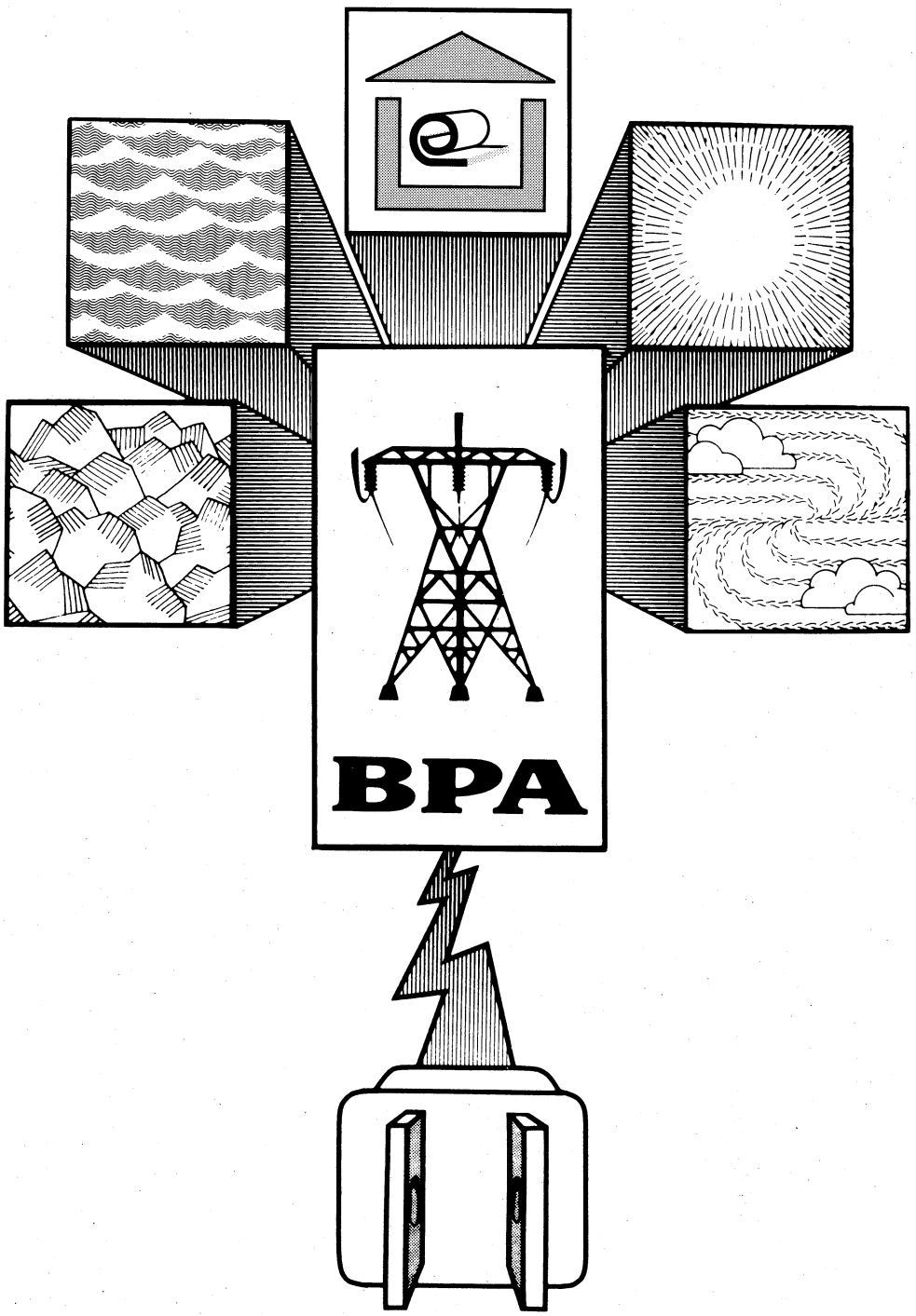
Final Environmental Impact Statement Resource Programs

DOE/EIS-0162

Addendum to Volume 2: Appendices

February 1993



U.S. Department of Energy

Bonneville
POWER ADMINISTRATION

Resource Programs
Final Environmental Impact Statement

Volume 2: Addendum to Volume 2: Appendices

Bonneville Power Administration
February 1993

Addendum to Volume 2: Technical Appendices
Table of Contents

Appendix G: Verification and Update of Threatened and Endangered Species List

Appendix H: Integrated System for the Analysis of Acquisitions (ISAAC) Model Runs

- **Section 1:** Analysis of Resource Additions Assuming Medium Loads
- **Section 2:** Revised Analysis of the Emphasize Renewables Alternative

Verification and Update of Threatened and Endangered Species Lists

Appendix G

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Portland Field Station
2600 S.E. 98th Avenue, Suite 100
Portland, Oregon 97266

November 7, 1991

Ref: 1-7-92-SP-4

Ms. Katherine S. Pierce
Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208-3621

RE: Resource Programs Environmental Impact Statement

Dear Ms. Pierce:

This response regards your letter, dated October 9, 1991, which was received by us on October 10, 1991. The Portland Field Station handles Section 7 consultation requests for Oregon only. We have attached a list (Attachment A) of endangered and threatened species that may be present within Oregon under consideration in your Resource Programs Environmental Impact Statement. The list fulfills the requirement of the Fish and Wildlife Service under Section 7(c) of the Endangered Species Act of 1973, as amended (16 USC 1531 et.seq.) for Oregon. Your requirements under the Act are outlined in Attachment B.

Should your biological assessment determine that a listed species is likely to be adversely affected by the project, the Bonneville Power Administration (BPA) should request formal Section 7 consultation through this office. Even if your biological assessment shows a "no effect" or "beneficial effect" situation, we would appreciate receiving a copy for our information.

Attachment A includes a list of candidate species presently under review by this Service. Candidate species have no protection under the Endangered Species Act but are included for your consideration as it is possible candidates could become formal proposals and be listed prior to project completion. If you determine your project may affect candidate species, you are not required to perform a biological assessment or to consult with the Fish and Wildlife Service. However, if early evaluation of your project indicates that it is likely to adversely impact a candidate species, you may wish to request technical assistance from this office.

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Your interest in endangered species is appreciated. If you have any additional questions regarding your responsibilities under the Act, please contact Laura Todd at our office, phone (503) 231-6179 or FTS 429-6179. All correspondence should include the above referenced case number.

Sincerely,

Russell D. Peterson
Field Supervisor

Attachments

LT4:792SP4.LTR

cc: PFO-ES
BFO-SE
ODFW (Nongame)
ONHP

ATTACHMENT A

Name		Category
A POPCORNFLOWER	PLAGIOBOTHRYS LAMPROCARPUS	C2
SOUTHERN OREGON BUTTERCUP	RANUNCULUS AUSTRO-OREGANUS	C2
COLUMBIA CRESS	RORIPPA COLUMBIAE	C2
SADDLE MT. SAXIFRAGE	SAXIFRAGA HITCHCOCKIANA	C2
ROGUE RIVER STONECROP	SEDUM MORANII	C2
APPLEGATE STONECROP	SEDUM OBLANCEOLATUM	C2
	SEDUM RADIATUM SSP DEPAUPERATUM	C2
WESTERN SENECIO	SENECIO HESPERIUS	C2
BRISTLY SIDALCEA	SIDALCEA SETOSA SSP SETOSA	C2
CASCADE HEAD CATCHFLY	SILENE DOUGLASII VAR ORARIA	C2
SPALDING'S CAMPION	SILENE SPALDINGII	C2
PALE BLUE-EYED GRASS	SISYRINCHIUM SARMENTOSUM	C2
WESTERN NECKLACE	SOPHORA LEACHIANA	C2
OREGON SULLIVANTIA	SULLIVANTIA OREGANA	C2
HOWELL'S TAUSCHIA	TAUSCHIA HOWELLII	C2
ARROW-LEAF THELYPODY	THELYPODIUM EUCOSMUM	C2
LEIBERG'S CLOVER	TRIFOLIUM LEIBERGII	C2
OWYHEE CLOVER	TRIFOLIUM OWYHEENSE	C2
SEXTON MT. MARIPOSA-LILY	CALOCHORTUS INDECORUS	C2*
CORAL SEEDED ALLOCARYA	PLAGIOBOTHRYS FIGURATUS VAR CORALLI	C2*
RED MT. ROCKCRESS	ARABIS MCDONALDIANA	LE
BRADSHAW'S LOMATIUM	LOMATIUM BRADSHAWII	LE
MACFARLANE'S FOUR-O'CLOCK	MIRABILIS MACFARLANEI	LE
MALHEUR WIRE-LETTUCE	STEPHANOMERIA MALHEURENSIS	LE

LE - Endangered

LT - Threatened

C1 - Category 1: Taxa for which the Fish and Wildlife Service has sufficient biological information to support a proposal to list as endangered or threatened.

C2 - Category 2: Taxa for which existing information indicates may warrant listing, but for which substantial biological information to support a proposed rule is lacking.

* Consultation with National Marine Fisheries Service required.

1/ U. S. Department of Interior, Fish and Wildlife Service, April 15, 1990, Endangered and Threatened Wildlife and Plants, 50 CFR 17.11 and 17.12.

2/ Federal Register Vol. 55, No. 123, June 26, 1990 Final Rule-Northern Spotted Owl

3/ Federal Register Vol. 54, No. 4, January 6, 1989 Notice of Review-Animals

4/ Federal Register Vol. 55, No. 38, February 21, 1990 Notice of Review-Plants

ATTACHMENT B

FEDERAL AGENCIES RESPONSIBILITIES UNDER SECTIONS 7(a) and (c) OF THE ENDANGERED SPECIES ACT

SECTION 7(a) - Consultation/Conference

Requires: 1) Federal agencies to utilize their authorities to carry out programs to conserve endangered and threatened species;

2) Consultation with FWS when a Federal action may affect a listed endangered or threatened species to insure that any action authorized, funded or carried out by a Federal agency is not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of Critical Habitat. The process is initiated by the Federal agency after they have determined if their action may affect (adversely or beneficially) a listed species; and

3) Conference with FWS when a Federal action is likely to jeopardize the continued existence of a proposed species or result in destruction or adverse modification of proposed Critical Habitat.

