from the public.⁴³⁶ However, to the extent the Sierra Club wished to raise such a challenge, it had the obligation to seek access to this information pursuant to the SUNSI access order issued with the Federal Register notice of the opportunity to request a hearing in this proceeding.⁴³⁷ Because the Sierra Club did not do so, the mere fact that information is non-public does not support an admissible contention.

⁴³⁴ *Id.*

⁴³⁵ *Id.* at 3-9.

⁴³⁶ Sierra Club Petition at 52.

⁴³⁷ Order Imposing Procedures for Access to Sensitive Unclassified Non-Safeguards Information and Safeguards Information for Contention Preparation, 83 Fed. Reg. 44,070, 44,073 (Aug. 29, 2018) (instructing that any potential party who intends to file an admissible contention under 10 C.F.R. § 2.309 and who believes access to SUNSI is necessary to respond to this notice may request access to SUNSI within 10 days of publication of this notice. The order states that “[r]equests for access to SUNSI ... submitted later than 10 days after publication will not be considered absent a showing of good cause ...”). Accordingly, the deadline for such requests was September 10, 2018.

NRC procedures to allow potential intervenors to gain access to SUNSI took effect 10 years ago.⁴³⁸ The SUNSI access order attached to this proceeding follows these SUNSI procedures.⁴³⁹ In a decision regarding SUNSI access, published within one year of SUNSI procedures taking effect, the Commission stated that it “remains convinced that 10 days from the publication of the Federal Register notice is a reasonable amount of time to request access to SUNSI ..., given the public availability of applications well before the 10-day period starts and the relatively minimal effort necessary to file a request for SUNSI.”⁴⁴⁰ Therefore, because the Sierra Club did not request SUNSI access to review the Seismic Hazard Evaluation, its reliance on the information being non-public does not support an admissible contention.

(g) Sierra Club, Contention 7

An ER is required to discuss alternatives to the proposed action. Pursuant to NEPA, this includes an examination of the no-action alternative. The discussion of the no-action alternative in the ISP ER is deficient because it does not discuss safer storage methods at the reactor sites, such as HOSS, nor does it acknowledge the NRC’s Continued Storage Rule that concludes that waste can be safely stored at the reactor site indefinitely.

Contention 7 asserts that the ER’s discussion regarding the “no action alternative” is deficient because it does not discuss the NRC’s Continued Storage Rule or the use of hardened on-site storage (HOSS). However, contrary to the requirements of 10 C.F.R. § 2.309(f)(1)(iv), the Sierra Club fails to demonstrate why either discussion is material to the NRC’s environmental review. Also, contrary to the requirements of 10 C.F.R. § 2.309(f)(1)(vi), the Sierra

⁴³⁸ See Delegated Authority to Order Use of Procedures for Access to Certain Sensitive Unclassified Information, 73 Fed. Reg. 10,978, 10,978–10,979 (Feb. 29, 2008).

⁴³⁹ See *Procedures to Allow Potential Intervenors to Gain Access to Relevant Records that Contain Sensitive Unclassified Non-Safeguards Information or Safeguards Information*, at 5 (Feb. 29, 2008) (ML080380626) (explaining that potential intervenors must submit their request for SUNSI access within 10 days of the issuance of the notice, and late submissions are not entertained without a showing of good cause).

⁴⁴⁰ *Detroit Edison Co. (Fermi Unit 3)*, CLI-09-4, 69 NRC 80, 84 (2009).

Club fails to show that a genuine dispute exists with the applicant's cost benefit analysis with respect to alternatives. Therefore, Contention 7 is inadmissible.

An ER's discussion of alternatives must be "sufficiently complete" to aid the NRC in developing and exploring appropriate alternatives in the EIS and must also be presented in comparative form.⁴⁴¹ The ER should also include consideration of the economic, technical, and other benefits and costs of the proposed action and its alternatives.⁴⁴² NRC guidance requests that applicants address the "no-action alternative," which is a discussion of the results from a lack of action, to serve as a "baseline" for comparing alternatives.⁴⁴³

Here, the ER provides a summary of the no-action alternative.⁴⁴⁴ Further, in Table 7.2-2, the ER contains a comparative analysis of the expenditures to a subset of plants that are no longer operating for the proposed action and the no-action alternative.⁴⁴⁵ Compared to the no-action alternative, the ER concludes that the proposed action's "primary economic benefit" would be the "net reduction of federal reimbursements to the operators of nuclear power plants for their costs associated with prolonged storage of spent fuel."⁴⁴⁶ The ER also provides that "[o]ther anticipated economic benefits from the proposed action are related to the repurposing of land at most of the plant sites."⁴⁴⁷

While Contention 7 is correct that the ER's discussion of the no-action alternative does not evaluate the Continued Storage rule or the use of HOSS at reactor sites, the Sierra Club fails to demonstrate how the inclusion of either would be material to the NRC staff's evaluation

⁴⁴¹ 10 C.F.R. § 51.45(b)(3).

⁴⁴² *Id.* § 51.45(c).

⁴⁴³ NUREG-1748 at Section 3.4.4 (3-9) and Section 5.2.3 (5-6).

⁴⁴⁴ ER at 2-1.

⁴⁴⁵ *Id.* at 7-7 to 7-8.

⁴⁴⁶ *Id.* at 7-4.

⁴⁴⁷ *Id.* at 7-4.

of alternatives. An issue is “material” if its resolution would make a difference in the outcome of the licensing proceeding.⁴⁴⁸ In this case, the ER’s discussion of the no-action alternative evaluates the status quo—*i.e.*, the environmental impacts resulting from the proposed facility not being constructed.⁴⁴⁹ Importantly, the Sierra Club does not explain why the status quo in this case would foreclose the possibility of at-reactor storage options like HOSS.⁴⁵⁰ And nowhere in Contention 7 does the Sierra Club explain how evaluating HOSS in the ER would impact the NRC’s analysis with respect to alternatives. Indeed, except for referencing a general description of HOSS by Dr. Gordon Thompson in Contention 2 and claiming that there are “benefits” to its use,⁴⁵¹ the Sierra Club makes no effort to explain the relevance of HOSS to the ISP application or provide any legal basis for why ISP would be required to discuss it in its alternatives analysis.

In addition, the Sierra Club’s arguments regarding the NRC’s Continued Storage Rule miss the mark. Contention 7 incorrectly claims that the Continued Storage Rule “concludes that spent fuel can remain at the reactor site indefinitely.” But, as previously stated with respect to Contention 3, the Continued Storage GEIS simply analyzed the *environmental impacts* of continuing to store spent fuel after the end of the licensed life for operations of a reactor.⁴⁵² Indeed, in responding to public comments in the GEIS, the NRC expressly stated that it was “not making a safety determination under the Atomic Energy Act (AEA) to allow for the continued storage of spent fuel.”⁴⁵³ The NRC clarified that the lack of a safety finding did “not imply that spent fuel cannot be stored safely.”⁴⁵⁴ Rather, the GEIS was “predicated on the ability

⁴⁴⁸ Oconee, CLI-99-11, 49 NRC at 333–34 (1999) (citing 54 Fed. Reg. 33,168, 33,172).

⁴⁴⁹ ER at 2-63.

⁴⁵⁰ In other words, the NRC’s decision is only whether or not to grant ISP a license—not whether or how all should be stored or otherwise disposed.

⁴⁵¹ Sierra Club Petition at 28.

⁴⁵² Continued Storage GEIS at 1-1.

⁴⁵³ GEIS at D-9.

⁴⁵⁴ *Id.*

to store spent fuel safely” throughout the timeframes analyzed in the GEIS based on the technical feasibility of such storage.⁴⁵⁵ Here, Contention 7 appears to conflate the NRC’s assumptions regarding the technical feasibility of continued storage with the NRC’s ultimate approval of such storage. In light of the above, the Sierra Club has failed to demonstrate that the issues raised in Contention 7 are material to the findings the NRC must make to support its review of the ISP application.⁴⁵⁶

Finally, Contention 7 challenges the ER’s cost benefit analysis with respect to alternatives.⁴⁵⁷ In support, Contention 7 notes that the ER lists the primary economic benefit of the ISP facility as the reduction of federal reimbursements to the operators of nuclear plants. The Sierra Club argues that these payments would still be required even if the ISP facility is licensed and concludes that “there would be *no economic benefit* to the CIS facility as compared to the no-action alternative” (emphasis added).⁴⁵⁸ Even assuming that the Sierra Club is correct that federal reimbursements would not cease, the Sierra Club’s conclusion that the ER identifies “no economic benefit” is demonstrably unsupported. First, this conclusion ignores the ER’s discussion of the economic benefit of allowing decommissioned sites to serve other purposes.⁴⁵⁹ In addition, the Sierra Club’s claim ignores the ER’s conclusion that the overall costs associated with centralized storage would be less than at-reactor storage.⁴⁶⁰ Therefore, to the extent Contention 7 argues that the ER contains no discussion of the economic benefits of the proposed project compared against the no-action alternative, the Sierra

⁴⁵⁵ *Id.*

⁴⁵⁶ 10 C.F.R. § 2.309(f)(1)(iv).

⁴⁵⁷ Sierra Club Petition at 55.

⁴⁵⁸ *Id.*

⁴⁵⁹ ER at 7-9.

⁴⁶⁰ *Id.* at 7-7; Table 7.2-2.

Club misstates the contents of the ER.⁴⁶¹ Therefore, in addition to the grounds stated above, Contention 7 is inadmissible because it has failed to show that a genuine dispute with the application exists.⁴⁶²

(h) Sierra Club, Contention 8

ISP relies heavily on the assertion that the Blue Ribbon Commission on America's Nuclear Future (BRC) has recommended CIS as the answer to the country's nuclear waste problem. On the contrary, the BRC report should not be viewed uncritically and does not necessarily deserve blind support in assessing the ISP application. ISP's ER therefore mischaracterizes both the BRC report's conclusions and the relative risks of CIS versus onsite storage. The EIS must therefore independently and fully address the relative risks and benefits of both storage options.

Contention 8 claims that the ER inappropriately relies on, and also mischaracterizes, the Blue Ribbon Commission on America's Nuclear Future report's conclusions. Simply put, the allegations in Contention 8 are not supported by the license application. Therefore, contrary to 10 C.F.R. § 2.309(f)(1)(vi), the contention fails to demonstrate that a genuine dispute exists on a material issue with the application. Therefore, Contention 8 should be dismissed.

The ISP ER mentions the Blue Ribbon Commission's report several times. First, the ER notes the report's recommendation "to adopt a new consent-based approach to siting future nuclear waste management facilities."⁴⁶³ The ER agrees with this recommendation, stating that "ISP supports the Blue Ribbon Commission's recommendation to only site a CISF in a state and community willing to host such a facility."⁴⁶⁴ The ER concludes that the no-action alternative "would constitute inaction" in response to the report's recommendation "to promote efforts to

⁴⁶¹ A petitioner's misreading of the application cannot form the basis for an admissible contention. See *Georgia Tech Research Reactor*, LBP-95-6, 41 NRC at 300.

⁴⁶² 10 C.F.R. § 2.309(f)(1)(vi).

⁴⁶³ ER at 1-3.

