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EIS002291

San Bernadino, CA 2/22/00
Exhibit 1-4
Halstead, Robert

**STATEMENT OF ROBERT J. HALSTEAD ON BEHAL. --
THE STATE OF NEVADA AGENCY FOR NUCLEAR PROJECTS
REGARDING U.S. DEPARTMENT OF ENERGY (DOE) DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS) FOR A GEOLOGIC REPOSITORY FOR THE DISPOSAL OF SPENT NUCLEAR FUEL AND HIGH-LEVEL RADIOACTIVE WASTE AT YUCCA MOUNTAIN, NEVADA**

**PRESENTED AT THE PUBLIC HEARING IN
SAN BERNARDINO, CALIFORNIA
FEBRUARY 22, 2000**

San Bernardino, California, is an especially appropriate location for a public hearing on DOE's Yucca Mountain draft EIS. California will be heavily impacted by the transportation of spent nuclear fuel (SNF) and high-level radioactive waste (HLW) to the proposed repository. San Bernardino will likely be one of the most heavily affected cities in California. Under several scenarios evaluated in the DEIS, all of the shipments to Yucca Mountain would pass through San Bernardino County.

1 The DEIS fails to identify the specific transportation routes through California evaluated by DOE contractors as part of the analyses reported in Chapter 6 and Appendix J. The manner in which the comment period and public hearings were
2 noticed by DOE was and is misleading and intended to suppress public participation and public comments. In January, DOE decided to reveal state route maps on its website at http://www.ymp.gov/timeline/eis/routes/ca_b_r00.pdf. Attachment 1 shows DOE's California map. DOE has not, however, provided information on the projected types and
3 numbers of shipments along each route. Based on data in DEIS Tables J-5 and J-6, the Nevada Agency for Nuclear Projects has calculated the probable SNF and HLW volume flows along each major cross-country route to Yucca Mountain.

DOE contractors evaluated a preferred highway route to Yucca Mountain from California and Utah, I-15 to US95 via the new Las Vegas Beltway, and six alternative highway routes. Under DOE's mostly truck scenario, about 12,900 truck shipments (13% of the total) travel through California over 39 years, an average of just under 1 truck per day. (See Table 1) Under four of the six alternative routing scenarios, all 96,000 truck shipments travel through San Bernardino County, an average of about six shipments per day. The primary routes from California reactors are I-5, I-10, and I-210 through the Los Angeles metropolitan area to I-15, joined by out-of-state shipments on I-10 and I-40 at San Bernardino and Barstow.

DOE did not identify a preferred route rail, but evaluated four routing options for potential new rail spurs in Nevada. Under DOE's mostly rail scenario, the number of shipments through California ranges from about 1,300 to 4,100, an average of 1 to 2 shipments per week over four decades, depending on rail spur location. (See Tables 2, 3, 4, & 5) Primary rail routes include the UP lines through Sacramento, Roseville, Fresno, Los Angeles, San Bernardino, and Barstow; and the BNSF lines through Riverside and San Bernardino. In addition to these rail shipments, there would also be 44 truck shipments from Humboldt Bay on I-5 to I-15.

Nevada Agency for Nuclear Projects staff and contractors critically reviewed DOE's shipment scenarios and routing assumptions. Based on these analyses, Nevada believes that the maximum credible number of truck shipments through California is about 74,000 over 39 years, an average of about 5 trucks per day. (See Table 6) Nevada believes the most likely national transportation scenario will involve each reactor shipping by truck or by rail according to its current capabilities, and a consolidated southern routing strategy which concentrates shipments on I-40 and the BNSF and UP mainlines through Arizona. Under Nevada's current capabilities scenario, California would be traversed by a total of 26,400 truck shipments and 9,800 rail shipments, a combined average of about 2.5 shipments per day over 39 years. (See Tables 7 & 8)

Nevada's comprehensive comments on transportation safety and security are available on the web at www.state.nv.us/nuclwaste.