SECTION 7(c) - Biological Assessment for Major Construction Projects [1/]

Requires Federal agencies or their designees to prepare a Biological Assessment (BA) for construction projects only. The purpose of the BA is to identify any proposed and/or listed species which are/is likely to be affected by a construction project. The process is initiated by a Federal agency in requesting a list of proposed and listed threatened and endangered species (list attached). The BA should be completed within 180 days after its initiation (or within such a time period as is mutually agreeable). If the BA is not initiated within 90 days of receipt of the species list, the accuracy of the species list should be informally verified with our Service. No irreversible commitment of resources is to be made during the BA process which would foreclose reasonable and prudent alternatives to protect endangered species. Planning, design, and administrative actions may be taken; however, no construction may begin.

To complete the BA, your agency or its designee should: (1) conduct an on-site inspection of the area to be affected by the proposal which may include a detailed survey of the area to determine if the species is present and whether suitable habitat exists for either expanding the existing population or for potential reintroduction of the species; (2) review literature and scientific data to determine species distribution, habitat needs, and other biological requirements; (3) interview experts including those within FWS, National Marine Fisheries Service, State conservation departments, universities, and others who may have data not yet published in scientific literature; (4) review and analyze the effects of the proposal on the species in terms of individuals and populations, including consideration of cumulative effects of the proposal on the species and its habitat; (5) analyze alternative actions that may provide conservation measures and (6) prepare a report documenting the results, including a discussion of study methods used, any problems encountered, and other relevant information. The BA should conclude whether or not a listed or proposed species will be affected. Upon completion, the report should be forwarded to our Portland Office.

[1/] A construction project (or other undertaking having similar physical impacts) which is a major Federal action significantly affecting the quality of the human environment as referred to in NEPA (42 U.S.C. 4332.(2)c). On projects other than construction, it is suggested that a biological evaluation similar to the biological assessment be undertaken to conserve species influenced by the Endangered Species Act.

U.S. FISH AND WILDLIFE SERVICE
FISH AND WILDLIFE ENHANCEMENT

OLYMPIA FIELD OFFICE
3704 GRIFFIN LANE SE, SUITE 102
OLYMPIA, WASHINGTON 98501-2192
(206)753-9440
FAX: 753-9008

TO: Kathy Pierce DATE: 11-30-92

FROM: Richard Carlson TIME: 9:00 AM

SUBJECT: ESA Section 7 TOTAL PAGES: 4

MESSAGE: Attached is an updated list of Endangered, Threatened, Designated, Proposed and Candidate Plants, animals and habitat. I have starred (*) the changes. Please call me if you have any questions.

FEDERALLY LISTED ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES, AND CRITICAL HABITAT IN WASHINGTON STATE
(Revised - October 1992)

Endangered

Brown pelican *(Pelecanus occidentalis)*
Columbian white-tailed deer *(Odocoileus virginianus leucurus)*
Gray wolf *(Canis lupus)*
Leatherback sea turtle *(Dermochelys coriacea)*
Peregrine falcon *(Falco peregrinus)*
Woodland caribou *(Rangifer tarandus caribou)*

Threatened

Aleutian Canada goose *(Branta canadensis leucopareia)*
Bald eagle *(Haliaeetus leucocephalus)*
Green sea turtle *(Chelonia mydas)*
Grizzly bear *(Ursus arctos = U.a. horribilis)*
Loggerhead sea turtle *(Caretta caretta)*
* Marbled murrelet *(Brachyramphus marmoratus)*
Northern spotted owl *(Strix occidentalis caurina)*
Olive ridley sea turtle *(Lepidochelys olivacea)*
Oregon silverspot butterfly *(Speyeria zerene hippolyta)*

* Designated

* Critical habitat for the northern spotted owl

Proposed

* Western snowy plover *(Charadrius alexandrinus nivosus)*

Candidate Animals

Beller's ground beetle *(Agonum belleri)*
* Black tern *(Chlidonias niger)*
Bull trout *(Salvelinus confluentus)*
California bighorn sheep *(Ovis canadensis californiana)*
* California floater (mussel) *(Anodonta californiensis* (Lea, 1852))
California wolverine *(Gulo gulo luteus)*
* Cascades frog *(Rana cascadae)*
Columbia pebblesnail *(Fluminicola (=Lithoglyphus) columbianus* (Hemphill in Pilsbry, 1899)) [great Columbia River spire snail]
Columbian sharp-tailed grouse *(Tympanuchus phasianellus columbianus)*
Destruction Island shrew *(Sorex trowbridgii destructioni)*
Fender's soliperlan stonefly *(Soliperla fenderi)*
Ferruginous hawk *(Buteo regalis)*

ATTACHMENT A

LISTED AND PROPOSED ENDANGERED AND THREATENED SPECIES, AND CANDIDATE SPECIES, THAT MAY OCCUR WITHIN THE AREA OF IDAHO
FWS-1-4-93-SP-57

LISTED SPECIES	COMMENTS
Bald Eagle (Haliaeetus leucocephalus)	
Peregrine Falcon (Falco peregrinus)	
Whooping Crane (Grus americana)	
Grizzly Bear (Ursus arctos)	
Woodland Caribou (Rangifer tarandus caribou)	
Spring, Summer, and Fall Chinook Salmon (Oncorhynchus tshawytscha)	
Sockeye Salmon (Oncorhynchus nerka)	

PROPOSED SPECIES

Utah Valvata Snail
(Oreohelix vortex)

Idaho Springsnail
(Pyrgulopsis idahoensis)

Bliss Rapids Snail
(undescribed species)

Snake River Physa Snail
(Physa natricina)

Bruneau Hot Springs Snail
(Undescribed species)

Banbury Springs Limpet
(Lanx sp.)

CANDIDATE SPECIES

White Sturegeon (C1)
(Acipenser transmontanus)

Bull Trout (C2)
(Salvelinus confluentus)

Snake River Fine-Spotted Cutthroat Trout (C2)
(Oncorhynchus mykiss spp.)

Redband Trout (C2)
(Oncorhynchus clarki spp.)

Leatherside Chub (C2)
(Gila copei)

Wood River Sculpin (C2)
(Cottus leiopomus)

Spotted Frog (C2)
(Rana pretiosa)

White-faced Ibis (C2)
(Plegadis chihi)

Trumpeter Swan (C2)
(Cygnus buccinator)

Harlequinn Duck (C2)
(Histrionicus histrionicus)

Northern Goshawk (C2)
(Accipiter gentilis)

Ferruginous Hawk (C2)
(Buteo regalis)

Columbian Sharp-tailed Grouse (C2)
(Tympanuchus phaianellus)

Mountain Quail (C2)
(Oreotyx pictus)

Black Tern (C2)
(Chlidonias niger)

Long-billed Curlew (3c)
(Numenius americanus)

Loggerhead Shrike (C2)
(Lanius ludovicianus)

Preble's Shrew (C2)
(Sorex preblei)

Pygmy Rabbit (C2)
(Brachylagus idahoensis)

Townsend's Big-eared Bat (C2)
(Plecotus townsendii)

Northern Idaho Ground Squirrel (C1)
(Spermophilus brunneus spp.)

Southern Idaho Ground Squirrel (C2)
(Spermophilus brunneus endemicus)

Woverine (C2)
(Gulo gulo luscus)

Lynx (C2)
(Fexlis lynx)

Idaho pointheaded Grasshopper (C2)
(Acrolophitus pulchellus)

Idaho Dunes Tiger Beetle (C2)
(Cicindela arenicola)

Blind Cave Leodid Beetle (C2)
(Glacicavicola bathysciodes)

California Floater (C2)
(Anodonta californiensis)

Columbia Pebblesnail (C2)
(Fluminicola columbianus)

Shortface Lanx (3c)
(Fisharola nuttalli)

Marbled Disc (C2)
(Discus marmorensis)

Mission Creek Oregonian (C2)
(Cryptomastix magnidentata)

Idaho Banded Mountainsnail (C2)
(Oreohelix idahoensis)

Boulder Pile Mountainsnail (C2)
(Oreohelix jugalis)

Carinated Striate Banded Mountainsnail (C2)
(Oreobehlix magnidentata)

Whorled Mountainsnail (C2)
(Oreohelix vortex)

Lava Rock Mountainsnail (C2)
(Oreohelix waltonai)

GENERAL COMMENTS:

C1 = Category 1 Taxa for which the U.S. Fish and Wildlife Service currently has substantial information on hand to support the biological appropriateness of proposing to list as endangered or threatened. Proposed rules have not been issued, but development and publication of such rules are anticipated.

C2 = Category 2 Taxa for which information now in possession of the U.S. Fish and Wildlife Service indicates that proposing to list as endangered or threatened is possibly appropriate, but for which conclusive data on biological vulnerability and threat are not currently available to support proposed rules. Further biological research and field study may be needed to ascertain the status of taxa in this category.

3c = Category 3 Taxa that have proven to be more abundant or widespread than previously believed and/or those that are not subject to any identifiable threat. If further research or changes in habitat indicate a significant decline in any of these taxa, they may be reevaluated for possible inclusion in categories 1 or 2.

NORTHERN GOSHAWK -- To determine the most likely areas for goshawk nest territories, identify all mature and old growth stands over 25 acres that have a canopy closure of 60% or more, and contain Douglas fir, aspen, and western larch. Areas that will NOT need to be surveyed include stands less than mature, spruce, alpine fir or mountain hemlock forest types, and stands that are less than 50% canopy closure.