⁴⁶⁴ *Id.* at 2-61.

develop one or more consolidated storage facilities”⁴⁶⁵ and would ultimately “not support” this recommendation.⁴⁶⁶

Here, the Sierra Club fails to establish a genuine dispute with any of the ER’s statements regarding the Blue Ribbon Commission’s report on a material issue. The Sierra Club points to challenges involving consolidated storage addressed in the report, such as legislative issues, siting concerns, and uncertainty regarding disposal.⁴⁶⁷ But, with respect to siting concerns, the ER’s discussions of the report are in apparent agreement with the Blue Ribbon Commission’s report.⁴⁶⁸ Otherwise, the ER merely points out—correctly—that the Blue Ribbon Commission’s report recommended the development of a consolidated storage option.⁴⁶⁹ Therefore, Contention 8 fails to point to any statement in the ER that misrepresents the report.

Similarly, Contention 8’s allegation that the “purpose and need for the CIS project is dictated to a great extent” by the report also lacks factual support and fails to articulate a genuine dispute with the application. The ER’s purpose and need statement simply references the report’s estimation of costs for the surveillance, maintenance, emergency preparedness, and physical security of the SNF stored at reactor sites.⁴⁷⁰ Contention 8 does not dispute this cost estimate, nor does it lend any other support for its conclusion that ISP has inappropriately placed “unwavering reliance” on an alleged misapprehension of the report.

In sum, the Sierra Club has failed to identify any mischaracterization of the Blue Ribbon Commission’s report contained in the application, let alone any unwarranted reliance on the

⁴⁶⁵ ER at 2-2 (citing the Blue Ribbon Commission’s Recommendation #5 regarding “[p]rompt efforts to develop one or more consolidated storage facilities.” Report to the Secretary of Energy, Blue Ribbon Commission on America’s Nuclear Future (January 2012) at vii & xii).

⁴⁶⁶ ER at 2-63.

⁴⁶⁷ Sierra Club Petition at 57–59.

⁴⁶⁸ ER at 2-61 (noting ISP’s “support” for the Blue Ribbon Commission’s recommendation).

⁴⁶⁹ *Id.* at 2-63.

⁴⁷⁰ *Id.* at 1-5.

report in support of the ER's alternatives analysis. To the contrary, the ER is in apparent agreement with the report. Because the Sierra Club has failed to show a genuine dispute with the application on a material issue, the contention should be dismissed.⁴⁷¹

(i) Sierra Club, Contention 9

10 C.F.R. § 72.30 establishes requirements for decommissioning interim storage facilities. An application for licensing a CIS facility must contain a decommissioning plan explaining how the plan will satisfy the requirements in the regulation. The application for the ISP CIS facility does not comply with these requirements.

In this proposed contention, the Sierra Club asserts that the decommissioning funding plan does not provide reasonable assurance that funds will be available to decommission the site nor does it give a detailed cost estimate of the total cost of decommissioning.⁴⁷² To the extent the contention challenges the requested exemption in the application from §72.30, it is admissible. To the extent it seeks to challenge the decommissioning funding cost estimate, it is inadmissible for failure to demonstrate a genuine dispute with the applicant in contravention of 10 C.F.R. § 2.309(f)(1)(vi).

The Petitioner quotes the application's decommissioning cost estimate of \$12,643.96.⁴⁷³ However, beyond the barebones statement that the estimate is lacking, Petitioner does not appear to dispute the estimate. Thus, to the extent the Petitioner is seeking to challenge the cost estimate, such a challenge fails for lack of a genuine dispute with the applicant. Petitioner has provided several reasons why they view the requested exemption as not complying with 10 C.F.R. §72.30. Thus, this portion of the contention is admissible.

(j) Sierra Club, Contention 10

The ISP CIS site sits atop the Ogallala Aquifer. The ER and SAR submitted by ISP appear to claim that the site does not sit atop the aquifer. Therefore, the ER

⁴⁷¹ 10 C.F.R. § 2.309(f)(1)(vi).

⁴⁷² Sierra Club Petition at 60.

⁴⁷³ *Id.* at 62 (citing License Application Rev. 2, App. D, Table 3-19).

and SAR do not accurately and adequately evaluate and consider the impacts to the aquifer from the CIS facility.

In Contention 10, Sierra Club asserts that the application does not adequately evaluate the impacts to the Ogallala Aquifer from the proposed action. As the basis for this contention, Sierra Club disputes the applicant's claim that the containers in which the radioactive waste is stored will not leak. Because there is a danger of release of radioactivity from the containers, Sierra Club argues, the ER and SAR must address the impact on groundwater from the release of radioactive material from the proposed CISF.⁴⁷⁴ This contention is inadmissible because Sierra Club fails to provide adequate support for its claims, as required by 10 C.F.R. § 2.309(f)(1)(v), and fails to raise a genuine dispute with the applicant, as required by 10 C.F.R. § 2.309(f)(1)(vi).

Sierra Club supports this contention with the declaration of Dr. Patricia Bobeck and a 2012 report from George Rice regarding the WCS LLRW site adjacent to the proposed CISF (Sierra Club Exhibit 3). These exhibits, Sierra Club asserts, confirm that the Ogallala Aquifer is present within the footprint of the CISF site.⁴⁷⁵ Sierra Club asserts that these exhibits challenge the ER's "false statement . . . denying the existence of the aquifer [which] renders the rest of the discussion of groundwater impacts in the ER meaningless," and further dispute a purportedly "incorrect" claim in the ER regarding the depth to the water saturation point under the CISF site.⁴⁷⁶ Sierra Club argues that Dr. Bobeck's expert opinion establishes a dispute regarding the adequacy of the ER's description of the geologic units present at the ISP CISF site and their characteristics and interconnection with other area geologic units.⁴⁷⁷

⁴⁷⁴ *Id.* at 63.

⁴⁷⁵ *Id.* at 63–64.

⁴⁷⁶ *Id.* at 64.

⁴⁷⁷ *Id.* at 64–65.

First, Sierra Club is incorrect that the ER and SAR “falsely” claim that the Ogallala aquifer is not present at the ISP CISF site. The SAR and ER both acknowledge that the Ogallala aquifer may be present.⁴⁷⁸ Both the SAR and ER state that the Ogallala Formation, if present, is not water-bearing in the CISF area.⁴⁷⁹ Both the SAR and ER describe the Ogallala Formation/aquifer at length, including assessing its importance to the region, its relationship to other formations, as well as sources of Ogallala aquifer recharge and locations of discharge, and direction and rate of groundwater flow.⁴⁸⁰ Sierra Club’s expert, Dr. Bobeck, also refers to information in the SAR that she indicates acknowledges the possible presence of the Ogallala Formation, further undermining the central premise of this contention.⁴⁸¹

Second, although Sierra Club disputes the adequacy of the ER and SAR’s characterization of groundwater resources, they have not shown that their dispute with the application is on a material issue of law or fact, as required by 10 C.F.R. § 2.309(f)(1)(vi). To show that a dispute is “material,” a petitioner must show that its resolution would make a difference in the outcome of the licensing proceeding.⁴⁸² Here, the applicant has described four independent bases that support its conclusion that operation of the ISP CISF will not lead to contamination of groundwater—“[t]he method of storage (dry cask), the nature of the canisters, the extremely low permeability of the red bed clay[,] and the depth to groundwater beneath the [ISP] CISF[.]”⁴⁸³ Two of these independent bases are the confinement provided by the dry cask storage method and the leak tight storage canisters.⁴⁸⁴ Sierra Club purports to challenge the

⁴⁷⁸ SAR at 2-22; ER at 3-26.

⁴⁷⁹ SAR at 2-22; ER at 3-26.

⁴⁸⁰ SAR at 2-21 to 2-22; ER at 3-25 to 3-26.

⁴⁸¹ See, e.g., Declaration of Patricia Bobeck, at 4 (citing SAR Figure 2-14).

⁴⁸² See *Oconee*, CLI-99-11, 49 NRC at 333–34.

⁴⁸³ SAR at 2-21; see also ER at 3-25.

⁴⁸⁴ *Id.*

applicant's determination that the dry cask storage method and/or canisters preclude a pathway to groundwater contamination, but fails to provide adequate support for its assertions or controvert relevant portions of the application, as required by 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

The sole bases Sierra Club raises for its claim that a pathway to groundwater contamination exists from the ISP CISF relate to (1) the potential for cask rupture from high burnup fuel and (2) the potential for earthquakes at the CISF site.⁴⁸⁵ With respect to the safety of storage of high-burnup fuel, Sierra Club asserts that cask rupture from high-burnup fuel "is not an impossibility or speculation" because it is commonly used and damages cladding.⁴⁸⁶ As the Staff explains in response to Sierra Club's Contention 16 on this topic, however, Sierra Club's claim that high-burnup fuel will increase the likelihood of radiological impacts is unsupported, and Sierra Club fails to acknowledge, much less show a genuine dispute with, the express limitation that will be placed on the use of high-burnup fuel at the proposed facility.⁴⁸⁷ The proposed license for the ISP CISF requires that "all fuel with assembly average burnup greater than 45 GWd/MTHM shall be canned inside the canister."⁴⁸⁸ Canning of spent nuclear fuel, especially in the case of damaged fuel, is a method of compensating for damaged cladding,⁴⁸⁹ and is explicitly acknowledged by 10 C.F.R. § 72.122(h) as a means of

⁴⁸⁵ Sierra Club Petition at 65–67.

⁴⁸⁶ *Id.*

⁴⁸⁷ License Application, Chapter 13 "Proposed License Conditions," Attachment A at 2.

⁴⁸⁸ *Id.*

⁴⁸⁹ See NUREG-1092 at I-4 (ML091050510) ("Furthermore, the assessment shows that for the long-term storage of spent fuel the cladding integrity need not be maintained if additional confinement is provided.").

See also Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High-Level Radioactive Waste, 53 Fed. Reg. 31,651, 31,655 (Aug. 19, 1988) (noting that the insertion of canning in 72.122(h)(1) was specifically to provide an alternative means for confinement of fuel material, a function otherwise accomplished by the cladding); *Licensing Requirements for the Independent*

demonstrating adequate confinement barriers.⁴⁹⁰ Accordingly, Sierra Club has not shown how its claims regarding high-burnup fuel are more than speculative.

With respect to the potential for earthquakes, Sierra Club asserts, without factual support, that if the cladding in the “storage containers” fails, “seismic tremors would cause cracking in the containers and thus allow radioactive leakage that . . . would find its way into the groundwater.”⁴⁹¹ Sierra Club relies on a conclusory statement in Dr. Bobeck’s declaration as support for this element of its contention, specifically, her assertion that the ER does not address the “effects of seismicity resulting from hydraulic fracturing in this region.”⁴⁹² However, Dr. Bobeck does not provide information in her declaration that supports Sierra Club’s claim that induced seismicity from hydraulic fracturing will cause contamination of groundwater. In fact, Dr. Bobeck discloses that her declaration does not encompass “[a] discussion of the type and amount of materials that could be released from spent nuclear fuel casks as a result of” seismicity.⁴⁹³ “[N]either mere speculation nor bare or conclusory assertions, even by an expert, alleging that a matter should be considered will suffice to allow the admission of a proffered contention.”⁴⁹⁴ Further, as the Staff explains in its response to Sierra Club’s Contention 6, contrary to Sierra Club’s assertion, the ER and SAR both address seismicity, including induced seismicity, but Sierra Club does not refer to or challenge the applicant’s analyses, much less explain how these analyses fail to support the applicant’s conclusion that the method of storage

Storage of Spent Nuclear Fuel and High-Level Radioactive Waste, 51 Fed. Reg. 19,106, 19,108 (May 27, 1986).