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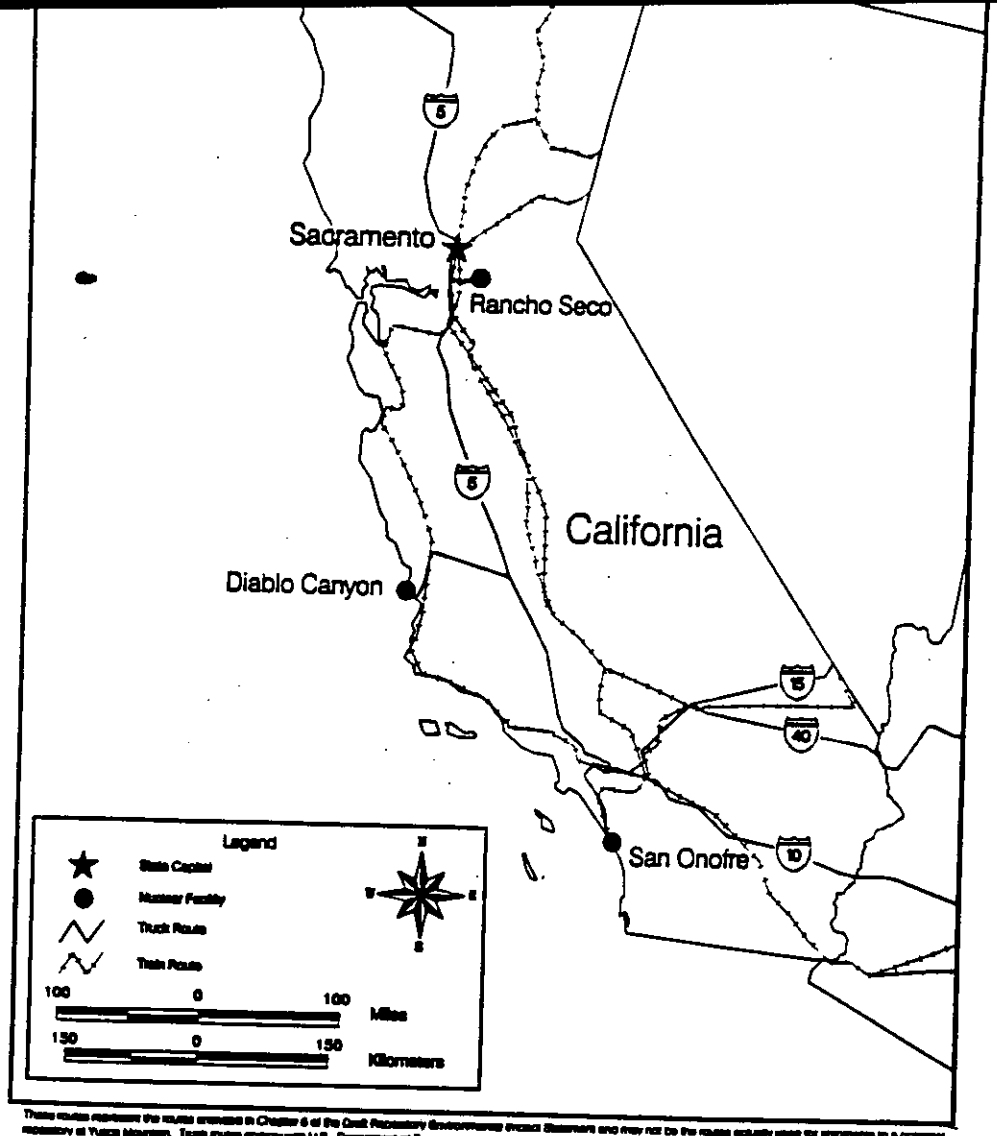

These routes represent the routes analyzed in Chapter 6 of the Draft Repository Environmental Impact Statement and may not be the routes actually used for shipments to a potential repository at Yucca Mountain. Truck routes comply with U.S. Department of Transportation routing regulations. Rail routes are based on determining the distance on mainline track and minimizing the overall distance and number of interchanges between railroads. Direction arrow is approximate.