CONVERSATION RECORD

TIME	DATE
8:20 a.m.	January 29, 1993

TYPE

☐ VISIT ☐ CONFERENCE ☒ TELEPHONE

☐ INCOMING
☒ OUTGOING

Location of Visit/Conference:

ROUTING	
NAME/SYMBOL	INT

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU	ORGANIZATION (Office, dept., bureau, etc.)	TELEPHONE NO.
Dale R. Harms	USFWS	406 449-5225

SUBJECT
Endangered Species Act

SUMMARY
I contacted Dale R. Harms, Montana State Supervisor, Ecological Services, Fish and Wildlife Service to verify and update the list of threatened and endangered species in Montana potentially affected by BPA's Resource Programs EIS. The original species list was dated November 15, 1991. Mr. Harms indicated that no additional species had been oficially listed as threatened or endangered and no new species had been added as candidates. We agreed that a documentation of our telephone conversation provides adequate verification and update.

ACTION REQUIRED

NAME OF PERSON DOCUMENTING CONVERSATION	SIGNATURE	DATE
Katherine S. Pierce	Katherine S. Pierce	1-29-93

ACTION TAKEN

SIGNATURE	TITLE	DATE

United States Department of the Interior
FISH AND WILDLIFE SERVICE
Fish and Wildlife Enhancement
2617 East Lincolnway
Cheyenne, WY 82001

TAKE PRIDE IN AMERICA

IN REPLY REFER TO:
FWE-61411
spb/W.03(bparpeis.spl)

November 30, 1992

Katherine S. Pierce - RAE
Environmental Specialist
Bonneville Power Administration
P.O. Box 3621
Portland, OR 97208-3621

Dear Ms. Pierce:

This responds to your fax of November 27, 1992, requesting a verification and update of the list of threatened and endangered species potentially affected by the Bonneville Power Administration's Resource Programs Environmental Impact Statement, affecting Teton and Lincoln counties, Wyoming. The original species list was submitted by this office on November 6, 1991.

No additional species have been officially listed as threatened or endangered since our original letter. One candidate, the mountain plover (Charadrius montanus), has been upgraded from Category 2 (more information needed) to Category 1 (listing is appropriate and is anticipated).

Several new species have since been added as **Candidates** for listing as threatened or endangered since our letter of November 6, 1991. Many Federal agencies have policies to protect candidate species from further population declines. Our office would appreciate receiving any information available on the status of these species in or near the project area.

SPECIES	CATEGORY*	SCIENTIFIC NAME	EXPECTED OCCURRENCE
Birds			
Trumpeter swan	2	Cygnus buccinator	NW Wyoming
Harlequin duck	2	Histrionicus histrionicus	rivers in NW Wyoming
Northern Goshawk	2	Accipiter gentilis	forests statewide
Black tern	2	Chlidonias niger	wetlands statewide
Loggerhead shrike	2	Lanius ludovicianus	woodlands/shrublands
Amphibians			
Spotted frog	2	Rana pretiosa	NW WY; YNP

Fish			
Bonneville cutthroat trout	2	Salmo clarki utah	Bear R. River drges.
Plants			
Payson's milk-vetch	2**	Astragalus paysonii	Salt River & Wyo. Mt ranges, in forest openings.
Wyoming tansymustard	1	Descuriania torulosa	Togwotee Pass, in rocky soils and talus slopes
Keeled bladderpod	2**	Lesquerella carinata	Teton Basin & Jackson Hole area, dry grasslands
Payson's bladderpod	2	Lesquerella paysonii	Jackson Hole and Greys River; open, rocky soils
Dorn's twinpod	2	Physaria dornii	Rock Cr. Ridge, betw. Fossil Butte & Sage; rocky soils

*1 = Federal T/E listing appears appropriate and is anticipated. 2 = Current data insufficient to support listing. 3C = More widespread or abundant than previously believed, or no immediate threats identified.
**Unofficial status proposed in Nov., 1991. Official status expected shortly.

The guidance offered in our November 6, 1991, letter concerning preparation of biological assessments and consultation procedures remains valid. If you have any questions please contact Steve Brockmann of my staff at the letterhead address or phone (307) 772-2374.

Sincerely,

Charles P. Davis
State Supervisor
Wyoming State Office

cc: Director, WGFD, Cheyenne, WY
Nongame Coordinator, WGFD, Lander, WY

Integrated System for the Analysis of Acquisitions (ISSAAC) Model Runs

Appendix H

Section 1: Analysis of Resource Additions using Medium Loads

The attached material documents ISAAC analysis of resource additions over the period 1991 to 2040, assuming that medium loads occur.

Study ID : 10-NOV-92 16:23:18
Study Title: FINAL RPEIS MEDIUM RUN

SYSTEM SUMMARY: Mean Loads and Resources (Avg MW), PARTY = BPA 0001 Games

Operating Year	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06
Observed Load	3794	3820	3854	3896	3941	3983	4025	4068	4110	4148	4188	4231	4277	4329	4383
Observed Rate		0.70%	0.90%	1.09%	1.14%	1.06%	1.05%	1.08%	1.04%	0.91%	0.98%	1.03%	1.07%	1.23%	1.23%
DSI Firm Load	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054
BPA Requirements	1728	1849	1796	1864	1934	1996	2059	2133	2204	2250	2299	2368	2442	2500	2441
Existing Resources	7343	7331	7220	7236	7252	7572	7573	7589	7484	7465	7574	7504	7434	7442	7198
NON-DISCRETIONARY RESOURCES:															
1990 R/P Conservatio	22	50	50	50	50	50	50	50	50	50	50	50	50	50	50
Load Reduction - BPA	6	11	16	21	25	29	33	37	43	48	53	58	63	68	73
New SF Res-HW	0	0	1	2	3	4	5	7	11	15	19	23	27	31	35
New MF Res-HW	0	0	0	0	0	0	0	1	1	1	2	2	3	3	4
Water Heat-HW	0	0	1	3	4	6	8	10	12	14	16	18	18	18	18
Solar Acc-HW	0	0	0	0	1	1	1	2	2	2	2	3	3	3	3
New Comm-HW	0	0	3	7	12	18	23	29	36	43	50	57	57	57	57
New Manuf Hsg-HW	0	0	4	8	12	16	20	24	28	33	37	41	41	41	41
DISCRETIONARY RESOURCES:															
Hydro Eff Imp	0	0	45	70	70	70	70	70	70	70	70	70	70	70	75
WNP2 MW Imp	0	0	14	47	47	47	47	47	47	47	47	47	47	47	47
Conservation Voltage	0	0	0	1	2	4	6	8	10	12	14	16	19	23	27
Solar Access	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3
Irrigation Conservat	0	0	1	3	4	6	7	8	10	11	12	13	14	14	14
Non-Aluminum Industr	0	0	9	18	30	43	57	72	88	105	124	143	143	143	143
New Commercial	0	0	0	0	0	0	0	0	0	0	0	0	6	14	20
Comm Discret Ex	0	0	4	11	20	31	42	54	66	78	90	102	109	110	111
Manuf Hsg Weath	0	0	3	6	10	13	16	19	21	23	23	23	23	23	23
Small Hydro 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Comm Lost Opps Exist	0	0	2	5	9	14	19	25	31	37	44	51	57	63	69
T & D Eff Imp	0	0	1	3	6	9	15	21	27	33	39	45	50	55	60
Thermal Eff Imp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Manuf Housing	0	0	0	0	0	0	0	0	0	0	0	0	4	7	11
Optioned CCCT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Combined Cycle CT	0	0	0	0	0	0	349	349	349	349	349	349	349	349	349
Southwest Imports	0	0	0	0	0	249	249	249	249	249	249	249	249	249	249
MF Res Weath	0	0	4	7	11	14	18	21	23	25	25	25	25	25	25
Small Hydro 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SF Res Weath	0	0	7	14	22	29	36	43	48	50	50	50	50	50	50
Water Heat	0	0	0	0	0	0	0	0	0	0	0	0	0	4	14
New Residential Ligh	0	0	0	1	1	1	2	2	3	4	6	7	7	7	8
Cogen1	0	0	0	101	101	101	101	101	101	101	101	101	101	101	101
WNP3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Residential	0	0	1	3	5	5	6	7	7	8	8	8	8	8	8
WNP1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen2	0	0	0	0	0	0	48	48	48	48	48	48	48	48	48
Wind1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Hydro 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MSW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal1 (E. Mont)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal2 (E. Wash)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Hydro 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal3 (E. Oregon)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal4 (Nevada)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wind2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal5 (W. Wa/Or)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Wind3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Biomass	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Solar2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Replacement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Conserv Energy	28	61	107	163	227	293	364	440	517	592	664	735	778	819	867
Total Gen Res Energy	0	0	59	218	218	467	864	864	864	864	864	864	864	864	873
Total Imports Energy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Firm Resources	7371	7392	7386	7617	7697	8332	8801	8893	8865	8921	9102	9103	9076	9125	8938
Load/Resource Balance	-205	-331	-317	-198	-234	298	663	637	495	467	557	447	300	239	58