⁴⁹⁰ See also *Shipments of High Level Nuclear Power Plant Waste*, DD-84-9, 19 NRC 1087, 1092 (1984) (denying request to halt all shipments of nuclear fuel on the basis that requirements for canning provided adequate protection for public health and safety); *Private Fuel Storage*, CLI-04-22, 60 NRC at 134 (citing *Private Fuel Storage*, CLI-04-4, 59 NRC at 39) (the fuel cladding is no longer a structure or system important to safety once sealed in a canister).

⁴⁹¹ Sierra Club Petition at 67.

⁴⁹² *Id.*; Declaration of Patricia Bobeck, at 2.

⁴⁹³ Declaration of Patricia Bobeck, at 2.

⁴⁹⁴ *Vogtle*, LBP-07-3, 65 NRC at 253 (citing *Fansteel*, CLI-03-13, 58 NRC at 203).

and nature of the casks preclude a pathway to groundwater contamination. Accordingly, contrary to 10 C.F.R. § 2.309(f)(1)(v), Sierra Club has not provided adequate information to establish their threshold premise that a credible pathway for groundwater intrusion from operation of the WCS CISF exists.

Nor does Sierra Club address the information in the ER or SAR supporting the applicant's determination that the dry cask storage method and/or canisters preclude a pathway to groundwater contamination. In the SAR, the applicant explains the bases for its conclusion that a contaminant leak from the method of dry cask storage and the nature of the canisters is not credible.⁴⁹⁵ The ER asserts that "[t]here is no air pathway to [public exposure to radiation from routine operations] because the casks are sealed by being welded shut" and "[t]here is no potential for a liquid pathway because the spent fuel contains no liquid component and the casks are sealed to prevent any liquids from contacting the spent fuel assemblies."⁴⁹⁶ Sierra Club does not acknowledge this discussion, let alone provide a basis for disputing it. Because Sierra Club has not provided adequate information to establish a genuine dispute with the applicant's determination that the dry cask storage method and canisters preclude a pathway to groundwater contamination under normal or accident conditions, it has not shown that its assertions regarding the adequacy and specificity of the application's characterization and evaluation of groundwater formations underlying the ISP CISF site would make a difference in the applicant's conclusion regarding the impacts of the CISF on area groundwater.⁴⁹⁷ Accordingly, Sierra Club not shown that its concerns with the analyses in the ER and SAR constitute a genuine dispute with the application on a material issue of law or fact.

⁴⁹⁵ See SAR at 11-1 to 11-2 & Appendix A.11.

⁴⁹⁶ See ER at 6-1 to 6-2.

⁴⁹⁷ For the same reason, the Petitioner has not shown how the application lacks relevant adverse information, as required by 10 C.F.R. § 51.45(e).

Finally, although Sierra Club states that the ER and SAR do not adequately evaluate the *impacts* to groundwater from the ISP CISF, Sierra Club has not challenged the applicant's analysis of these impacts in the ER. Section 4.4 of the ER evaluates the potential impacts of the proposed CISF on groundwater resources.⁴⁹⁸ The ER states that "[t]he storage system design and construction, along with environmental monitoring of the storage pad, combine to make the potential for contaminant release through this system extremely low."⁴⁹⁹ The ER concludes that "[n]o adverse impacts to surface water are anticipated during construction and operation of the proposed [ISP] CISF."⁵⁰⁰ The ER also concludes that "the cumulative impact to water resources would be small."⁵⁰¹ Having failed to controvert the ER's analyses and conclusions regarding potential radiological and environmental *impacts* of the proposed ISP CISF, Sierra Club does not demonstrate how its various concerns regarding the adequacy of the application's characterization of groundwater resources amounts to a genuine dispute with the ER on a material issue of law or fact, in accordance with 10 C.F.R. § 2.309(f)(1)(vi).⁵⁰²

In sum, because this contention does not meet the requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi), this contention is inadmissible.

(k) Sierra Club, Contention 11

Section 2.3.3 of the ER discusses 15 criteria ISP used to evaluate the suitability of the Andrews County site. These criteria were created by ISP and bear little or no relationship to any criteria in the statutes or regulations. Even the criteria that are relevant have not been adequately addressed.

⁴⁹⁸ See ER at 4-29 to 4-32.

⁴⁹⁹ *Id.* at 4-31.

⁵⁰⁰ *Id.*

⁵⁰¹ *Id.* at 4-32.

⁵⁰² See *Millstone*, LBP-08-9, 67 NRC at 433 (citing *Rancho Seco*, LBP-93-23, 38 NRC at 247–48, *review declined*, CLI-94-2, 39 NRC 91 (1994)) ("Any contention that fails directly to controvert the application or that mistakenly asserts the application does not address a relevant issue can be dismissed.").

In this contention Sierra Club points to 15 criteria listed in ER section 2.3.3, “Site Selection Process: Factors in the Two-Tiered Screening Process,” and argues that many of the criteria do not meet the objective of 10 C.F.R. § 51.45 that the ER’s purpose is to discuss and analyze the impacts of various alternatives.⁵⁰³ Sierra Club asserts that most of the criteria “have nothing to do with the environmental impacts of alternatives,” and those that do are not adequately addressed in the ER.⁵⁰⁴ Specifically, Sierra Club takes issue with ISP’s conclusion about seismic suitability and, under siting criterion 11, the adequacy of ISP’s analyses assessing variables of environmental protection.⁵⁰⁵ As a result, Sierra Club asserts, the siting criteria “claimed to be used by ISP in choosing the CIS site . . . do not comply with NRC regulations.”⁵⁰⁶

This contention is inadmissible because Sierra Club has failed to show that a genuine dispute exists with the applicant on an issue of material fact or law in accordance with 10 C.F.R. § 2.309(f)(1)(vi). On this basis, as detailed below, it should be dismissed.

Sierra Club misconstrues the purpose of ISP’s 15 site selection criteria and their relationship to NEPA and NRC’s regulations in 10 C.F.R. § 51.45.⁵⁰⁷ The site selection criteria are related to the purpose and need of the project, as defined by ISP in the ER.⁵⁰⁸ An applicant’s purpose and need generally defines the scope of reasonable alternatives for analysis, and the NRC may accord “substantial weight to the preferences of the applicant and/or

⁵⁰³ Sierra Club Petition at 68.

⁵⁰⁴ *Id.* at 68.

⁵⁰⁵ *Id.* at 71–75.

⁵⁰⁶ *Id.* at 75.

⁵⁰⁷ The ER must discuss environmental impacts “in proportion to their significance.” 10 C.F.R. § 51.45(b)(1). The discussion of the alternatives must be “sufficiently complete to aid” the Commission in developing and exploring appropriate alternatives pursuant to section 102(2)(E) of NEPA. 10 C.F.R. § 51.45(b)(3).

⁵⁰⁸ See ER at section 1.1, “Purpose and Need for the Proposed Action.”

sponsor in the siting and design of the project.”⁵⁰⁹ Moreover, site selection criteria need not be solely related to environmental values; an applicant may, among other things, factor feasibility⁵¹⁰ and economic considerations⁵¹¹ into the project’s goals and defining reasonable alternatives. NEPA requires only a discussion of “those alternatives that are reasonable and ‘will bring about the ends’ of the proposed action.”⁵¹² For ISP, the 15 site selection criteria incorporate its stated interest in promptly beginning to meet the storage needs of the U.S. reactor fleet.⁵¹³ The site selection criteria provide a framework for evaluating the proposed action and alternatives through the lens of ISP’s purpose and need, consistent with the objectives of NEPA and 10 C.F.R. § 51.45.

There are no specific regulatory findings under 10 C.F.R. Part 51 for an applicant’s site selection criteria; rather, the criteria are examined for reasonableness.⁵¹⁴ NEPA requires only that when defining the scope of alternatives for review, the objective of the action cannot be artificially narrowed to circumvent the requirement that relevant alternatives be considered.⁵¹⁵ As ISP explains in the ER, it undertook a multi-step search and screening process that began with identifying a multi-state Region-of-Interest, narrowing to a set of potential host counties, and narrowing further to identify a preferred site and potential alternative sites.⁵¹⁶

⁵⁰⁹ *Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 55 (2001) (citing *Citizens Against Burlington*, 938 F.2d at 195).

⁵¹⁰ *See Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-17, 56 NRC 1, 7 (2002).

⁵¹¹ *See Hydro Resources, Inc.*, CLI-01-4, 53 NRC at 55 (citing *City of Grapevine*, 17 F.3d at 1506 (An agency “may take into account ‘the economic goals of a project’s sponsor.’”).

⁵¹² *Id.*

⁵¹³ *See* ER at section 1.1.

⁵¹⁴ *See Duke Energy Carolinas, LLC* (William States Lee III Nuclear Station, Units 1 and 2), CLI-16-19, 84 NRC 180, 210 (2016) (approving of the NRC staff examining the applicant’s site selection process for reasonableness).

⁵¹⁵ *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), CLI-90-8, 32 NRC 201, 206 (1991).

⁵¹⁶ *See* ER at sections 2.3.1, 2.3.2, and 2.3.3.

With the identification of potential sites, ISP applied a further two-step screening process. The first step applied five criteria for a high-level analysis of key siting impediments; all sites were potentially acceptable under this process and were advanced to the second step.⁵¹⁷ The second step involved a more detailed analysis of operational and environmental considerations applying the 15 site selection criteria (and numerous sub-criteria) to identify a site for detailed environmental review. The results of this analysis were recorded as quantified scores and presented in comparative form.⁵¹⁸ The ER provides the final score of the candidate sites against ISP's screening criteria, and the proposed site had an appreciably higher overall score.⁵¹⁹ Therefore, ISP concluded that "Andrews County was the superior site location and no other location could reasonably serve as the location for the CISF site."⁵²⁰ The process ISP followed was informed by its identified purpose and need, as appropriate under NEPA and NRC regulations, and Sierra Club has not specifically described how ISP's use of this process circumvents a reasonable consideration of alternatives.⁵²¹ Because the applicant may appropriately define the scope of alternatives consistent with its purpose and need—with the condition that it may not circumvent considering reasonable alternatives—Sierra Club's arguments regarding ISP's site selection criteria do not raise a genuine dispute of material fact or law with the application.

Contention 11 focuses on questioning the suitability of the criteria that ISP applied to defining the scope of site selection and the alternatives analysis, but it also briefly addresses the adequacy of the analysis under certain criteria.⁵²² However, Sierra Club fails to explain how any

⁵¹⁷ See *Id.* at 2-57.

⁵¹⁸ *Id.* at Tables 2.3-2 to 2.3-4.

⁵¹⁹ *Id.* at Table 2.3-4.

⁵²⁰ *Id.* at 2-62 to 2-63.