TABLE 1		
YMDEIS TRANSPORTATION IMPACTS		
RAIL AND TRUCK SHIPMENTS THROUGH CALIFORNIA		
DOE NATIONAL MOSTLY TRUCK SCENARIO		
DOE BASE CASE ROUTING (TRW1999u Data, Ch. 4, file.bt.map.prn)		
	PROPOSED ACTION (2010 - 2033)	MODULES 1&2 (2010 - 2048)
SHIPMENTS USING I-5/I-10/I-15 CORRIDOR		
Humboldt Bay(CA)	44	44
Rancho Seco(CA)	124	124
Diablo Canyon(CA)	632	1308
San Onofre(CA)	867	1284
Corridor Subtotal	1667	2760
SHIPMENTS ENTERING ON I-40 CORRIDOR		
Farley(AL)	633	1126
Arkansas(AR)	634	963
Grand Gulf(MS)	516	1016
Comanche Peak(TX)	559	1558
Corridor Subtotal	2342	4663
SHIPMENTS ENTERING ON I-10 CORRIDOR		
Palo Verde(AZ)	1018	2498
River Bend(LA)	324	823
Waterford(LA)	313	675
South Texas(TX)	485	1448
Corridor Subtotal	2140	5444
CALIFORNIA TOTAL	6149	12867

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TABLE 2
YMDEIS TRANSPORTATION IMPACTS
RAIL AND TRUCK SHIPMENTS THROUGH CALIFORNIA
DOE NATIONAL MOSTLY RAIL SCENARIO
DOE RAIL ROUTING TO YM VIA CALIENTE (TRW1999u Data, Ch. 4, file.ca_rail.prn)

	PROPOSED ACTION (2010 - 2033)	MODULES 1&2 (2010 - 2048)
RAIL SHIPMENTS FROM CALIFORNIA		
Diablo Canyon (CA) (UP)	200	343
Rancho Seco(CA)(UP)	21	21
San Onofre(CA)(BNSF)	143	207
RAIL SHIPMENTS FROM ARIZONA		
Palo Verde(AZ)(UP)	156	350
South Texas(TX)(UP)	151	358
TOTAL RAIL SHIPMENTS	671	1279
TRUCK SHIPMENTS FROM CALIFORNIA		
Humboldt Bay(CA)	44	44

TABLE 3
YMDEIS TRANSPORTATION IMPACTS
RAIL AND TRUCK SHIPMENTS THROUGH CALIFORNIA
DOE NATIONAL MOSTLY RAIL SCENARIO
DOE RAIL ROUTING TO YM VIA BEOWAWE (TRW1999u Data, Ch. 4, file.be_rail.prn)

	PROPOSED ACTION (2010 - 2033)	MODULES 1&2 (2010 - 2048)
RAIL SHIPMENTS FROM CALIFORNIA		
Diablo Canyon (CA) (UP)	200	343
Rancho Seco(CA)(UP)	21	21
San Onofre(CA)(BNSF)	143	207
RAIL SHIPMENTS FROM ARIZONA		
Palo Verde(AZ)(UP)	156	350
RAIL SHIPMENTS FROM OREGON		
Trojan (OR)(BNSF)	33	33
WPPSS (WA)(BNSF)	53	107
DOE-Hanford SNF(WA)(BNSF)	147	157
DOE-Hanford HLW(WA)(BNSF)	400	2900
TOTAL RAIL SHIPMENTS	1153	4118
TRUCK SHIPMENTS FROM CALIFORNIA		
Humboldt Bay(CA)	44	44

TABLE 4
YMDEIS TRANSPORTATION IMPACTS
RAIL AND TRUCK SHIPMENTS THROUGH CALIFORNIA
DOE NATIONAL MOSTLY RAIL SCENARIO
DOE RAIL ROUTING TO YM VIA JEAN (TRW1999u Data, Ch. 4, file.je_rail.prn)