SYSTEM SUMMARY: Mean Loads and Resources (Avg MW), PARTY = BPA 0001 Games

Operating Year	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21
Observed Load	4431	4482	4477	4471	4471	4471	4471	4471	4471	4471	4471	4471	4471	4471	4471
Observed Rate	1.11%	1.15%	-0.12%	-0.13%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
DSI Firm Load	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054
BPA Requirements	2443	2511	2500	2507	2748	2750	2752	2753	2755	2757	2758	2760	2762	2764	2765
Existing Resources	7113	7139	7045	7091	7091	7091	7092	7092	7093	7075	6873	6874	6815	6160	6160
NON-DISCRETIONARY RESOURCES:															
1990 R/P Conservatio	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
Load Reduction - BPA	78	83	87	92	92	92	92	92	92	92	92	92	92	92	92
New SF Res-HW	39	43	47	51	51	51	51	51	51	51	51	51	51	51	51
New MF Res-HW	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5
Water Heat-HW	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
Solar Acc-HW	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
New Comm-HW	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
New Manuf Hsg-HW	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41
DISCRETIONARY RESOURCES:															
Hydro Eff Imp	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75
WNP2 MW Imp	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47
Conservation Voltage	31	35	39	41	41	41	41	41	41	41	41	41	41	41	41
Solar Access	4	5	5	6	6	6	6	6	6	6	6	6	6	6	6
Irrigation Conservat	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
Non-Aluminum Industr	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143
New Commercial	29	38	46	55	55	55	55	55	55	55	55	55	55	55	55
Comm Discret Ex	114	120	127	134	134	134	134	134	134	134	134	134	134	134	134
Manuf Hsg Weath	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
Small Hydro 1	8	12	15	15	15	15	15	15	15	15	15	15	15	15	15
Comm Lost Opps Exist	75	81	87	93	93	93	93	93	93	93	93	93	93	93	93
T & D Eff Imp	65	71	76	81	81	81	81	81	81	81	81	81	81	81	81
Thermal Eff Imp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Manuf Housing	15	19	22	26	26	26	26	26	26	26	26	26	26	26	26
Optioned CCCT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Combined Cycle CT	349	349	349	349	349	349	349	349	349	349	349	349	349	349	349
Southwest Imports	299	349	398	398	398	398	398	398	398	398	398	398	398	398	398
MF Res Weath	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
Small Hydro 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SF Res Weath	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
Water Heat	28	41	54	69	69	69	69	69	69	69	69	69	69	69	69
New Residential Ligh	10	11	13	14	14	14	14	14	14	14	14	14	14	14	14
Cogen1	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101
WNP3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Residential	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
WNP1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen2	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
Wind1	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Small Hydro 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MSW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal1 (E. Mont)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal2 (E. Wash)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Hydro 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal3 (E. Oregon)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal4 (Nevada)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wind2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal5 (W. Wa/Or)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Wind3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Biomass	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Solar2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Replacement	0	0	0	0	102	102	102	102	102	102	271	273	333	990	992
Total Conserv Energy	924	983	1040	1099	1099	1099	1099	1099	1099	1099	1099	1099	1099	1099	1099
Total Gen Res Energy	934	988	1040	1040	1142	1142	1142	1142	1142	1142	1311	1313	1373	2030	2032
Total Imports Energy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Firm Resources	8971	9110	9125	9230	9332	9332	9333	9333	9334	9316	9283	9286	9287	9289	9291
Load/Resource Balance	40	59	95	197	59	57	56	55	54	34	0	0	0	0	0

SYSTEM SUMMARY: Mean Loads and Resources (Avg MW), PARTY = BPA 0001 Games

Operating Year	21-22	22-23	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-31	31-32	32-33	33-34	34-35	35-36
Observed Load	4471	4471	4471	4471	4471	4471	4471	4471	4471	4471	4471	4471	4471	4471	4471
Observed Rate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
DSI Firm Load	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054
BPA Requirements	2767	2769	2771	2772	2774	2776	2778	2779	2781	2783	2785	2786	2788	2790	2791
Existing Resources	6160	6160	6159	6159	6159	6159	6159	6159	6158	6158	6158	6158	6158	6157	6157
NON-DISCRETIONARY RESOURCES:															
1990 R/P Conservatio	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
Load Reduction - BPA	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92
New SF Res-HW	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51
New MF Res-HW	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Water Heat-HW	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
Solar Acc-HW	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
New Comm-HW	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
New Manuf Hsg-HW	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41
DISCRETIONARY RESOURCES:															
Hydro Eff Imp	75	75	75	75	75	75	75	75	75	75	75	75	30	5	5
WNP2 MW Imp	47	47	33	0	0	0	0	0	0	0	0	0	0	0	0
Conservation Voltage	41	41	41	41	41	41	41	41	41	41	41	41	41	40	39
Solar Access	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Irrigation Conservat	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
Non-Aluminum Industr	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143
New Commercial	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
Comm Discret Ex	134	134	134	134	134	134	134	134	134	134	134	134	134	134	134
Manuf Hsg Weath	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
Small Hydro 1	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
Comm Lost Opps Exist	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93
T & D Eff Imp	81	81	81	81	81	81	81	81	81	81	81	81	80	78	75
Thermal Eff Imp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Manuf Housing	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
Optioned CCCT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Combined Cycle CT	349	349	349	349	349	349	0	0	0	0	0	0	0	0	0
Southwest Imports	398	398	398	398	398	149	149	149	149	149	149	149	149	149	149
MF Res Weath	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
Small Hydro 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SF Res Weath	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
Water Heat	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69
New Residential Ligh	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
Cogen1	101	101	101	101	101	101	101	101	101	101	101	101	101	0	0
WNP3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Residential	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
WNP1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen2	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
Wind1	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Small Hydro 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MSW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal1 (E. Mont)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal2 (E. Wash)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Hydro 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal3 (E. Oregon)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal4 (Nevada)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wind2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal5 (W. Wa/Or)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Wind3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Biomass	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Solar2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Replacement	993	995	1011	1046	1048	1299	1649	1651	1653	1655	1657	1659	1707	1838	1843
Total Conserv Energy	1099	1099	1099	1099	1099	1099	1099	1099	1099	1099	1099	1099	1098	1095	1091
Total Gen Res Energy	2033	2035	2037	2039	2041	2043	2044	2046	2048	2050	2052	2054	2057	2062	2067
Total Imports Energy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Firm Resources	9292	9294	9295	9297	9299	9301	9302	9304	9305	9307	9309	9311	9313	9314	9315
Load/Resource Balance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SYSTEM SUMMARY: Mean Loads and Resources (Avg MW), PARTY = BPA 0001 Games

Operating Year	36-37	37-38	38-39	39-40
Observed Load	4471	4471	4471	4471
Observed Rate	0.00%	0.00%	0.00%	0.00%
DSI Firm Load	2054	2054	2054	2054
BPA Requirements	2793	2795	2797	2798
Existing Resources	6157	6157	6157	6157
NON-DISCRETIONARY RESOURCES:				
1990 R/P Conservatio	50	50	50	50
Load Reduction - BPA	92	92	92	92
New SF Res-HW	51	51	51	51
New MF Res-HW	5	5	5	5
Water Heat-HW	18	18	18	18
Solar Acc-HW	3	3	3	3
New Comm-HW	57	57	57	57
New Manuf Hsg-HW	41	41	37	33
DISCRETIONARY RESOURCES:				
Hydro Eff Imp	5	5	5	5
WNP2 MW Imp	0	0	0	0
Conservation Voltage	37	35	33	31
Solar Access	6	6	6	6
Irrigation Conservat	14	14	14	14
Non-Aluminum Industr	143	143	143	143
New Commercial	55	55	55	55
Comm Discret Ex	134	134	134	134
Manuf Hsg Weath	23	23	23	23
Small Hydro 1	15	15	15	15
Comm Lost Opps Exist	93	93	93	93
T & D Eff Imp	72	66	60	54
Thermal Eff Imp	0	0	0	0
New Manuf Housing	26	26	26	26
Optioned CCCT	0	0	0	0
Combined Cycle CT	0	0	0	0
Southwest Imports	100	50	0	0
MF Res Weath	25	25	25	25
Small Hydro 2	0	0	0	0
SF Res Weath	50	50	50	50
Water Heat	69	69	69	69
New Residential Ligh	14	14	14	14
Cogen1	0	0	0	0
WNP3	0	0	0	0
Existing Residential	8	8	7	5
WNP1	0	0	0	0
Cogen2	48	0	0	0
Wind1	7	7	7	7
Small Hydro 3	0	0	0	0
Geothermal	0	0	0	0
Cogen3	0	0	0	0
MSW	0	0	0	0
Coal1 (E. Mont)	0	0	0	0
Coal2 (E. Wash)	0	0	0	0
Cogen4	0	0	0	0
Small Hydro 4	0	0	0	0
Coal3 (E. Oregon)	0	0	0	0
Coal4 (Nevada)	0	0	0	0
Wind2	0	0	0	0
Coal5 (W. Wa/Or)	0	0	0	0

Total Gen Res Energy	1958	2181	2293	2341	3560	3776	4087	4109	4273	4626	5224	5234	5279	5717	6192
Total Imports Energy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Firm Resources	11761	11958	11979	12000	11997	11933	11933	11933	11933	11933	11933	11933	11933	11933	11933
Load/Resource Balance	66	65	65	67	64	0	0	0	0	0	0	0	0	0	0

SYSTEM SUMMARY: Mean Loads and Resources (Avg MW), PARTY = IOUs 0001 Games

Operating Year	21-22	22-23	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-31	31-32	32-33	33-34	34-35	35-36
Observed Load	11937	11937	11937	11937	11937	11937	11937	11937	11937	11937	11937	11937	11937	11937	11937
Observed Rate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
BPA Requirements	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Resources	4555	4546	4536	4526	4516	4506	4496	4486	4477	4467	4457	4447	4437	4427	4417
NON-DISCRETIONARY RESOURCES:															
Load Reduction - IOU	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83
New SF Res-HW	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
New MF Res-HW	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
Water Heat-HW	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
Solar Acc-HW	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
New Comm-HW	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86
New Manuf Hsg-HW	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46
DISCRETIONARY RESOURCES:															
Hydro Eff Imp	35	35	35	35	35	35	35	35	35	35	35	35	35	20	5
Conservation Voltage	59	59	59	59	59	59	59	59	59	59	59	59	56	50	45
Solar Access	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Irrigation Conservat	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Non-Aluminum Industr	153	153	153	153	153	153	153	153	153	153	153	153	153	153	153
New Commercial	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83
Comm Discret Ex	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127
Manuf Hsg Weath	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
Small Hydro 1	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
Comm Lost Opps Exist	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115
T & D Eff Imp	79	79	79	79	79	79	79	79	79	79	79	79	77	72	67
Thermal Eff Imp	41	41	41	41	0	0	0	0	0	0	0	0	0	0	0
New Manuf Housing	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
Cheap BC Hydro	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Combined Cycle CT	697	697	697	697	697	697	697	697	349	349	0	0	0	0	0
MF Res Weath	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
Small Hydro 2	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75
SF Res Weath	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
Water Heat	109	109	109	109	109	109	109	109	109	109	109	109	109	109	109
New Residential Ligh	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
Cogen1	353	353	353	353	353	353	353	353	353	353	353	353	353	353	353
Existing Residential	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Cogen2	448	448	448	448	448	448	448	448	448	448	448	448	448	448	448
Wind1	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Small Hydro 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MSW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal1 (E. Mont)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal2 (E. Wash)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Hydro 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal3 (E. Oregon)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal4 (Nevada)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wind2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal5 (W. Wa/Or)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wind3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Biomass	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Solar2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Replacement	4481	4491	4500	4510	4561	4571	4580	4590	4949	4959	5317	5327	5342	5378	5413
Total Conserv Energy	1176	1176	1176	1176	1176	1176	1176	1176	1176	1176	1176	1176	1171	1160	1150