⁵²¹ See *Shoreham*, CLI-90-8, 32 NRC at 206.

⁵²² Sierra Club Petition at 71.

of these claims are material issues that would make a difference in the comparison of alternatives or amount to more than “flyspecking” the ER.⁵²³ Accordingly, these critiques do not raise a genuine dispute of material fact or law with the application.⁵²⁴

With respect to issue (a),⁵²⁵ related to ISP’s criterion on contamination, the ER states that a site without contamination is preferable so that it does not require remediation prior to construction.⁵²⁶ This is consistent with the applicant’s purpose and need, and Sierra Club does not raise a specific dispute on the reasonableness of including this as a criterion for consideration in the ER.

With respect to issue (b),⁵²⁷ related to siting outside of a floodplain, ISP includes as a sub-criterion within site selection criterion 11 that the site not be within the 500-year floodplain. Sierra Club asserts that the safety standard from 10 C.F.R. Part 72 refers to the 100-year floodplain (a less restrictive standard) and that, presumably, ISP should use that as its siting criterion for environmental purposes.⁵²⁸ Because the NRC’s safety review and environmental review are separate and fulfill separate purposes, they do not necessarily apply equivalent standards. The Part 72 floodplain requirements are minimum safety standards an applicant must meet to receive a license. In its Safety Analysis Report, ISP addresses facility location within several floodplain areas: “the 100-year floodplain, the 500-year floodplain or the floodplain resulting from the probable maximum precipitation (PMP)/ probable maximum flood (PMF).”⁵²⁹ In its ER, ISP applies the floodplain screening criterion to determine a reasonable

⁵²³ See *Grand Gulf ESP*, CLI-05-4, 61 NRC at 13 (“Our boards do not sit to ‘flyspeck’ environmental documents or to add details or nuances.”).

⁵²⁴ 10 C.F.R. § 2.309(f)(1)(vi).

⁵²⁵ Sierra Club Petition at 71.

⁵²⁶ ER at 2-16.

⁵²⁷ Sierra Club Petition at 72.

⁵²⁸ *Id.*

⁵²⁹ SAR at 2-17.

slate of low flood risk sites for consideration. Sierra Club does not address why it is unreasonable to use the 500-year floodplain as a site selection criterion in the environmental review.

With respect to issue (c),⁵³⁰ related to the relevance of meteorology data in the ER, ISP included as a criterion that it is preferable that site characterization data for meteorology be available.⁵³¹ The NRC requires that natural phenomena that are relevant to facility and site performance be identified and assessed;⁵³² these natural phenomena may include wind speed, precipitation, and temperature. Sierra Club does not identify any specific meteorological information with which it takes issue, or why it believes the site characterization information is irrelevant to the NEPA site selection.

With respect to issue (d),⁵³³ related to the discussion of protected species, Sierra Club states that “the discussion of this criterion does not discuss the impacts of the CIS proposal on those protected species.”⁵³⁴ ISP included general information on protected species in Chapter 2 and more specific information about the potential for impacts to protected species in section 4.5.8, “Activities Expected to Impact Sensitive Communities or Habitats” and 4.5.10 “Tolerances and Susceptibilities of Important Biota to Pollutants.” Sierra Club does not reference these discussions or specifically address why it believes the impact information in them is inadequate.

With respect to issue (e),⁵³⁵ related to the environmental justice methodology used in the ER, Sierra Club argues that the environmental justice analysis is deficient because “almost all of

⁵³⁰ Sierra Club Petition at 72–73.

⁵³¹ ER at 2-16. Moreover, the ER does address the influence of meteorological characteristics on environmental impacts. For example, atmospheric dispersion factors into the analysis of air quality and meteorological data is relevant to radiological monitoring. See ER at sections 4.6, “Air Quality Impacts” and 6.3, “Radiological Monitoring Program.”

⁵³² See 10 C.F.R. § 72.92(a).

⁵³³ Sierra Club Petition at 73.

⁵³⁴ *Id.*

⁵³⁵ *Id.*

the counties in the general area of the proposed CIS site have majority minority populations. Yet, ISP claims that there will be no impact on minority populations”⁵³⁶ ISP lays out its methodology for the environmental justice analysis in detail in Appendix A, Section 1.1.10. In the explanation of its analytical methodology, ISP states that it used a 4-mile study area for environmental justice impacts—an area that conforms to NRC guidance in NUREG-1748 “Environmental Review Guidance for NMSS Programs.”⁵³⁷ Therefore, Sierra Club does not identify the correct study area when it asserts that there would be environmental justice impacts from the proposed action because it is looking at information from outside the 4-mile area.⁵³⁸ Moreover, Sierra Club does not articulate any fault with the methodology that ISP did use to study environmental justice impacts, nor does it specify any disproportionate adverse impact to low-income or minority populations that would demonstrate a dispute with the ER’s conclusions.

With respect to issue (f),⁵³⁹ related to the assessment of historic and cultural resources, Sierra Club takes issue with the survey ISP conducted for historic and archaeological resources. Sierra Club suggests that a “pedestrian” survey is insufficient, that ISP should have coordinated with Native Americans, and that there may not have been coordination with the Texas Historical Commission.⁵⁴⁰ Sierra Club, however, ignores the ER’s statement that coordination with the Texas Historical Commission and the New Mexico State Historic Preservation Office has been completed without objections from either agency.⁵⁴¹ Sierra Club does not explain why the surveys performed that were satisfactory for these agencies are insufficient for NEPA

⁵³⁶ *Id.*

⁵³⁷ ER, Appendix A at 1-39.

⁵³⁸ “As shown in Table 1-28, the minority percentages for the relevant block groups are below 50 percent and are also each lower than the respective county and state in which the block group is located.” ER, Appendix A at 1-42.

⁵³⁹ Sierra Club Petition at 74.

⁵⁴⁰ *Id.* at 74–75.

⁵⁴¹ ER at 1-14.

purposes.⁵⁴² Finally, it is the NRC's responsibility—not ISP's—to conduct appropriate consultation under the NHPA with the Texas Historical Commission, the New Mexico State Historic Preservation Office, and Indian Tribes. NRC will undertake necessary consultation in conjunction with its environmental review.

For the foregoing reasons, Sierra Club fails to show that its objections to ISP's site selection criteria, or its specific objections regarding adequacy of certain topics as they relate to alternatives, constitute any genuine dispute with the applicant on an issue of material fact or law in accordance with 10 C.F.R. § 2.309(f)(1)(vi). Therefore, this contention should be dismissed.

(I) Sierra Club, Contention 12

The minimum cooling time for transportation of fuel from a boiling water reactor (BWR) in a NUHOMS MP-187 cask is greater than calculated by TN Americas, the manufacturer of the cask. This implies that the cladding of BWR fuel will exceed allowable limits and will degrade. Cladding is an issue that must be adequately addressed.

In Contention 12, Sierra Club claims that the minimum cooling time for placement of a 7×7 boiling water reactor fuel assembly in a NUHOMS-MP187 cask design has been incorrectly calculated.⁵⁴³ In support, Sierra Club has referenced an expert declaration along with a calculation that claims the actual cooling time is 32 years, not the fifteen years Sierra Club asserts is stated in the NUHOMS-MP187 SAR.⁵⁴⁴

The proposed contention is inadmissible under 10 C.F.R. § 2.309(f)(1)(iii), (iv), (v), and (vi), because the Petitioner does not demonstrate that the issue is within the scope of the

⁵⁴² Sierra Club also includes a cursory reference to guidelines of the Counsel of Texas Archaeologists. However, Sierra Club does not explain how those guidelines represent an applicable legal requirement, nor does it specify in what way they differ from, or show a deficiency in, the survey described in the ER. Moreover, Sierra Club does not actually dispute the ER's conclusions regarding impact to cultural resources.

⁵⁴³ Sierra Club Petition at 75.

⁵⁴⁴ *Id.* at 76–77; Petitioner's Exhibits 4, 5, and 6.

proceeding or is material to the findings the NRC must make. Nor does it provide factual or expert support for the specific issue raised, and it does not articulate a genuine dispute with the application.

First, the proposed contention is presented as a challenge to the NUHOMS-MP187 cask design, and it references two exhibits which Sierra Club claims appear in “the SAR for the NUHOMS MP-187.”⁵⁴⁵ However, the exhibits appear to be from the safety analysis report from an entirely different design, the NUHOMS MP197 Transportation Cask. While a petition may be read in a light favorable to the petitioner, a Board is not empowered to make assumptions or draw inferences that favor the petitioner.⁵⁴⁶ This discrepancy is fatal to the Petitioner’s claims because the Petitioner fails to explain how documents from the NUHOMS MP197 Transportation Cask could in any way support the assertion that the MP187 has a significant design flaw, nor in turn raise a genuine dispute with the WCS CISF application.⁵⁴⁷

Even if the cited exhibits were from the MP187 cask design referenced in the contention, Sierra Club has still not demonstrated that the concern raised is within the scope of this proceeding or material to the findings the NRC must make on the application. Based on the statements on transportation impacts, the reference to the NUHOMS-MP187 could be construed either a reference to a generic transportation package that has already been approved. The Petitioner has not made clear which of these scenarios it is challenging, and as a result, has also failed to provide a genuine dispute with the application under 10 C.F.R. § 2.309(f)(1)(vi).

⁵⁴⁵ Sierra Club Petition at 76–77; Petitioner’s Exhibits 5 and 6.

⁵⁴⁶ See *Crow Butte*, CLI-09-12, 69 NRC at 553–54 (2009); *Palo Verde*, CLI-91-12, 34 NRC at 155.

⁵⁴⁷ 10 C.F.R. § 2.309(f)(1)(v), (vi); *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-899, 28 NRC 93, 97 (1988) (“The reach of a contention necessarily hinges upon its terms coupled with its stated bases.”); *accord Pilgrim*, CLI-10-11, 71 NRC at 309.

The NUHOMS-MP187 cask design does not have a certificate of compliance authorizing storage under Part 72; instead, the certificate of compliance that TN Americas maintains for the NUHOMS-MP187 cask design is solely for transportation purposes under Part 71.⁵⁴⁸ Transportation packages are regulated and approved through a separate process from that in Part 72, and 10 C.F.R. § 51.22(c)(13) indicates that approvals of transportation package designs are actions for which the Commission has issued a categorical exclusion, meaning the Commission has generically determined such approvals do not individually or cumulatively have a significant effect on the human environment. As a result, to the extent this contention relies on a claim of significant environmental impacts from the authorized transportation use of an approved design, it represents a challenge to the basic structure of how the NRC regulates the transportation of licensed material, rendering the contention inadmissible.⁵⁴⁹

Fundamentally, a proposed contention on the generic safety review for a cask design under Part 71 or the safety review performed for a different license under Part 72 under the guise of a hypothetical environmental impact for a license under Part 72 is inadmissible. The

⁵⁴⁸ Certificate of Compliance No. 9255 for NUHOMS MP187 Multi-Purpose Cask, Revision 13 (Jan. 30, 2017) (ML17032A054). See also Request for Renewal to Certificate of Compliance No. 9255; Docket 71-9255, for the Model NUHOMS® MP187 Multi-Purpose Cask (Oct. 10, 2018) (ML18285A451).