	PROPOSED ACTION (2010 - 2033)	MODULES 1&2 (2010 - 2048)
RAIL SHIPMENTS FROM CALIFORNIA		
Diablo Canyon (CA) (UP)	200	343
Rancho Seco(CA)(UP)	21	21
San Onofre(CA)(BNSF)	143	207
RAIL SHIPMENTS FROM ARIZONA		
Palo Verde(AZ)(UP)	156	350
St. Lucie (FL)(UP)	88	140
La Salle(IL)(BNSF)	89	172
Quad Cities(IL)(BNSF)	299	419
River Bend(LA)(UP)	48	101
Waterford(LA)(UP)	49	91
Comanche Peak(TX)(BNSF)	90	246
South Texas(TX)(UP)	151	358
RAIL SHIPMENTS FROM OREGON		
Trojan (OR)(BNSF)	33	33
TOTAL RAIL SHIPMENTS	1367	2481
TRUCK SHIPMENTS FROM CALIFORNIA		
Humboldt Bay(CA)	44	44

TABLE 5
YMDEIS TRANSPORTATION IMPACTS
RAIL AND TRUCK SHIPMENTS THROUGH CALIFORNIA
DOE NATIONAL MOSTLY RAIL SCENARIO
DOE RAIL ROUTING TO YM VIA APEX (TRW1999u Data, Ch. 4, file.ap_rail.prn)

	PROPOSED ACTION (2010 - 2033)	MODULES 1&2 (2010 - 2048)
RAIL SHIPMENTS FROM CALIFORNIA		
Diablo Canyon (CA) (UP)	200	343
Rancho Seco(CA)(UP)	21	21
San Onofre(CA)(BNSF)	143	207
RAIL SHIPMENTS FROM ARIZONA		
Palo Verde(AZ)(UP)	156	350
River Bend(LA)(UP)	48	101
Waterford(LA)(UP)	49	91
South Texas(TX)(UP)	151	358
RAIL SHIPMENTS FROM OREGON		
Trojan (OR)(BNSF)	33	33
TOTAL RAIL SHIPMENTS	801	1504
TRUCK SHIPMENTS FROM CALIFORNIA		
Humboldt Bay(CA)	44	44

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TABLE 6		
YMDEIS TRANSPORTATION IMPACTS		
MAXIMUM SHIPMENTS THROUGH SOUTHERN CALIFORNIA		
DOE NATIONAL MOSTLY TRUCK SCENARIO, MODULE 2		
NV/PIC CONSOLIDATED SOUTHERN ROUTING		
CALIFORNIA TOTAL		74050
CORRIDOR I-5/I-10/I-15		5258
Humboldt Bay(CA)	44	
Rancho Seco(CA)	124	
Diablo Canyon(CA)	1306	
San Onofre(CA)	1284	
Palo Verde(CA)	2498	
Corridor Subtotal	5258	
CORRIDOR I-40/I-15		68792
Browns Ferry(AL)	2067	
Farley(AL)	1126	
Arkansas(AR)	963	
Haddam Neck(CT)	255	
Millstone(CT)	1669	
Crystal River(FL)	442	
St. Lucie(FL)	1086	
Turkey Point(FL)	871	
Hatch(GA)	1334	
Vogtle(GA)	1462	
Arnold(IA)	420	
Braidwood(IL)	1494	
Byron(IL)	1444	
Clinton(IL)	690	
Dresden/Morris(IL)	1569	
La Salle(IL)	1261	
Quad Cities(IL)	1123	
Zion(IL)	1028	
Wolf Creek(KS)	708	
River Bend(LA)	823	
Waterford(LA)	675	
Pilgrim(MA)	476	
Yankee-Rowe(MA)	134	
Calvert Cliffs(MD)	1140	
Maine Yankee(ME)	356	
Big Rock Point(MI)	131	
Cook(MI)	1235	
Fermi(MI)	764	
Palisades(MI)	454	
Monticello(MN)	342	
Prairie Island(MN)	805	
Callaway(MO)	735	
Grand Gulf(MS)	1016	
Brunswick(NC)	903	
Harris(NC)	921	
McGuire(NC)	1464	
Cooper(NE)	454	
Fort Calhoun(NE)	362	
Seabrook(NH)	630	
Oyster Creek(NJ)	519	
Salem/Hope Creek(NJ)	1992	
Fitzpatrick/Nine Mile(NY)	1971	
Ginna(NY)	379	
Indian Point(NY)	1155	
Davis-Besse(OH)	535	
Perry(OH)	631	
Beaver Valley(PA)	1156	
Limerick(PA)	1722	
Peach Bottom(PA)	1408	
Susquehanna(PA)	1582	
Three Mile Island(PA)	435	
Catawba(SC)	1,330	
Oconee(SC)	1500	
Robinson(SC)	306	
Summer(SC)	536	
DOE-Savannah River(SC)	8131	
Sequoyah(TN)	1179	
Watts Bar(TN)	840	
Comanche Peak(TX)	1558	
South Texas(TX)	1448	
North Anna(VA)	1079	
Surry (VA)	902	
Vt Yankee(VT)	484	
Kewaunee(WI)	401	
LaCrosse(WI)	37	
Point Beach(WI)	742	
Corridor Subtotal	68792	