Total Gen Res Energy	6202	6212	6221	6231	6241	6251	6260	6270	6281	6291	6300	6310	6325	6346	6366
Total Imports Energy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Firm Resources	11933	11934	11933	11933	11933	11933	11932	11932	11934	11934	11933	11933	11933	11933	11933
Load/Resource Balance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SYSTEM SUMMARY: Mean Loads and Resources (Avg MW), PARTY = IOUs 0001 Games

Operating Year	36-37	37-38	38-39	39-40
Observed Load	11937	11937	11937	11937
Observed Rate	0.00%	0.00%	0.00%	0.00%
BPA Requirements	0	0	0	0
Existing Resources	4407	4398	4388	4378
NON-DISCRETIONARY RESOURCES:				
Load Reduction - IOU	83	83	83	83
New SF Res-HW	38	38	38	38
New MF Res-HW	11	11	11	11
Water Heat-HW	23	23	23	23
Solar Acc-HW	2	2	2	2
New Comm-HW	86	86	86	86
New Manuf Hsg-HW	46	46	41	37
DISCRETIONARY RESOURCES:				
Hydro Eff Imp	0	0	0	0
Conservation Voltage	39	33	27	21
Solar Access	5	5	5	5
Irrigation Conservat	20	20	20	20
Non-Aluminum Industr	153	153	153	153
New Commercial	83	83	83	83
Comm Discret Ex	127	127	127	127
Manuf Hsg Weath	25	25	25	25
Small Hydro 1	65	65	65	65
Comm Lost Opps Exist	115	115	115	115
T & D Eff Imp	62	58	53	48
Thermal Eff Imp	0	0	0	0
New Manuf Housing	29	29	29	29
Cheap BC Hydro	0	0	0	0
Combined Cycle CT	0	0	0	0
MF Res Weath	31	31	31	31
Small Hydro 2	75	75	75	75
SF Res Weath	31	31	31	31
Water Heat	109	109	109	109
New Residential Ligh	17	17	17	17
Cogen1	353	353	353	336
Existing Residential	4	4	4	4
Cogen2	448	448	448	448
Wind1	7	7	7	7
Small Hydro 3	0	0	0	0
Geothermal	0	0	0	0
Cogen3	0	0	0	0
MSW	0	0	0	0
Coal1 (E. Mont)	0	0	0	0
Coal2 (E. Wash)	0	0	0	0
Cogen4	0	0	0	0
Small Hydro 4	0	0	0	0
Coal3 (E. Oregon)	0	0	0	0
Coal4 (Nevada)	0	0	0	0
Wind2	0	0	0	0
Coal5 (W. Wa/Or)	0	0	0	0
Wind3	0	0	0	0
Biomass	0	0	0	0
Solar2	0	0	0	0
Replacement	5439	5460	5485	5527
Total Conserv Energy	1139	1129	1113	1098

Total Gen Res Energy	6387	6408	6433	6458
Total Imports Energy	0	0	0	0
Total Firm Resources	11933	11935	11934	11934
Load/Resource Balance	0	0	0	0

SYSTEM SUMMARY: Mean Loads and Resources (Avg MW), PARTY = Generating Publics 0001 Games

Operating Year	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06
Observed Load	4119	4193	4252	4304	4357	4419	4481	4532	4582	4632	4685	4738	4795	4860	4925
Observed Rate		1.79%	1.40%	1.23%	1.25%	1.41%	1.40%	1.15%	1.10%	1.08%	1.15%	1.13%	1.20%	1.35%	1.34%
BPA Requirements	-1698	-1769	-1796	-1864	-1934	-1996	-2059	-2133	-2204	-2250	-2299	-2368	-2442	-2500	-2441
Existing Resources	2421	2423	2456	2440	2423	2422	2421	2400	2378	2382	2386	2370	2353	2360	2484
NON-DISCRETIONARY RESOURCES:															
DISCRETIONARY RESOURCES:															
Total Conserv Energy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Gen Res Energy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Imports Energy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Firm Resources	2421	2423	2456	2440	2423	2422	2421	2400	2378	2382	2386	2370	2353	2360	2484
Load/Resource Balance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SYSTEM SUMMARY: Mean Loads and Resources (Avg MW), PARTY = Generating Publics 0001 Game

Operating Year	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21
Observed Load	4989	5057	5045	5034	5034	5034	5034	5034	5034	5034	5034	5034	5034	5034	5034
Observed Rate	1.30%	1.37%	-0.23%	-0.23%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
BPA Requirements	-2443	-2511	-2500	-2507	-2748	-2750	-2752	-2753	-2755	-2757	-2758	-2760	-2762	-2764	-2765
Existing Resources	2546	2546	2546	2526	2286	2284	2282	2280	2279	2277	2275	2274	2272	2270	2268
NON-DISCRETIONARY RESOURCES:															
DISCRETIONARY RESOURCES:															
Total Conserv Energy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Gen Res Energy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Imports Energy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Firm Resources	2546	2546	2546	2526	2286	2284	2282	2280	2279	2277	2275	2274	2272	2270	2268
Load/Resource Balance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SYSTEM SUMMARY: Mean Loads and Resources (Avg MW), PARTY = Generating Publics 0001 Games

Operating Year	21-22	22-23	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-31	31-32	32-33	33-34	34-35	35-36
Observed Load	5034	5034	5034	5034	5034	5034	5034	5034	5034	5034	5034	5034	5034	5034	5034
Observed Rate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
BPA Requirements	-2767	-2769	-2771	-2772	-2774	-2776	-2778	-2779	-2781	-2783	-2785	-2786	-2788	-2790	-2791
Existing Resources	2267	2265	2263	2261	2260	2258	2256	2255	2253	2251	2249	2248	2246	2244	2242
NON-DISCRETIONARY RESOURCES:															
DISCRETIONARY RESOURCES:															
Total Conserv Energy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Gen Res Energy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Imports Energy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Firm Resources	2267	2265	2263	2261	2260	2258	2256	2255	2253	2251	2249	2248	2246	2244	2242
Load/Resource Balance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SYSTEM SUMMARY: Mean Loads and Resources (Avg MW), PARTY = Generating Publics

Operating Year	36-37	37-38	38-39	39-40
Observed Load	5034	5034	5034	5034
Observed Rate	0.00%	0.00%	0.00%	0.00%
BPA Requirements	-2793	-2795	-2797	-2798
Existing Resources	2241	2239	2237	2235
NON-DISCRETIONARY RESOURCES:				
DISCRETIONARY RESOURCES:				
Total Conserv Energy	0	0	0	0
Total Gen Res Energy	0	0	0	0
Total Imports Energy	0	0	0	0
Total Firm Resources	2241	2239	2237	2235
Load/Resource Balance	0	0	0	0

SYSTEM SUMMARY: Mean Loads and Resources (Avg MW), PARTY = REGION 0001 Games

Operating Year	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06
Observed Load	17268	17546	17783	18005	18233	18489	18746	18994	19236	19456	19693	19944	20211	20513	20818
Observed Rate		1.61%	1.35%	1.25%	1.27%	1.40%	1.39%	1.32%	1.28%	1.15%	1.21%	1.28%	1.34%	1.49%	1.49%
DSI Firm Load	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054
Existing Resources	19341	19380	19349	19300	19177	19257	19291	19093	18919	18852	18765	18629	18461	18432	18423
NON-DISCRETIONARY RESOURCES:															
1990 R/P Conservatio	22	50	50	50	50	50	50	50	50	50	50	50	50	50	50
Load Reduction - BPA	6	11	16	21	25	29	33	37	43	48	53	58	63	68	73
New SF Res-HW	0	0	1	3	5	7	9	12	19	26	33	40	47	55	62
New MF Res-HW	0	0	0	0	1	1	1	2	3	4	6	7	8	10	11
Water Heat-HW	0	0	3	6	10	14	18	23	28	32	37	42	42	42	42
Solar Acc-HW	0	0	0	1	1	2	2	3	3	4	4	5	5	5	5
New Comm-HW	0	0	8	18	30	44	58	73	89	107	125	144	144	144	144
New Manuf Hsg-HW	0	0	9	17	26	35	43	52	61	69	78	87	87	87	87
DISCRETIONARY RESOURCES:															
Hydro Eff Imp	0	0	45	85	100	105	105	105	105	105	105	105	105	105	110
WNP2 MW Imp	0	0	14	47	47	47	47	47	47	47	47	47	47	47	47
Conservation Voltage	0	0	3	10	17	25	33	41	49	57	64	72	78	82	87
Solar Access	0	0	0	0	0	0	0	0	0	0	0	0	1	3	5
Irrigation Conservat	0	0	2	4	8	11	14	17	20	23	26	29	31	33	34
Non-Aluminum Industr	0	0	13	35	68	105	143	183	223	259	277	296	296	296	296
New Commercial	0	0	0	0	0	0	0	0	0	0	0	0	15	36	51
Comm Discret Ex	0	0	6	19	36	54	74	94	113	133	154	174	189	198	206
Manuf Hsg Weath	0	0	4	9	14	20	25	31	35	39	41	43	46	47	48
Small Hydro 1	0	0	0	0	0	0	0	0	0	0	12	23	35	46	61
Comm Lost Opps Exist	0	0	3	10	21	33	45	59	72	86	100	114	128	141	154
T & D Eff Imp	0	0	3	10	18	26	37	47	58	69	80	91	101	110	120
Thermal Eff Imp	0	0	0	0	41	41	41	41	41	41	41	41	41	41	41
New Manuf Housing	0	0	0	0	0	0	0	0	0	0	0	0	8	16	24
Optioned CCCT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Combined Cycle CT	0	0	0	0	0	0	349	349	697	697	1046	1046	1046	1046	1046
Southwest Imports	0	0	0	0	0	249	249	249	249	249	249	249	249	249	249
MF Res Weath	0	0	4	10	17	23	29	35	40	45	47	50	53	55	56
Small Hydro 2	0	0	0	0	0	0	0	0	0	0	16	32	48	63	75
SF Res Weath	0	0	8	18	28	38	48	58	65	71	73	76	79	81	82
Water Heat	0	0	0	0	0	0	0	0	0	0	0	0	4	21	51
New Residential Ligh	0	0	1	2	4	6	8	9	12	14	17	19	20	22	25
Cogen1	0	0	0	101	101	101	101	101	118	218	218	235	370	454	454
WNP3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Residential	0	0	1	3	5	6	7	8	9	9	10	10	10	11	11
WNP1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen2	0	0	0	0	0	0	48	48	48	48	48	48	48	96	96
Wind1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Hydro 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MSW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal1 (E. Mont)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal2 (E. Wash)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Hydro 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal3 (E. Oregon)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal4 (Nevada)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wind2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal5 (W. Wa/Or)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wind3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Biomass	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Solar2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Replacement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Conserv Energy	33	70	148	263	405	552	708	868	1029	1188	1323	1460	1561	1672	1786
Total Gen Res Energy	0	0	59	313	519	1113	1560	1560	1926	2027	2403	2446	2609	2767	2800
Total Imports Energy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Firm Resources	19374	19450	19557	19877	20098	20920	21557	21518	21873	22064	22488	22533	22630	22871	23007
Load/Resource Balance	52	-150	-281	-182	-190	377	757	470	582	553	740	535	364	304	134