Additionally, with respect to storage under Part 72, the MP187 design does not have a generic cask approval and instead, is currently only approved for use at one specifically-licensed ISFSI. See WCS ISP CISF SAR Subsection 1.2.4.1 at 1-7 (“NUHOMS MP187 Cask Storage System as configured for the WCS CISF is described in ‘Rancho Seco Independent Spent Fuel Storage Installation Safety Analysis Report’ Revision 4, NRC Docket No. 72-11.”). See also License SNM-2510, Amendment 4 (Nov. 24, 2017) (ML17290A009). For similar reasons, safety issues related to other licensees are plainly outside the scope of this hearing, and absent clear allegations otherwise, licensees are presumed to meet their applicable regulations and license requirements.

⁵⁴⁹ See *Private Fuel Storage*, LBP-98-7, 47 NRC at 179, 190–191 (finding inadmissible a proposed contention on the environmental impacts of the agency’s transportation scheme for spent fuel). See also Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions and Related Conforming Amendments, 49 Fed. Reg. 9352, 9375 (Mar. 12, 1984) (“Since the Commission finds from other available material that the transportation of radioactive material in accord with applicable regulations will not have a significant adverse impact on the environment, the approval of package designs in accord with those regulations similarly can have no significant adverse environmental impact.”).

NRC's contention admissibility rules exist to "focus litigation on concrete issues, and result in a clearer and more focused record for decision."⁵⁵⁰ Reopening the design of transportation packages that have already been approved and second-guessing whether they meet the appropriate regulatory requirements, all in an action on a license for a separate storage facility, defeats this aim entirely. An applicant for an ISFSI is not required to re-evaluate (let alone assume there are significant flaws in) designs that have been approved by the NRC. As such, the Petitioner has not demonstrated that the issue raised is appropriate for litigation and within the scope or material to the findings the NRC must make.

In any event, even if the Petitioner were correct about the asserted error in the Part 71 cask certification, it has not explained what significance this issue could have for the environmental review for the ISP CISF, contrary to 10 C.F.R. § 2.309(f)(1)(iv). At root, the contention asserts only that the ER does not take into account a specific design issue that may have occurred in one of the potential transportation casks that may be used to bring spent fuel to the site.⁵⁵¹ But as noted above, the cask described in the contention is only approved for storage at a single ISFSI site and is already NRC-approved as compliant with Part 71 transportation requirements. The contention contains only a single generalized reference to the application and does not explain how the posited error (even if true) could affect, let alone alter, any conclusion in the ER regarding the environmental impacts of the proposed CISF. Furthermore, while the Petitioner's reference to the application suggests that the issue relates to "radiation risks from transportation," the associated bases appear to instead express concern with future waste disposal — that a flaw could lead to cladding defects that would render fuel "not acceptable by the DOE in a waste repository." For these reasons, and because the

⁵⁵⁰ *Crow Butte*, LBP-15-15, 81 NRC at 601 (citing *Changes to Adjudicatory Process*, 69 Fed. Reg. 2182, 2202 (Jan. 14, 2004)).

⁵⁵¹ *Sierra Club Petition* at 77–78.

Petitioner has not articulated a consistent rationale for why (or what particular aspect of) the Environmental Report is materially deficient, Sierra Club has not demonstrated a genuine dispute with the application under 10 C.F.R. § 2.309(f)(1)(vi).⁵⁵²

In sum, because Sierra Club has not demonstrated that proposed contention 12 meets the requirements of 10 C.F.R. § 2.309(f)(1)(iii), (iv), (v), and (vi), the Board should find it inadmissible.

(m) Sierra Club, Contention 13

The ER states that two species of concern, the Texas horned lizard and the dunes sagebrush lizard, have been seen at the ISP site or may be present. But there is no discussion of any studies or surveys to determine if the species are present and the impact of the project on those species. Therefore, the ER is inadequate in describing the affected environment.

This contention focuses on ISP's treatment in its ER of the Texas horned lizard and the dunes sagebrush lizard. The Sierra Club asserts that the ER inadequately describes the environment affected by the proposed CIS Facility, because the ER does not discuss the project's impact on the lizards and does not discuss studies or surveys to determine if the lizards are present at the project site. Petitioner also asserts that NRC guidance regarding environmental reviews for licensing actions "directs that the ER must discuss ... impacts to important species and their habitats."⁵⁵³ As discussed below, this contention is inadmissible because the Sierra Club fails to support the contention with facts or expert opinion and it fails to raise a genuine dispute with the applicant, in contravention of 10 C.F.R. § 2.309(f)(1)(v) and (vi).

This contention is inadmissible because the Petitioner fails to provide adequate support for its claim, as required by 10 C.F.R. § 2.309(f)(1)(v). The Sierra Club states that the Texas

⁵⁵² See *Millstone*, CLI-01-24, 54 NRC at 358.

⁵⁵³ Sierra Club Petition at 78. The referenced guidance appears in section 6.3.5 at 6-11 of NUREG-1748, not in section 5.3.5 as stated by the Petitioner.

horned lizard and the dunes sagebrush lizard are in the area of the proposed CIS Facility site. The Sierra Club, referencing ER 4.5.10, simply asserts that the ER provides “no factual support” to show that the proposed facility will not impact these species.⁵⁵⁴ However, it is the Petitioner’s obligation to present the factual information and expert opinion necessary to support its contention,⁵⁵⁵ and the Sierra Club does not provide any such support. Moreover, the Sierra Club misconstrues the information in ER 4.5.10, which actually states that “no significant impacts to aquatic systems are expected” and mentions that the lizards “either do not occur on the CISF or are highly adaptable.”⁵⁵⁶ Also, the ER in 4.5.8 discusses that the Texas horned lizard “has adapted to areas of human activities” and “although the area has some components of sand dune lizard habitat, various factors make it unsuitable.”⁵⁵⁷ Because the Sierra Club inaccurately states the contents of the application and includes no additional factual support for its position, the contention fails to meet the requirements of 10 C.F.R. § 2.309(f)(1)(v).

Sierra Club’s contention is also inadmissible because the Petitioner does not demonstrate that a genuine dispute exists on a material issue of law or fact, as required by 10 C.F.R. § 2.309(f)(1)(vi). The Sierra Club states that, according to sections 3.5.2 and 3.5.4 of the ER, the lizards are present at or near the proposed CIS Facility site.⁵⁵⁸ Without reference to surveys cited in section 3.5 of the ER, the Petitioner simply asserts that an “adequate survey” of the species “does not appear to have been ... conducted.”⁵⁵⁹ The Sierra Club does not explain how the surveys referred to in the ER contradict the ER’s description of the affected

⁵⁵⁴ *Id.*

⁵⁵⁵ *USEC, Inc.*, CLI-06-10, 63 NRC at 457.

⁵⁵⁶ ER at 4-38.

⁵⁵⁷ *Id.* at 4-37.

⁵⁵⁸ Sierra Club Petition at 79 (noting subsections in the ER within Section 3.5, “Ecological Resources,” which is in Chapter 3, “Description of the Affected Environment”).

⁵⁵⁹ *Id.*

environment regarding the lizards or the applicant's conclusion regarding potential impacts. Therefore, the Sierra Club does not establish a material dispute with the applicant.

Lastly, the Sierra Club asserts that the ER makes "unsupported statements" because "several sources" in the ER "are not described well enough" for the public to access them.⁵⁶⁰ But the Sierra Club does not explain the basis for this criticism (or even identify to which sources it is referring), let alone how this information creates a material dispute with the applicant, as required by 10 C.F.R. § 2.309(f)(1)(vi).

As a result, the Sierra Club has not met the requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi), and is therefore, inadmissible.

(n) Sierra Club, Contention 14

The containers in which the waste will be transported to and stored at the ISP site are licensed for a period of 20 years. ISP hopes to renew the license for an additional 40 years, and then apparently hoping for additional relicensing to the projected 100-year life of the CIS facility. However, many of the containers will already have been in service for years prior to being shipped to the ISP CIS facility. Furthermore, the Continued Storage Rule assumes that the spent fuel will be transferred to new containers after 100 years. ISP's proposal may present an unacceptable danger of radioactive release. Therefore, the ER must examine the environmental impact of the containers beyond their 20-year licensing period.

In Contention 14, the Sierra Club claims that the ER must discuss the environmental impacts of ISP's canister storage systems being used beyond their service life because of the possibility of "indefinite storage" at the ISP CISF.⁵⁶¹ In addition, the Sierra Club claims the "canisters to be used at the ISP facility cannot be inspected, repaired or repackaged."⁵⁶² Finally,

⁵⁶⁰ *Id.* (These sources are listed in subsection 3.5.16 of the ER at 3-40, not in 3.4.16 as the Petitioner states).

⁵⁶¹ *Id.* at 80.

⁵⁶² *Id.* at 81.

the Sierra Club alleges that the ER “makes no mention of dealing with damaged or leaking containers.”⁵⁶³

At the outset, the impacts regarding the continued storage of spent fuel beyond the license term of an ISFSI (*i.e.*, “indefinite” storage) have already been evaluated by the NRC in the Continued Storage GEIS.⁵⁶⁴ Here, ISP is seeking an initial license term of 40 years.⁵⁶⁵ The Continued Storage Rule is clear that the ER is “not required to discuss the environmental impacts of spent nuclear fuel storage in . . . an ISFSI for the period following the term of the . . . ISFSI license.”⁵⁶⁶ Contention 14 challenges whether the ER needs to include an evaluation of the possibility of indefinite storage of SNF at the ISP CISF. Such a challenge represents an inadmissible challenge to the Continued Storage Rule and is outside the scope of this proceeding.⁵⁶⁷

Contention 14 also alleges a deficiency in the ISP ER with respect to the inspection, maintenance, and potential repackaging of the canisters stored at the ISP facility. Here, the casks to be utilized at the ISP CISF have been previously approved by the NRC for a period of 20 years.⁵⁶⁸ Certificates may be renewed for periods up to 40 years.⁵⁶⁹ The SAR states that, based on the safety analysis associated with the storage systems to be utilized at the ISP facility, “there are no credible accident scenarios for the [ISP] CISF which would result in a loss of confinement accident or a radiological release in excess” of NRC requirements.⁵⁷⁰ ISP

⁵⁶³ *Id.* at 82.

⁵⁶⁴ See *generally* Continued Storage GEIS at 5-1 (Section 5.0, “Environmental Impacts of Away-From-Reactor Storage).

⁵⁶⁵ License Application at 1-5.

⁵⁶⁶ 10 C.F.R. § 51.23(b).

⁵⁶⁷ 10 C.F.R. §§ 2.309(f)(1)(iii), 2.335; see *Oconee*, CLI-99-11, 49 NRC at 334.

⁵⁶⁸ See SAR at 1-7 to 1-9.

⁵⁶⁹ 10 C.F.R. § 72.240(a).