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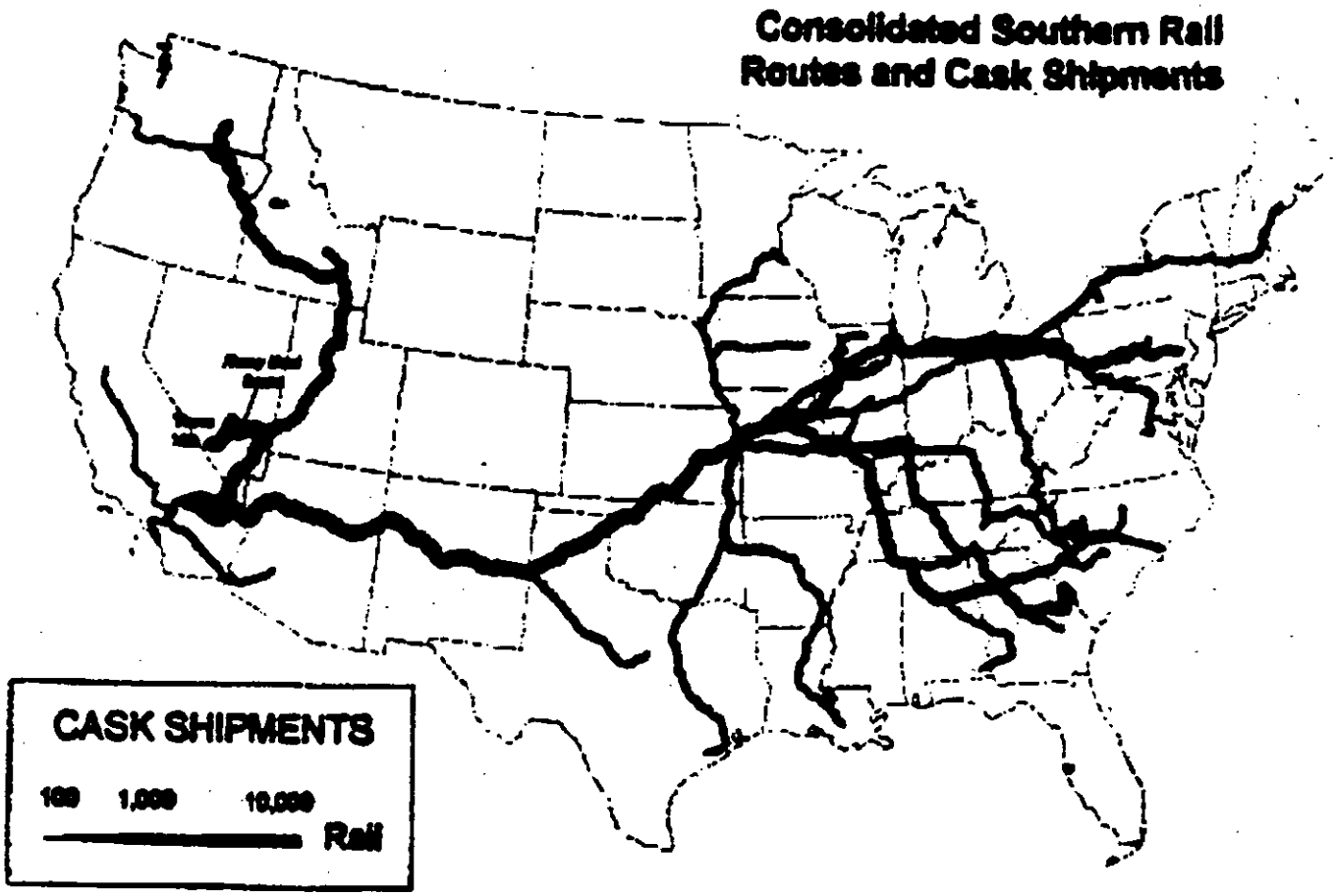