SYSTEM SUMMARY: Mean Loads and Resources (Avg MW), PARTY = REGION 0001 Games

Operating Year	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21
Observed Load	21117	21435	21438	21441	21441	21441	21441	21441	21441	21441	21441	21441	21441	21441	21441
Observed Rate	1.44%	1.50%	0.02%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
DSI Firm Load	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054
Existing Resources	18478	18414	18164	18100	16638	16356	16044	16021	15855	15482	14681	14670	14564	13470	12994
NON-DISCRETIONARY RESOURCES:															
1990 R/P Conservatio	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
Load Reduction - BPA	78	83	87	92	92	92	92	92	92	92	92	92	92	92	92
New SF Res-HW	69	75	82	89	89	89	89	89	89	89	89	89	89	89	89
New MF Res-HW	12	14	15	16	16	16	16	16	16	16	16	16	16	16	16
Water Heat-HW	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42
Solar Acc-HW	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
New Comm-HW	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144
New Manuf Hsg-HW	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87
DISCRETIONARY RESOURCES:															
Hydro Eff Imp	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110
WNP2 MW Imp	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47
Conservation Voltage	91	95	99	100	100	100	100	100	100	100	100	100	100	100	100
Solar Access	6	8	10	11	11	11	11	11	11	11	11	11	11	11	11
Irrigation Conservat	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34
Non-Aluminum Industr	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296
New Commercial	73	95	116	138	138	138	138	138	138	138	138	138	138	138	138
Comm Discret Ex	217	231	247	262	262	262	262	262	262	262	262	262	262	262	262
Manuf Hsg Weath	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
Small Hydro 1	73	77	81	81	81	81	81	81	81	81	81	81	81	81	81
Comm Lost Opps Exist	168	181	195	208	208	208	208	208	208	208	208	208	208	208	208
T & D Eff Imp	130	140	150	160	160	160	160	160	160	160	160	160	160	160	160
Thermal Eff Imp	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41
New Manuf Housing	32	40	48	55	55	55	55	55	55	55	55	55	55	55	55
Optioned CCCT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Combined Cycle CT	1046	1046	1046	1046	1046	1046	1046	1046	1046	1046	1046	1046	1046	1046	1046
Southwest Imports	299	349	398	398	398	398	398	398	398	398	398	398	398	398	398
MF Res Weath	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56
Small Hydro 2	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75
SF Res Weath	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82
Water Heat	84	113	144	178	178	178	178	178	178	178	178	178	178	178	178
New Residential Ligh	27	28	30	31	31	31	31	31	31	31	31	31	31	31	31
Cogen1	454	454	454	454	454	454	454	454	454	454	454	454	454	454	454
WNP3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Residential	11	11	12	12	12	12	12	12	12	12	12	12	12	12	12
WNP1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen2	120	336	448	496	496	496	496	496	496	496	496	496	496	496	496
Wind1	7	14	14	14	14	14	14	14	14	14	14	14	14	14	14
Small Hydro 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MSW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal1 (E. Mont)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal2 (E. Wash)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Hydro 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal3 (E. Oregon)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal4 (Nevada)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wind2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal5 (W. Wa/Or)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wind3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Biomass	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Solar2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Replacement	0	0	0	0	1321	1537	1848	1870	2114	2617	3724	3786	3891	4986	5463
Total Conserv Energy	1908	2031	2152	2275	2275	2275	2275	2275	2275	2275	2275	2275	2275	2275	2275
Total Gen Res Energy	2892	3169	3333	3381	4702	4918	5229	5251	5415	5768	6535	6547	6652	7747	8224
Total Imports Energy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Firm Resources	23278	23613	23652	23760	23619	23553	23552	23551	23549	23529	23495	23496	23495	23496	23496
Load/Resource Balance	106	124	160	264	123	57	56	55	53	33	-1	0	-1	0	1

SYSTEM SUMMARY: Mean Loads and Resources (Avg MW), PARTY = REGION 0001 Games

Operating Year	21-22	22-23	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-31	31-32	32-33	33-34	34-35	35-36
Observed Load	21441	21441	21441	21441	21441	21442	21442	21442	21442	21442	21442	21442	21442	21442	21442
Observed Rate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
DSI Firm Load	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054	2054
Existing Resources	12982	12970	12958	12947	12935	12923	12911	12899	12888	12876	12864	12852	12841	12829	12817
NON-DISCRETIONARY RESOURCES:															
1990 R/P Conservatio	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
Load Reduction - BPA	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92
New SF Res-HW	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89
New MF Res-HW	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
Water Heat-HW	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42
Solar Acc-HW	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
New Comm-HW	144	144	144	144	144	144	144	144	144	144	144	144	144	144	144
New Manuf Hsg-HW	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87
DISCRETIONARY RESOURCES:															
Hydro Eff Imp	110	110	110	110	110	110	110	110	110	110	110	110	65	25	10
WNP2 MW Imp	47	47	33	0	0	0	0	0	0	0	0	0	0	0	0
Conservation Voltage	100	100	100	100	100	100	100	100	100	100	100	100	97	90	83
Solar Access	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
Irrigation Conservat	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34
Non-Aluminum Industr	296	296	296	296	296	296	296	296	296	296	296	296	296	296	296
New Commercial	138	138	138	138	138	138	138	138	138	138	138	138	138	138	138
Comm Discret Ex	262	262	262	262	262	262	262	262	262	262	262	262	262	262	262
Manuf Hsg Weath	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
Small Hydro 1	81	81	81	81	81	81	81	81	81	81	81	81	81	81	81
Comm Lost Opps Exist	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208
T & D Eff Imp	160	160	160	160	160	160	160	160	160	160	160	160	157	150	142
Thermal Eff Imp	41	41	41	41	0	0	0	0	0	0	0	0	0	0	0
New Manuf Housing	55	55	55	55	55	55	55	55	55	55	55	55	55	55	55
Optioned CCCT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Combined Cycle CT	1046	1046	1046	1046	1046	1046	697	697	349	349	0	0	0	0	0
Southwest Imports	398	398	398	398	398	149	149	149	149	149	149	149	149	149	149
MF Res Weath	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56
Small Hydro 2	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75
SF Res Weath	82	82	82	82	82	82	82	82	82	82	82	82	82	82	82
Water Heat	178	178	178	178	178	178	178	178	178	178	178	178	178	178	178
New Residential Ligh	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
Cogen1	454	454	454	454	454	454	454	454	454	454	454	454	454	353	353
WNP3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Residential	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
WNP1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen2	496	496	496	496	496	496	496	496	496	496	496	496	496	496	496
Wind1	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
Small Hydro 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MSW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal1 (E. Mont)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal2 (E. Wash)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Hydro 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal3 (E. Oregon)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal4 (Nevada)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wind2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal5 (W. Wa/Or)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wind3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Biomass	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Solar2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Replacement	5474	5486	5511	5556	5609	5870	6229	6241	6602	6614	6974	6986	7049	7216	7256
Total Conserv Energy	2275	2275	2275	2275	2275	2275	2275	2275	2275	2275	2275	2275	2269	2255	2241
Total Gen Res Energy	8235	8247	8258	8270	8282	8294	8304	8316	8329	8341	8352	8364	8382	8408	8433
Total Imports Energy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Firm Resources	23496	23496	23495	23496	23496	23496	23495	23495	23496	23496	23496	23496	23496	23497	23495
Load/Resource Balance	0	0	0	0	0	1	-1	-1	0	0	0	0	0	1	-1