⁵⁷⁰ SAR 1-16.

specifically claims that the design and operational considerations of the casks and CISF “preclude the release of radioactive materials from the canisters under all normal, off-normal, and credible accident conditions.”⁵⁷¹

With respect to the canisters, NRC regulations require SNF to be packaged in a matter that “allows handling and retrievability without the release of radioactive materials to the environment.”⁵⁷² Here, the SAR provides that “[s]torage and handling systems are designed to allow ready retrieval of the canisters” and “the cask/canister handling systems are designed . . . to ensure adequate safety under normal and accident conditions.”⁵⁷³ The SAR also provides that “[n]o repackaging of individual SNF assemblies [will be] performed at the [ISP] CISF.”⁵⁷⁴

In this case, because Contention 14 all but ignores the SAR’s discussion of retrievability, as well as inspection and maintenance activities, and in any event provides no basis to contradict that analysis, Contention 14 fails to establish a genuine dispute with the application and warrants dismissal pursuant to 10 C.F.R. § 2.309(f)(1)(vi). Contention 14 offers no facts or expert opinion regarding whether the canisters are likely to need repair or whether ISP must demonstrate the ability to repair damaged canisters. Instead, Contention 14 references an NRC Staff summary of a public meeting involving a safety discussion of stress corrosion cracking in storage canisters, during which the staff discussed inspection intervals for storage canisters based on the shortest possible timeframe a potential cracks could go through the wall of a canister.⁵⁷⁵ Not only does Contention 14 fail to explain the relevance of inspection intervals

⁵⁷¹ *Id.* at 6-2.

⁵⁷² 10 C.F.R. § 72.122(h)(5); see also 10 C.F.R. § 72.122(l) (requiring storage systems to be designed to allow “ready retrieval” of fuel “for further processing or disposal).

⁵⁷³ SAR at 3-20.

⁵⁷⁴ *Id.* at 11-4.

⁵⁷⁵ Sierra Club Petition at 81. See *Summary of August 5, 2014, Public Meeting With Nuclear Energy Institute* (ML14258A081) at 4 (“Based on estimated crack growth rates as a function of temperature and assuming the conditions necessary for stress corrosion cracking continue to be present, the shortest time that a crack could propagate and go through-wall was determined to be 16 years after

here, it also makes no attempt to explain how the SAR's analysis or conclusions with respect to stress corrosion cracking are deficient. Notably, the SAR includes a discussion of stress corrosion cracking as a specific consideration regarding the materials selection for the storage systems to be utilized at the CISF.⁵⁷⁶ The Petitioner neither cites nor disputes that discussion.

Further, Contention 14 concludes—without any factual basis—that the containers cannot be inspected. To the contrary, the SAR discusses both surveillance activities and routine maintenance of the casks in order to identify and resolve any issues.⁵⁷⁷ Instead of taking issue with the SAR, Contention 14 provides a general citation to the U.S. Nuclear Waste Technical Review Board's report regarding geologic repositories. But this report provides no support for the contention. Instead, the report contains several observations regarding, among other things, the importance of retrievability and monitoring in the design and operation of *geologic repositories*—not a storage facility like the proposed ISP CISF.⁵⁷⁸ Moreover, the NRC specifically requires that facilities licensed pursuant to 10 C.F.R. Part 72 have the ability to retrieve SNF and also to provide surveillance for storage systems.⁵⁷⁹

Finally, because Contention 14 fails to demonstrate a genuine dispute with the application, any additional claim that the ER is deficient in not addressing the possibility of

crack initiation. A 5-year inspection frequency would result in at least 2 inspections that would provide an opportunity to find indications of degradation and allow corrective actions to be implemented to prevent localized corrosion or stress corrosion cracking penetration of the canister.”).

⁵⁷⁶ See, e.g., SAR at A.3-9 (NUHOMS-MP187 Cask System), B.3-9 (NUHOMS Horizontal Modular Storage System), C.3-9 (NUHOMS 61BT System), D.3-9 (NUHOMS-61BTH Type 1 System), E.3-9 (La Crosse MPC storage system).

⁵⁷⁷ See generally SAR at 5-5 (Section 5.1.3.2, “Surveillance of the Storage Overpacks”); 5-5 to 5-6 (Section 5.1.3.5, “Maintenance Operations”); 5-7 (Section 5.1.5.5, “Maintenance Techniques”).

⁵⁷⁸ Nuclear Waste Technical Review Board, *Geologic Repositories: Performance Monitoring and Retrievability of Emplaced High-Level Radioactive Waste and Spent Nuclear Fuel* (May 2018) (available at https://www.nwtrb.gov/docs/default-source/reports/nwtrb_perfmonitoring.pdf?sfvrsn=6, also available at <https://go.usa.gov/xPJKZ>) at iv.

⁵⁷⁹ See 10 C.F.R. §§ 72.44(c)(3) & 72.122(l).

“damaged or leaking” canisters must also fail.⁵⁸⁰ In *Private Fuel Storage*, the Commission upheld the Board’s rejection of a similar issue where the contention “did no more than point out that *if* somehow there was a need to open a canister or remove its contents, PFS could not do so at its storage facility.”⁵⁸¹ Similarly, Contention 14 claims that the ER fails to account for the environmental consequences of the *mere possibility* that canisters will be (or later become) damaged. These allegations, for which the contention offers no factual support, fail to demonstrate a genuine dispute with the application on a material issue.⁵⁸²

(o) Sierra Club, Contention 15

The ER for the ISP CIS facility does not adequately investigate or analyze the impact of the CIS facility on minority and low income communities. Executive Order 12898 requires that the NEPA process include a discussion and analysis of the environmental justice impacts of the proposed action.

In Contention 15, Sierra Club asserts that the application fails to adequately analyze the environmental justice impacts of the proposed action on minority and low-income communities.⁵⁸³ First, relying on Executive Order 12898⁵⁸⁴ and *Louisiana Energy Services*, LBP-97-8,⁵⁸⁵ Sierra Club asserts that the applicant did not adequately consider environmental justice in its siting of the proposed ISP CISF.⁵⁸⁶ Second, Sierra Club challenges the adequacy

⁵⁸⁰ See Sierra Club Petition at 82.

⁵⁸¹ *Private Fuel Storage*, CLI-04-22, 60 NRC at 139 (emphasis in original) (concluding that the mere possibility of repackaging of fuel was “not enough to suggest that there were undiscussed NEPA ‘consequences’ to the storage facility”).

⁵⁸² 10 C.F.R. § 2.309(f)(1)(vi).

⁵⁸³ Sierra Club Petition at 83. The term “environmental justice” refers to the federal policy established in 1994 by Exec. Order 12,898, which directed federal agencies to identify and address “disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations.” Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations, Exec. Order No. 12,898, 59 Fed. Reg. 7629 (Feb. 16, 1994) (E.O. 12898).

⁵⁸⁴ 59 Fed. Reg. 7629 (Feb. 16, 1994).

⁵⁸⁵ 45 NRC 367 (1997).

⁵⁸⁶ Sierra Club Petition at 83–89.

of the applicant's use of a 4-mile radius for its analysis of environmental justice impacts in the ER and the ER's conclusion, in the intervenor's words, "that the project will have no environmental justice impact."⁵⁸⁷ Finally, Sierra Club asserts that the ER is inadequate because the ER contains no discussion of environmental justice impacts from the transportation of waste through the cities of Hobbs, Eunice, and Jal, New Mexico.⁵⁸⁸ This contention is inadmissible because the Petitioner fails to show that the concerns raised are material to the findings the Staff must make relative to the proposed action, as required by 10 C.F.R. § 2.309(f)(1)(iv), and fails to provide adequate support for its claims, as required by 10 C.F.R. § 2.309(f)(1)(v).

Sierra Club asserts that the site-selection process employed by ISP and described in the ER was inadequate because only two of 11 site-selection criteria were related to environmental justice, and one of these two criteria pertains to community support, which is not commensurate with consideration of minority communities.⁵⁸⁹ Sierra Club also argues that the ER's description of environmental justice considerations relating to site selection was inadequate with respect to some potential sites.⁵⁹⁰ It is true that the applicant must evaluate alternatives to the proposed action (as the ER does in Chapter 2) and must also identify and quantify any impacts on low-income and minority populations (as the ER does in Chapter 4 and Appendix A). However, with respect to an applicant's environmental justice analysis, the Petitioner fails to show how the inadequacy it asserts is contrary to any particular site selection investigation or process required by the NRC or by NEPA.

Sierra Club cites *Louisiana Energy Services*, LBP-97-8, in which a licensing board required a further investigation into racial discrimination in siting of a proposed project, as

⁵⁸⁷ *Id.* at 83, 89–89.

⁵⁸⁸ *Id.* at 90–91.

⁵⁸⁹ *Id.* at 86–87.

⁵⁹⁰ *Id.* at 87–89.

“provid[ing] important guidance as to the proper analytical framework to decide environmental justice issues that arise in nuclear licensing proceedings, including the need to avoid or mitigate any discriminatory effect of the original site selection process.”⁵⁹¹ Sierra Club states that this decision explains “what a licensing applicant must do to ensure that the site selection process for storage of nuclear material does not have a disparate impact on a minority population.”⁵⁹² However, Sierra Club fails to acknowledge the Commission’s reversal of the licensing board’s holding with respect to environmental justice considerations in a project site selection process.

In *Louisiana Energy Services*, CLI-98-3,⁵⁹³ the Commission overturned the licensing board’s determination that the Staff’s environmental review was inadequate because it did not consider racial discrimination in siting. The Commission explained that Executive Order 12898 establishes no new rights or remedies, and merely reinforces the requirements of existing law—in this case, NEPA.⁵⁹⁴ Observing that the licensing board’s approach “stretches NEPA to the breaking point,”⁵⁹⁵ the Commission noted that the licensing board’s approach was also incompatible with Council on Environmental Quality (CEQ) guidance for implementing Executive Order 12898, which “focuses exclusively on identifying and adequately assessing the *impacts* of the proposed actions on minority populations, low-income populations, and Indian Tribes.”⁵⁹⁶

⁵⁹¹ *Id.* at 84.

⁵⁹² *Id.* at 83–84.

⁵⁹³ 47 NRC 77 (1998).

⁵⁹⁴ *Id.* at 102.

⁵⁹⁵ *Id.* at 104.

⁵⁹⁶ *Id.* at 102 (emphasis in original). The Commission also found that the licensing board’s approach would go beyond what the CEQ has stated is required of an agency considering a license application, noting that an EIS must rigorously explore all reasonable alternatives, but “for those alternatives that have been eliminated from detailed study, the EIS is required merely to briefly discuss why they were ruled out. . . . Where (as here) a federal agency is not the sponsor of a project, the federal government’s consideration of alternatives may accord substantial weight to the preferences of the applicant and/or sponsor in the siting and design of the project.” *Id.* (quoting *City of Grapevine*, 17 F.3d at 1507, *cert. denied*, 513 U.S. 1043 (1994)) (internal quotations omitted).