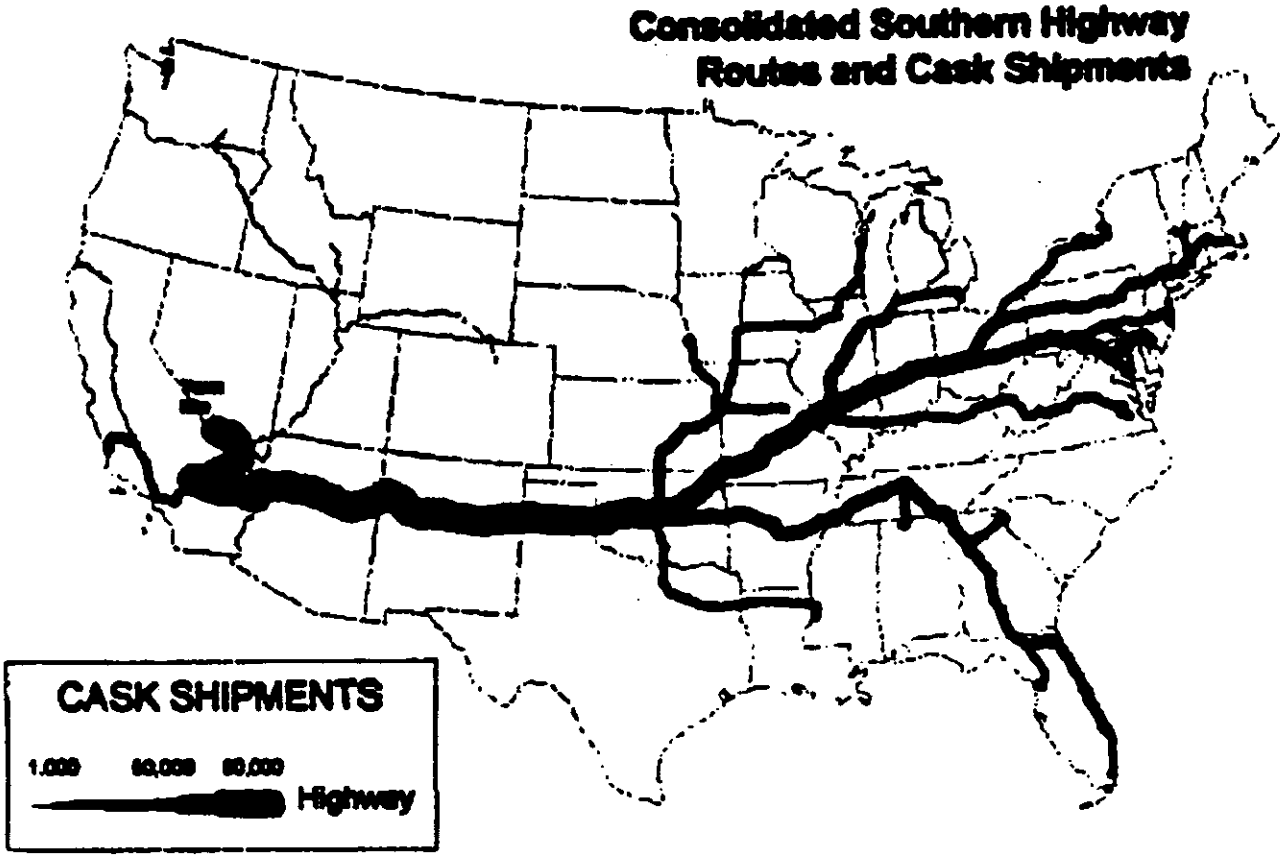

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ATTACHMENT #2

PLANNING INFORMATION CORPORATION

TABLE 7		
YMDEIS TRANSPORTATION IMPACTS		
TRUCK SHIPMENTS THROUGH SOUTHERN CALIFORNIA		
NEVADA CURRENT CAPABILITIES SCENARIO, DOE MODULE 2		
NV/PIC CONSOLIDATED SOUTHERN ROUTING		
CALIFORNIA TOTAL		26375
CORRIDOR I-5/I-10/I-15		1352
Humboldt Bay(CA)	44	
Diablo Canyon(CA)	1308	
Corridor Subtotal	1352	
CORRIDOR I-40/I-15		25023
Browns Ferry(AL)	2067	
Haddam Neck(CT)	255	
Crystal River(FL)	442	
St. Lucie(FL)	1086	
Turkey Point(FL)	871	
Dresden/Morris(IL)	1569	
Pilgrim(MA)	476	
Yankee-Rowe(MA)	134	
Calvert Cliffs(MD)	1140	
Big Rock Point(MI)	131	
Cook(MI)	1235	
Fermi(MI)	764	
Palisades(MI)	454	
Monticello(MN)	342	
Callaway(MO)	735	
Grand Gulf(MS)	1016	
Cooper(NE)	454	
Fort Calhoun(NE)	362	
Oyster Creek(NJ)	519	
Salem/Hope Creek(NJ)	1992	
Fitzpatrick/Nine Mile(NY)	1971	
Ginna(NY)	379	
Indian Point(NY)	1155	
Peach Bottom(PA)	1408	
Oconee(SC)	1500	
Surry (VA)	902	
Vt Yankee(VT)	484	
Kewaunee(WI)	401	
LaCrosse(WI)	37	
Point Beach(WI)	742	
Corridor Subtotal	25023	

TABLE 8		
YMDEIS TRANSPORTATION IMPACTS		