SYSTEM SUMMARY: Mean Loads and Resources (Avg MW), PARTY = REGION

0001 Games

Operating Year	36-37	37-38	38-39	39-40
Observed Load	21442	21442	21442	21442
Observed Rate	0.00%	0.00%	0.00%	0.00%
DSI Firm Load	2054	2054	2054	2054
Existing Resources	12805	12794	12782	12770
NON-DISCRETIONARY RESOURCES:				
1990 R/P Conservatio	50	50	50	50
Load Reduction - BPA	92	92	92	92
New SF Res-HW	89	89	89	89
New MF Res-HW	16	16	16	16
Water Heat-HW	42	42	42	42
Solar Acc-HW	5	5	5	5
New Comm-HW	144	144	144	144
New Manuf Hsg-HW	87	87	78	69
DISCRETIONARY RESOURCES:				
Hydro Eff Imp	5	5	5	5
WNP2 MW Imp	0	0	0	0
Conservation Voltage	75	67	59	51
Solar Access	11	11	11	11
Irrigation Conservat	34	34	34	34
Non-Aluminum Industr	296	296	296	296
New Commercial	138	138	138	138
Comm Discret Ex	262	262	262	262
Manuf Hsg Weath	48	48	48	48
Small Hydro 1	81	81	81	81
Comm Lost Opps Exist	208	208	208	208
T & D Eff Imp	134	124	113	102
Thermal Eff Imp	0	0	0	0
New Manuf Housing	55	55	55	55
Optioned CCCT	0	0	0	0
Combined Cycle CT	0	0	0	0
Southwest Imports	100	50	0	0
MF Res Weath	56	56	56	56
Small Hydro 2	75	75	75	75
SF Res Weath	82	82	82	82
Water Heat	178	178	178	178
New Residential Ligh	31	31	31	31
Cogen1	353	353	353	336
WNP3	0	0	0	0
Existing Residential	12	12	11	9
WNP1	0	0	0	0
Cogen2	496	448	448	448
Wind1	14	14	14	14
Small Hydro 3	0	0	0	0
Geothermal	0	0	0	0
Cogen3	0	0	0	0
MSW	0	0	0	0
Coal1 (E. Mont)	0	0	0	0
Coal2 (E. Wash)	0	0	0	0
Cogen4	0	0	0	0
Small Hydro 4	0	0	0	0
Coal3 (E. Oregon)	0	0	0	0
Coal4 (Nevada)	0	0	0	0
Wind2	0	0	0	0
Coal5 (W. Wa/Or)	0	0	0	0
Wind3	0	0	0	0

Solar2	0	0	0	0
Replacement	7339	7468	7558	7616
Total Conserv Energy	2225	2207	2178	2149
Total Gen Res Energy	8462	8493	8533	8574
Total Imports Energy	0	0	0	0
Total Firm Resources	23496	23496	23496	23496
Load/Resource Balance	0	0	0	0

Coal2 (E. Wash)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal3 (E. Oregon)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal4 (Nevada)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal5 (W. Wa/Or)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Replacement	0	0	0	0	0	89	103	157	157	157	157	682	901	1030	1751
Subtotal	3324	3340	3450	4256	4256	4345	4359	4333	4306	4306	4306	4771	4990	5119	5840
Total Firm Resources	8295	8293	8388	9006	8802	8669	8620	8530	8439	8375	8292	8492	8645	8649	8652
Load/Resource Balance	241	99	54	533	193	54	0	-95	-191	-259	-347	-150	0	0	0

SYSTEM SUMMARY: Mean Loads and Resources (Avg MW), PARTY = BPA
0100 Games

Operating Year	20-21	21-22	22-23	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-31	31-32	32-33	33-34	34-35
Observed Load	6199	6202	6205	6208	6211	6214	6216	6218	6220	6222	6224	6226	6229	6231	6234
Observed Rate	0.05%	0.05%	0.05%	0.05%	0.04%	0.04%	0.04%	0.04%	0.03%	0.03%	0.03%	0.03%	0.04%	0.04%	0.04%
DSI Firm Load	2457	2457	2457	2457	2457	2457	2457	2457	2457	2457	2457	2457	2457	2457	2457
Existing Resources	6727	6727	6727	6727	6727	6727	6727	6727	6727	6727	6727	6727	6727	6727	6727
BPA Requirements	-4944	-4942	-4940	-4937	-4935	-4933	-4931	-4930	-4928	-4926	-4925	-4924	-4925	-4926	-4927
CONSERVATION PROGRAMS:															
SF Res MCS	126	126	126	126	126	126	126	126	126	126	126	126	126	126	126
MF Res MCS	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
New Manuf Housing	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39
Water Heat	159	159	159	159	159	159	159	159	159	159	159	159	159	159	159
Refrigerators	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45
Freezers	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Irrigation	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
Industrial	188	188	188	188	188	188	188	188	188	188	188	188	188	188	188
New Commercial	214	214	214	214	214	214	214	214	214	214	214	214	214	214	214
Comm Lost Opps Exist	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67
MF Res Weath	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
SF Res Weath	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62
Comm Discret Ex	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86
Subtotal	1033	1033	1033	1033	1033	1033	1033	1033	1033	1033	1033	1033	1033	1033	1033
GENERATING RESOURCES:															
Small Hydro 1 West	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Small Hydro 1 East	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
Small Hydro 2 West	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
Small Hydro 2 East	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
Small Hydro 3 West	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
Small Hydro 3 East	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
Small Hydro 4 West	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Small Hydro 4 East	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
Geothermal2	383	383	383	383	338	293	248	202	157	113	67	23	0	0	0
Wind1	66	66	66	66	66	66	66	66	66	66	66	66	66	49	33
Wind2	308	308	308	308	308	308	308	308	308	308	308	308	308	284	259
Geothermal1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Solar3	42	42	42	0	0	0	0	0	0	0	0	0	0	0	0
Solar1	22	22	22	0	0	0	0	0	0	0	0	0	0	0	0
Solar2	22	22	22	0	0	0	0	0	0	0	0	0	0	0	0
Hydro Eff Imp	100	100	80	60	40	20	0	0	0	0	0	0	0	0	0
Trans Eff Imp	34	34	23	12	1	0	0	0	0	0	0	0	0	0	0
Cogen1w	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Combined Cycle Mix	349	349	349	349	0	0	0	0	0	0	0	0	0	0	0
Combined Cycle BPA	697	697	697	697	697	697	697	349	349	349	349	349	349	0	0
Cogen1e	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen2w	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WNP 1	813	813	813	813	813	813	813	813	813	813	813	813	813	813	813
WNP 3	806	806	806	806	806	806	806	806	806	806	806	806	806	806	806
Cogen2e	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen3w	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen3e	120	20	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen4w	110	110	110	110	110	110	110	0	0	0	0	0	0	0	0
Coal1 (E. Mont)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen4e	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Coal2 (E. Wash)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal3 (E. Oregon)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal4 (Nevada)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal5 (W. Wa/Or)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Replacement	1871	1972	2024	2142	2567	2634	2699	3203	3249	3294	3340	3386	3413	3805	3849
Subtotal	5840	5841	5842	5843	5843	5844	5844	5844	5845	5846	5846	5848	5852	5854	5857
Total Firm Resources	8656	8659	8662	8666	8668	8671	8673	8674	8677	8680	8681	8684	8687	8688	8690
Load/Resource Balance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SYSTEM SUMMARY: Mean Loads and Resources (Avg MW), PARTY = BPA
0100 Games

Operating Year	35-36	36-37	37-38	38-39	39-40	40-41	41-42	42-43	43-44	44-45	45-46	46-47	47-48	48-49	49-50
Observed Load	6236	6239	6241	6243	6245	6247	6248	6250	6252	6253	6255	6256	6257	6257	6258
Observed Rate	0.04%	0.04%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.02%	0.02%	0.01%	0.01%	0.01%
DSI Firm Load	2457	2457	2457	2457	2457	2457	2457	2457	2457	2457	2457	2457	2457	2457	2457
Existing Resources	6727	6727	6727	6727	6727	6727	6727	6727	6727	6727	6727	6727	6727	6727	6727
BPA Requirements	-4928	-4929	-4929	-4930	-4931	-4931	-4932	-4933	-4933	-4934	-4934	-4935	-4935	-4934	-4934
CONSERVATION PROGRAMS:															
SF Res MCS	126	126	126	126	126	126	126	126	126	126	126	126	126	126	126
MF Res MCS	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
New Manuf Housing	39	38	37	36	34	32	31	28	26	24	21	19	17	14	12
Water Heat	159	159	159	159	159	159	159	159	159	159	159	159	159	159	159
Refrigerators	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45
Freezers	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Irrigation	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
Industrial	188	188	188	188	188	188	188	188	188	188	188	188	188	188	188
New Commercial	214	214	214	214	214	214	214	214	214	214	214	214	214	214	214
Comm Lost Opps Exist	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67
MF Res Weath	9	9	9	9	9	9	9	8	7	7	6	5	5	4	3
SF Res Weath	62	62	62	62	62	62	60	56	50	45	39	33	28	22	17
Comm Discret Ex	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86
Subtotal	1033	1032	1031	1030	1028	1026	1023	1015	1006	999	989	980	973	963	955
GENERATING RESOURCES:															
Small Hydro 1 West	10	10	10	10	10	10	10	10	0	0	0	0	0	0	0
Small Hydro 1 East	14	14	14	14	14	14	14	14	0	0	0	0	0	0	0
Small Hydro 2 West	11	11	11	11	11	11	11	11	0	0	0	0	0	0	0
Small Hydro 2 East	14	14	14	14	14	14	14	14	4	0	0	0	0	0	0
Small Hydro 3 West	11	11	11	11	11	11	11	11	11	11	11	0	0	0	0
Small Hydro 3 East	19	19	19	19	19	19	19	19	19	19	19	7	0	0	0
Small Hydro 4 West	7	7	7	7	7	7	7	7	7	7	7	0	0	0	0
Small Hydro 4 East	11	11	11	11	11	11	11	11	11	11	11	0	0	0	0
Geothermal2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wind1	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wind2	235	211	186	162	138	113	89	65	41	16	16	0	0	0	0
Geothermal1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Solar3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Solar1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Solar2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydro Eff Imp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trans Eff Imp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen1w	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Combined Cycle Mix	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Combined Cycle BPA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen1e	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen2w	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WNP 1	813	813	813	813	813	813	813	813	813	813	0	0	0	0	0
WNP 3	806	806	806	806	806	806	806	806	806	806	806	806	806	0	0
Cogen2e	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen3w	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen3e	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen4w	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal1 (E. Mont)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen4e	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Coal2 (E. Wash)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal3 (E. Oregon)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal4 (Nevada)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal5 (W. Wa/Or)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Replacement	3893	3938	3966	3995	4023	4052	4082	4116	4197	4236	5059	5126	5143	5958	5966
Subtotal	5861	5865	5868	5873	5877	5881	5887	5897	5909	5919	5929	5939	5949	5958	5966
Total Firm Resources	8693	8695	8697	8700	8701	8703	8705	8706	8709	8711	8711	8711	8714	8714	8714
Load/Resource Balance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SYSTEM SUMMARY: Mean Loads and Resources (Avg MW), PARTY = IOUs
0100 Games