Accordingly, the authorities on which Sierra Club relies fail to demonstrate why an applicant's evaluation of environmental justice impacts requires any more specific form of investigation or community outreach concerning site selection.⁵⁹⁷

Sierra Club next argues that the applicant's ER is inadequate because it assesses environmental justice impacts within a 4-mile radius of the WCS CISF project and concludes that because the minority population within that radius is less than 50% minority, there is no environmental justice impact from the proposed project.⁵⁹⁸ However, Sierra Club does not challenge the adequacy of the analysis performed by the applicant, but rather asserts that the ER should consider the impacts to nearby Lea County, New Mexico, much of which is within 30 miles of the WCS CISF site, and which contains three cities with minority populations approaching or exceeding 50%.⁵⁹⁹ Sierra Club argues that this is "a reasonable area for purposes of environmental justice considerations" because "the EIS for Yucca Mountain designated a 50-mile radius as the relevant area to be considered for health and safety."⁶⁰⁰

The NRC's policy statement on environmental justice, which incorporates the Commission's decisions in *Louisiana Energy Services* and *Private Fuel Storage*, commits to implementing the principles in Executive Order 12898 through existing NRC guidance, including NUREG-1748.⁶⁰¹ Section 6.4.11 of NUREG-1748 provides that the ER should follow the detailed guidance in Appendix C, including "a discussion of the methods used to identify and quantify impacts on low-income and minority populations, the location and significance of any

⁵⁹⁷ See *Louisiana Enrichment Services*, CLI-98-3, 47 NRC at 101 (reversing the Board's requirement of an NRC Staff investigation into racial discrimination in LBP-97-8, 45 NRC 367 (1997)); see also *Private Fuel Storage*, LBP-98-7, 47 NRC at 203 (1998) (ruling inadmissible a contention seeking to litigate discrimination in site selection process).

⁵⁹⁸ Sierra Club Petition at 89–90.

⁵⁹⁹ *Id.* at 90.

⁶⁰⁰ *Id.*

⁶⁰¹ NRC Policy Statement on the Treatment of Environmental Justice Matters in NRC Regulatory and Licensing Actions, 69 Fed. Reg. 52,040 (Aug. 24, 2004).

environmental impacts during construction on populations that are particularly sensitive, and any additional information pertaining to mitigation.”⁶⁰² Appendix C of NUREG-1748 provides that if a facility is located outside the city limits or in a rural area, a radius of approximately 4 miles (50 square miles) should be used.”⁶⁰³ Appendix C states, “[i]f the percentage in the block groups significantly exceed that of the state or county percentage for either minority or low-income population, environmental justice will have to be considered in greater detail.”⁶⁰⁴

The ER contains such an analysis. Section 3.10 provides summarized information about the socioeconomic conditions in the counties encompassing and adjoining the ISP CISF and refers to Appendix A of the ER for detailed information.⁶⁰⁵ Section 1.1.10 of Appendix A identifies minority and low-income populations that may be impacted by the proposed ISP CISF, using a four-mile radius from the proposed facility, consistent with the guidance in NUREG-1748, Appendix C.⁶⁰⁶ The applicant also included data for the city of Eunice, New Mexico, the nearest city to the proposed project within Lea County, New Mexico.⁶⁰⁷ In Table 1-28 of Appendix A to the ER, the applicant presents the site-specific thresholds in New Mexico and Texas for minority populations.⁶⁰⁸ In Tables 1-29 and 1-30 of Appendix A to the ER, the applicant presents the site-specific thresholds in New Mexico and Texas for low-income

⁶⁰² NUREG-1748 at 6-25.

⁶⁰³ *Id.* at C-4.

⁶⁰⁴ *Id.* (“As a general matter (and where appropriate), staff may consider differences greater than 20 percentage points to be significant. Additionally, if either the minority or low-income population percentage exceeds 50 percent, environmental justice will have to be considered in greater detail.”).

⁶⁰⁵ ER at 3-63 to 3-65.

⁶⁰⁶ ER, Appendix A, at 1-39 to 1-44.

⁶⁰⁷ *Id.*

⁶⁰⁸ *Id.* at 1-42.

populations.⁶⁰⁹ The applicant subsequently evaluates the impact on these populations in ER Section 4.11 and Appendix A, Section 2.6.1.⁶¹⁰

Although Sierra Club advocates a larger radius for assessment of environmental justice impacts, it does not present factual or expert support to show why the applicant's adherence to the 4-mile radius guideline in NUREG-1748 fails to comply with NRC requirements or NEPA. Sierra Club observes that there are communities within a broader 30-mile radius that contain large minority populations. However, because Sierra Club does not explain in what way such communities would be adversely impacted by the facility, it fails to demonstrate why an area of assessment broader than 4 miles is required, whether 30, 50, or otherwise.⁶¹¹ Sierra Club argues that a 30-mile radius is appropriate because the Yucca Mountain EIS designated a 50-mile radius as the relevant area of consideration for health and safety impacts, and because "40,000 MTU of waste [will be] stored at the ISP site without the protections of a permanent repository."⁶¹² But Sierra Club does not explain why radiological health and safety impacts presented by the Yucca Mountain project make a 30 mile radius appropriate, let alone required, for a different analytical purpose (environmental justice impacts) at a different facility with a different volume of waste. A petitioner cannot simply rely on "conclusory allegations about potential radiological harm," but must show "*how* these various harms might result from the [proposed action]."⁶¹³ Because the environmental justice analysis is to assess potential *disproportionate* impacts on EJ communities, it is insufficient for the petitioner to simply assert

⁶⁰⁹ *Id.* at 1-43 to 1-44.

⁶¹⁰ ER at 4-54.

⁶¹¹ See NUREG-1748, Appendix C, at C-4 & n.3 (nature of the materials facility and geographic scale of facility's impacts are relevant factors for determining the area for assessment).

⁶¹² Sierra Club Petition at 90.

⁶¹³ *Detroit Edison Co. (Fermi Power Plant ISFSI)*, LBP-09-20, 70 NRC 565, 577 (2009) (citing *Commonwealth Edison Co. (Zion Nuclear Power Station, Units 1 and 2)*, CLI-99-4, 49 NRC 185, 192 (1999)) (emphasis added).

that EJ communities may exist within some distance from a proposed facility; rather, the petitioner must articulate how potential impacts from the project have been inadequately considered. Without explaining what plausible impacts have been unanalyzed, Sierra Club fails to show why its preference for a different radius is material – i.e., why it would make a difference to the ER’s assessment of environmental justice impacts.⁶¹⁴

For similar reasons, Sierra Club fails to identify a genuine dispute with the impacts analyzed in the ER, contrary to 10 C.F.R. § 2.309(f)(1)(vi). The only category of impacts Sierra Club mentions is its assertion that the ER is inadequate because it does not contain a discussion of environmental justice impacts from the transportation of waste through the cities of Hobbs, Eunice, and Jal, New Mexico.⁶¹⁵ Sierra Club states that “anyone who lives in those cities is well within the 4-mile distance from the rail lines for environmental justice analysis.”⁶¹⁶ But as the Staff explains in its response to the Joint Petitioners’ Contention 5, the area for assessment of environmental justice impacts is based on the location of the facility itself.⁶¹⁷ Where a licensing action may have impacts on the environment from transportation of materials, these impacts will be described in the section of the applicant’s ER or the Staff’s environmental review document pertaining to transportation impacts. The Applicant describes the potential impacts from transportation in Section 4.2 of the ER,⁶¹⁸ and finds that “[t]he radiological environmental impacts attributable to the transport of SNF from the decommissioned reactor sites are insignificant.”⁶¹⁹ The ER concludes that the impacts from transportation will be

⁶¹⁴ 10 C.F.R. § 2.309(f)(1)(iv).

⁶¹⁵ Sierra Club Petition at 90–91.

⁶¹⁶ *Id.* at 90.

⁶¹⁷ See NUREG-1748, Appendix C, at C-4 & n.3. This guidance document is applicable to all categories of facilities regulated by the Office of Nuclear Material Safety and Safeguards (NMSS) of the NRC.

⁶¹⁸ See ER at 4-3 to 4-28.

⁶¹⁹ *Id.* at 4-10.

small.⁶²⁰ Sierra Club contention does not identify, let alone directly dispute, that analysis, much less explain why it reveals any potential disproportionate impact on environmental justice communities. Accordingly, the contention fails to meet the requirements of 10 C.F.R. § 2.309(f)(1)(vi). Further, the excerpted article Sierra Club relies on consists only of speculative or conclusory statements regarding the potential radiological consequences of a highway or rail accident and the political, technical, and environmental challenges posed by the end of the nuclear fuel cycle.⁶²¹ “[N]either mere speculation nor bare or conclusory assertions, even by an expert, alleging that a matter should be considered will suffice to allow the admission of a proffered contention.”⁶²²

In sum, because this contention does not meet the requirements of 10 C.F.R. § 2.309(f)(1)(iv), (v), and (vi), this contention is inadmissible.

(p) Sierra Club, Contention 16

Since the 1990’s almost all spent nuclear fuel being generated is high burnup fuel (HBF). HBF causes the cladding to become thinner, creating a higher risk of release of radioactive material. The cladding also becomes more brittle, with additional cracks. This situation causes risks for short-term and long-term dry storage. The SAR, 1.2.4, claims that the cask system to be used for the transportation and storage for the ISP CIS facility will not contain HBF. But the prevalence of HBF requires that the cask systems will need to contain HBF at some point. The SAR and ER must evaluate the risks of HBF.

In Contention 16, Sierra Club broadly asserts that the application does not specifically address the transportation and storage risks of high burnup fuel.⁶²³ The Petitioner claims the application, in its current form, does not permit high burnup fuel, but that because most newly

⁶²⁰ *Id.* at 4-70.

⁶²¹ See Sierra Club Petition at 91 (quoting Dean Kyne and Bob Bolin, *Emerging Environmental Justice Issues in Nuclear Power and Radioactive Contamination*, Int’l J. of Env’tl. Res. & Pub. Health (Jul. 12, 2016)).

⁶²² *Vogtle*, LBP-07-3, 65 NRC at 253 (citing *Fansteel*, CLI-03-13, 58 NRC at 203).

⁶²³ Sierra Club Petition at 91.

generated spent fuel is considered high burnup, both the safety analysis report and environmental report must specifically address the challenges that arise from its use.⁶²⁴ In support of its contention, Petitioner claims that challenges from high burnup fuel increase the likelihood of radiological impacts, citing two different reports by the Department of Energy and the Nuclear Waste Technical Review Board, and that based on a decision from the D.C. Circuit⁶²⁵, the “[Environmental Report] and [Safety Analysis Report] must discuss and evaluate the risks of transporting and storing [high burnup fuel] due to deterioration of the cladding from [high burnup fuel].”⁶²⁶

Contention 16 is inadmissible because the Petitioner has not, under either safety or environmental standards, demonstrated a genuine dispute with the application on a material issue of fact or law or shown that the issues raised are within the scope of the proceeding, contrary to the requirements of 10 C.F.R. § 2.309(f)(1)(vi) and (iii).

As an initial matter, Petitioner relies heavily on the assumption that the application does not discuss or contemplate the impacts that may result from the transportation and storage of high burnup fuel at the site. However, this does not square with the proposed license or its reference to Section 1.2.4 of the applicant’s safety analysis report. Section 1.2.4 of the safety analysis report states that the approved systems may be used with “an additional limitation on *uncanned* high burnup fuel.”⁶²⁷ Similarly, Item 9 of the proposed license requires that “all fuel with assembly average burnup greater than 45 GWd/MTHM shall be canned inside the canister.”⁶²⁸ Canning of spent nuclear fuel, especially in the case of damaged fuel, is a method

⁶²⁴ *Id.* at 91.