RAIL SHIPMENTS THROUGH SOUTHERN CALIFORNIA		
NEVADA CURRENT CAPABILITIES SCENARIO,DOE MODULE 2		
NV/PIC CONSOLIDATED SOUTHERN ROUTING		
CALIFORNIA TOTAL		9831
UNION PACIFIC(SP) from Rancho Seco		
Rancho Seco(CA)	21	21
BURLINGTON NORTHERN/SANTA FE from San Onofre		
San Onofre(CA)	207	207
UNION PACIFIC(SP) from Palo Verde via Yuma, AZ		
Palo Verde(CA)	350	350
BURLINGTON NORTHERN/SANTA FE from Kingman, AZ		9253
Farley(AL)	157	
Arkansas(AR)	252	
Millstone(CT)	524	
Hatch(GA)	197	
Vogtle(GA)	431	
Arnold(IA)	158	
Braidwood(IL)	215	
Byron(IL)	244	
Clinton(IL)	200	
La Salle(IL)	172	
Quad Cities(IL)	419	
Zion(IL)	250	
Wolf Creek(KS)	106	
River Bend(LA)	101	
Waterford(LA)	91	
Maine Yankee(ME)	60	
Prairie Island(MN)	221	
Brunswick(NC)	321	
Harris(NC)	258	
McGuire(NC)	427	
Seabrook(NH)	83	
Davis-Besse(OH)	71	
Perry(OH)	82	
Beaver Valley(PA)	160	
Limerick(PA)	497	
Susquehanna(PA)	219	
Three Mile Island(PA)	113	
Catawba(SC)	253	
Robinson(SC)	97	
Summer(SC)	82	
DOE-Savannah River(SC)	1739	
Sequoyah(TN)	161	
Watts Bar(TN)	121	
Comanche Peak(TX)	246	
South Texas(TX)	358	
North Anna(VA)	167	
Corridor Subtotal	9253	

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