⁶²⁵ *Id.* at 95.

⁶²⁶ *Id.* at 93–95.

⁶²⁷ SAR at 1-6. Additionally, taking Petitioner’s assertions as true, that high burnup fuel is not currently included in the application for the facility, the Petitioner has not raised an issue that is ripe. See *McGuire/Catawba*, CLI-02-14, 55 NRC at 294–95; *Kleppe*, 427 U.S. 390.

⁶²⁸ License Application, Chapter 13 “Proposed License Conditions,” Attachment A at 2.

of compensating for damaged cladding.⁶²⁹ In short, because the Petitioner fails to acknowledge, let alone dispute, the application's description of high burnup fuel and its associated provisions for (and limitations on) its handling, the contention is inadmissible under 10 C.F.R. § 2.309(f)(1)(vi) for failing to identify a genuine dispute with the application.⁶³⁰

Similarly, although the Petition asserts various concerns related to high burnup fuel, it fails to specify what portions of the application the Petitioner deems insufficient, as required by 10 C.F.R. § 2.309(f)(1)(vi). The general topic with which the contention appears to be concerned, the potential environmental impacts of spent fuel transportation, is in fact addressed in the Environmental Report's discussion of transportation impacts in Subsection 4.2. The contention does not cite this or any other section of the ER and thus fails to explain how the arguments in the contention would contradict or undermine any specific aspect of the applicant's analysis.

(i) Transportation and Storage Safety Claims

Regarding transportation safety, the WCS/ISP application is for a specific-license ISFSI licensed under 10 C.F.R. Part 72.⁶³¹ The application does not request approval of a new

⁶²⁹ See NUREG-1092 at I-4 (ML091050510) ("Furthermore, the assessment shows that for the long-term storage of spent fuel the cladding integrity need not be maintained if additional confinement is provided.").

See *also* Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High-Level Radioactive Waste, 53 Fed. Reg. 31,651, 31,655 (Aug. 19, 1988) (noting that the insertion of canning in 72.122(h)(1) was specifically to provide an alternative means for confinement of fuel material, a function otherwise accomplished by the cladding); Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High-Level Radioactive Waste, 51 Fed. Reg. 19,106, 19,108 (May 27, 1986).

⁶³⁰ See *Palo Verde*, CLI-91-12, 34 NRC at 156 (petitioners must "read the relevant parts of the license application and show where the application is lacking."); *Crow Butte*, CLI-09-12, 69 NRC at 552 ("contentions based on little more than guesswork would waste the scarce adjudicatory resources of all involved"). Here, the Petitioner has referenced only one sentence in the application and failed to include any discussion of the actual discussion provided in the ER.

⁶³¹ Interim Storage Partner's Waste Control Specialists Consolidated Interim Storage Facility, 83 Fed. Reg. 44,070, 44,070 (Aug. 29, 2018) ("The NRC received, by letter dated April 28, 2016, an application from WCS for a specific license pursuant to 10 CFR part 72, 'Licensing Requirements for

transportation package design.⁶³² The safety of fuel transportation is governed by the standards in 10 C.F.R. Part 71 and through regulations issued by the Department of Transportation.⁶³³ Consequently, to the extent the contention seeks to litigate generic safety concerns regarding offsite transportation of spent fuel (whether encompassing HBF or otherwise), such claims are outside the scope of this proceeding.⁶³⁴

As discussed earlier, the proposed license includes an express limitation on the use of high burnup fuel at the proposed facility.⁶³⁵ Canning is a method explicitly acknowledged by 10 C.F.R. § 72.122(h) as a means of confining the fuel such that degradation of the fuel during storage will not pose operational safety problems with respect to its removal from storage.⁶³⁶ Despite asserting an omission from the application, the Petitioner has failed to acknowledge this limitation, much less explain why it is insufficient to address the contention's concerns about the safety of either storage or transportation of HBF; this constitutes a failure to articulate a genuine dispute with the application as required by 10 C.F.R. § 2.309(f)(1)(vi).

the Independent Storage of Spent Nuclear Fuel, High-Level Radioactive Waste, and Reactor-Related Greater Than Class C Waste.”).

⁶³² *Id.*

⁶³³ See 10 C.F.R. § 71.0, “Purpose and scope.” See also *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-99-34, 50 NRC 168, 176–177 (1999) (noting that “shipment of spent nuclear fuel [is] governed by Part 71 and do[es] not require a specific license under Part 72”).

⁶³⁴ See *id.*; *State of New Jersey* (Department of Law and Public Safety’s Requests Dated October 8, 1993), CLI-93-25, 38 NRC 289, 294 (1993); *Trustees of Columbia University in the City of New York*, ALAB–50, 4 AEC 849, 863 (1972) (noting that DOT regulations govern the safety of radioactive material transportation).

⁶³⁵ License Application, Chapter 13 “Proposed License Conditions,” Attachment A at 2.

⁶³⁶ See also *Shipments of High Level Nuclear Power Plant Waste*, DD-84-9, 19 NRC at 1092 (denying request to halt all shipments of nuclear fuel on the basis that requirements for canning provided adequate protection for public health and safety).

(ii) Transportation and Storage Environmental Claims

Concerning the potential environmental claims, Petitioner appears to assert a contention of omission.⁶³⁷ If a petitioner proposes a contention of omission, and the allegedly missing information is included in the license application, the proposed contention will have failed to raise a genuine dispute.⁶³⁸ Even assuming that the potential environmental impacts of high burnup fuel are within the scope of the environmental review, the Petition fails to raise a genuine dispute of material fact because potential impacts of transportation and storage are described in the Applicant's Environmental Report, and the Petition fails to specify how its claims regarding high burnup fuel actually contradict the ER.

First, with respect to transportation, as stated earlier, general requirements that govern the transportation of spent fuel are established in the Commission's regulations in 10 C.F.R. Part 71 and regulations promulgated by the Department of Transportation. According to the Environmental Report, the analysis WCS performed on the consequences of incident-free transportation is based upon the maximum dose rate permitted for exclusive use shipments.⁶³⁹ The Petition fails to articulate a dispute with the applicant's approach in this analysis. And to the extent the Petition contends that doses from shipments that comply with these transportation regulations are inadequately protective, such a challenge would fall outside the scope of this hearing as an impermissible collateral attack on the rule itself and the associated NEPA review.⁶⁴⁰

⁶³⁷ Sierra Club Petition at 95 ("Neither the SAR nor the ER discuss at all the likelihood of the impacts of HBF being transported to and stored at the ISP CIS facility.").

⁶³⁸ See *Millstone*, LBP-04-15, 60 NRC at 95.

⁶³⁹ 10 C.F.R. § 71.47; ER at 4-13 ("The incident-free transportation doses were calculated for populations located within 800 meters (one-half mile) along either side of the transportation routes using the RADTRAN software. Incident-free doses were calculated using the maximum dose rate allowed for exclusive use shipments under NRC regulations . . .").

⁶⁴⁰ 10 C.F.R. § 2.335.

Moreover, the Petitioner has not acknowledged, let alone contradicted, the analysis of the radiological impact of accidents provided in the Environmental Report for high burnup fuel. Section 4.2.8 of the ER discusses the potential radiological consequences of transportation accidents, and Petitioner has not raised a dispute as to how high burnup fuel, let alone canned high burnup fuel, would be uniquely impacted by such an accident, considering the requirements in Part 71 must still be met.⁶⁴¹ The Petitioner's failure to specify a dispute with the contents of the application thus lacks the necessary support for a contention of omission with respect to the environmental impacts of transportation or storage of spent fuel.

Moreover, storage of high burnup fuel is subject to the same standards as other forms of spent fuel, and Section 4.12.2 of the Environmental Report discusses the impacts to public and occupational health from facility operation. The Petitioner does not specify any dispute with this analysis and, in any event, has not described a mechanism as to how asserted cladding defects associated with HBF, especially for canned fuel, could fail to meet NRC regulations or ultimately affect the ER's conclusions regarding potential impacts to members of the public.

In short, the Petitioner fails to acknowledge the evaluations provided in the ER and instead only summarily asserts that concerns with high burnup fuel must be "discuss[ed] and evaluate[d]" in the ER. Such an issue does not present a concrete, focused issue for litigation, and therefore, the Petitioner has not put forward an admissible contention.⁶⁴²

Consequently, because Contention 16 either raises issues that are not within the scope of the hearing or fails to provide sufficient information to demonstrate a genuine dispute with the application, it must be found inadmissible.

(q) Sierra Club, Contention 17

Sierra Club adopts all contentions presented by Don't Waste Michigan, Citizens for Alternatives to Chemical Contamination, Public Citizen, Inc., San Luis Obispo

⁶⁴¹ ER at 4-23 to 4-25.

⁶⁴² *Peach Bottom*, ALAB-216, 8 AEC at 20–21.

Mothers for Peace, Nuclear Energy Information Service, Citizens' Environmental Coalition, Sustainable Energy and Economic Development (SEED) Coalition, and Leona Morgan, Individually, in their Petition to Intervene in this proceeding.

The NRC Staff has no objection to this request.

Conclusion

For the foregoing reasons, the NRC Staff respectfully requests the Board to grant, in part, the petitions filed by the Sierra Club, and to dismiss the petitions filed by the Joint Petitioners.

Respectfully submitted,

/Signed (electronically) by/

Sara B. Kirkwood
Counsel to the Staff
Mail Stop: O-14-A44
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
Telephone: (301) 287-9187
E-mail: Sara.Kirkwood@nrc.gov
Signed December 10, 2018

Executed in Accord with 10 CFR 2.304(d)

Joe I. Gillespie III
Counsel to the Staff
Mail Stop: O-14-A44
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
Telephone: (301) 287-9184
E-mail: Joe.Gillespie@nrc.gov
Signed December 10, 2018

Executed in Accord with 10 CFR 2.304(d)

Emily Monteith
Counsel to the Staff
Mail Stop: O-14-A44
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
Telephone: (301) 415-0926
E-mail: Emily.Monteith@nrc.gov
Signed December 10, 2018

Executed in Accord with 10 CFR 2.304(d)

Alana M. Wase
Counsel to the Staff
Mail Stop: O-14-A44
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
Telephone: (301) 287-9095
E-mail: Alana.Wase@nrc.gov
Signed December 10, 2018

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

INTERIM STORAGE PARTNERS

(WCS Consolidated Interim Storage Facility)

Docket No. 72-1050

CERTIFICATE OF SERVICE

Pursuant to 10 C.F.R § 2.305 I hereby certify that copies of the foregoing "NRC Staff's Consolidated Response to Petitions to Intervene and Requests for Hearing Filed By Don't Waste Michigan, et al., and the Sierra Club," dated December 10, 2018, have been served upon the Electronic Information Exchange (the NRC's E-Filing System), in the above-captioned proceeding, this 10th day of December, 2018.

Respectfully submitted,

/Signed (electronically) by/

Sara B. Kirkwood
Counsel to the Staff
Mail Stop: O-14-A44
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
Telephone: (301) 287-9187
E-mail: Sara.Kirkwood@nrc.gov
Signed December 10, 2018

Dated in Arlington, VA
this 10th day of December 2018