Operating Year	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05
Observed Load	9551	9881	10214	10558	10916	11253	11590	11927	12264	12600	12946	13291	13638	13984	14331
Observed Rate		3.45%	3.37%	3.37%	3.39%	3.09%	3.00%	2.91%	2.82%	2.74%	2.74%	2.67%	2.60%	2.54%	2.48%
Existing Resources	9685	9681	9795	9910	9353	8791	8795	8798	8710	8621	8652	8683	8448	8214	8306
BPA Requirements	47	77	127	0	0	0	0	0	0	0	0	0	0	0	0
CONSERVATION PROGRAMS:															
SF Res MCS	0	3	6	10	14	17	21	25	30	34	39	44	50	55	60
MF Res MCS	0	1	2	4	5	6	7	9	10	11	13	14	16	17	18
New Manuf Housing	0	1	2	4	5	7	9	12	14	17	20	22	25	28	31
Refrigerators	0	0	0	0	2	5	8	12	15	19	23	27	32	36	41
Freezers	0	0	0	0	1	1	2	3	4	5	6	8	9	10	11
Water Heat	0	0	0	0	5	16	28	39	51	63	76	90	104	117	131
Irrigation	0	0	1	2	3	5	7	10	12	14	16	18	20	21	22
Industrial	0	2	8	19	31	43	55	68	80	92	104	116	129	141	153
New Commercial	0	11	32	52	72	89	108	127	146	166	185	203	222	241	260
Comm Lost Opps Exist	0	2	6	10	14	18	21	25	29	33	37	41	45	49	53
MF Res Weath	0	1	3	5	7	9	11	13	15	17	19	21	23	25	27
SF Res Weath	0	1	4	8	11	15	18	22	26	29	33	36	39	40	40
Comm Discret Ex	0	2	7	14	21	28	35	42	49	56	63	71	76	76	76
Subtotal	0	24	71	128	191	259	330	407	481	556	634	711	790	856	923
GENERATING RESOURCES:															
Small Hydro 1 West	0	0	0	29	29	29	29	29	29	29	29	29	29	29	29
Small Hydro 1 East	0	0	0	34	43	43	43	43	43	43	43	43	43	43	43
Small Hydro 2 West	0	0	0	25	32	32	32	32	32	32	32	32	32	32	32
Small Hydro 2 East	0	0	0	25	47	47	47	47	47	47	47	47	47	47	47
Cogen1w	0	0	30	30	30	30	30	30	30	30	30	30	30	30	30
Combined Cycle Mix	0	0	0	0	349	349	349	349	349	349	349	349	349	349	349
Cogen1e	0	0	30	30	30	30	30	30	30	30	30	30	30	30	30
Cogen2w	0	0	180	180	180	180	180	180	180	180	180	180	180	180	180
Small Hydro 3 West	0	0	0	0	0	0	26	37	37	37	37	37	37	37	37
Small Hydro 3 East	0	0	0	0	0	0	26	52	52	52	52	52	56	56	56
Cogen2e	0	0	0	180	180	180	180	180	180	180	180	180	180	180	180
Coal1 (E. Mont)	0	0	0	0	0	0	0	188	375	563	750	938	1125	1313	1313
Cogen3w	0	0	0	0	360	360	360	360	360	360	360	360	360	360	360
Small Hydro 4 West	0	0	0	0	0	0	25	25	25	25	25	25	25	25	25
Small Hydro 4 East	0	0	0	0	0	0	25	32	32	32	32	32	32	32	32
Cogen3e	0	0	0	0	140	360	360	360	360	360	360	360	360	360	360
Coal2 (E. Wash)	0	0	0	0	0	0	0	188	375	563	563	563	563	563	563
Cogen4w	0	0	0	0	0	620	780	780	780	780	780	780	1000	1330	1330
Coal3 (E. Oregon)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	188
Cogen4e	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal4 (Nevada)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal5 (W. Wa/Or)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wind1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wind2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Replacement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal	0	0	240	533	1420	2260	2522	2942	3316	3692	3879	4067	4478	4996	5184
Total Firm Resources	9732	9782	10233	10571	10964	11310	11647	12147	12507	12869	13165	13461	13716	14066	14413

Load/Resource Balance	181	-98	21	11	47	58	59	218	243	271	221	171	77	81	79

SYSTEM SUMMARY: Mean Loads and Resources (Avg MW), PARTY = IOUs
0100 Games

Operating Year	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20
Observed Load	14754	15178	15604	16030	16458	16460	16462	16464	16466	16468	16470	16471	16473	16474	16475
Observed Rate	2.95%	2.87%	2.80%	2.73%	2.67%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%
Existing Resources	8398	8383	8368	8513	8542	7194	6872	6543	6477	6261	5838	5194	5139	5051	4589
BPA Requirements	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONSERVATION PROGRAMS:															
SF Res MCS	66	71	77	83	89	89	89	89	89	89	89	89	89	89	89
MF Res MCS	20	21	22	24	25	25	25	25	25	25	25	25	25	25	25
New Manuf Housing	33	36	38	41	44	44	44	44	44	44	44	44	44	44	44
Refrigerators	45	49	53	59	65	65	65	65	65	65	65	65	65	65	65
Freezers	12	13	14	16	18	18	18	18	18	18	18	18	18	18	18
Water Heat	144	158	173	188	203	203	203	203	203	203	203	203	203	203	203
Irrigation	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
Industrial	165	177	189	202	212	212	212	212	212	212	212	212	212	212	212
New Commercial	280	300	321	343	365	365	365	365	365	365	365	365	365	365	365
Comm Lost Opps Exist	57	60	64	68	72	72	72	72	72	72	72	72	72	72	72
MF Res Weath	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
SF Res Weath	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Comm Discret Ex	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76
Subtotal	987	1050	1116	1189	1258	1258	1258	1258	1258	1258	1258	1258	1258	1258	1258
GENERATING RESOURCES:															
Small Hydro 1 West	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
Small Hydro 1 East	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43
Small Hydro 2 West	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
Small Hydro 2 East	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47
Cogen1w	30	30	30	30	30	30	30	0	0	0	0	0	0	0	0
Combined Cycle Mix	349	349	349	349	349	349	349	349	349	349	349	349	349	349	349
Cogen1e	30	30	30	30	30	30	30	0	0	0	0	0	0	0	0
Cogen2w	180	180	180	180	180	180	180	0	0	0	0	0	0	0	0
Small Hydro 3 West	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37
Small Hydro 3 East	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56
Cogen2e	180	180	180	180	180	180	180	180	0	0	0	0	0	0	0
Coal1 (E. Mont)	1313	1313	1313	1313	1313	1313	1313	1313	1313	1313	1313	1313	1313	1313	1313
Cogen3w	360	360	360	360	360	360	360	360	360	0	0	0	0	0	0
Small Hydro 4 West	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
Small Hydro 4 East	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
Cogen3e	360	360	360	360	360	360	360	360	360	220	0	0	0	0	0
Coal2 (E. Wash)	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563
Cogen4w	1400	1500	1500	1500	1500	1500	1500	1500	1500	1500	880	720	720	720	720
Coal3 (E. Oregon)	375	563	563	563	563	563	563	563	563	563	563	563	563	563	563
Cogen4e	0	80	450	670	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Coal4 (Nevada)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal5 (W. Wa/Or)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wind1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wind2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Replacement	0	0	0	0	0	1352	1607	1831	1831	2643	3907	4714	4980	5279	5822
Subtotal	5441	5809	6179	6399	6729	8081	8336	8320	8140	8452	8876	9523	9789	10088	10631
Total Firm Resources	14826	15242	15663	16101	16529	16533	16466	16121	15875	15971	15972	15975	16186	16397	16478

Load/Resource Balance	69	63	60	67	68	69	0	-346	-595	-500	-500	-500	-290	-80	0

SYSTEM SUMMARY: Mean Loads and Resources (Avg MW), PARTY = IOUs
0100 Games

Operating Year	20-21	21-22	22-23	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-31	31-32	32-33	33-34	34-35
Observed Load	16475	16474	16474	16473	16472	16472	16471	16471	16470	16470	16469	16468	16464	16461	16457
Observed Rate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.01%	-0.02%	-0.02%	-0.02%
Existing Resources	4143	4143	4143	4143	4143	4143	4143	4143	4143	4143	4143	4143	4143	4143	4143
BPA Requirements	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONSERVATION PROGRAMS:															
SF Res MCS	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89
MF Res MCS	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
New Manuf Housing	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44
Refrigerators	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
Freezers	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
Water Heat	203	203	203	203	203	203	203	203	203	203	203	203	203	203	203
Irrigation	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
Industrial	212	212	212	212	212	212	212	212	212	212	212	212	212	212	212
New Commercial	365	365	365	365	365	365	365	365	365	365	365	365	365	365	365
Comm Lost Opps Exist	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72
MF Res Weath	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27
SF Res Weath	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Comm Discret Ex	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76
Subtotal	1258	1258	1258	1258	1258	1258	1258	1258	1258	1258	1258	1258	1258	1258	1258
GENERATING RESOURCES:															
Small Hydro 1 West	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
Small Hydro 1 East	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43
Small Hydro 2 West	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
Small Hydro 2 East	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47
Cogen1w	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Combined Cycle Mix	349	349	349	349	0	0	0	0	0	0	0	0	0	0	0
Cogen1e	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen2w	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Hydro 3 West	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37
Small Hydro 3 East	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56
Cogen2e	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal1 (E. Mont)	1313	1313	1313	1313	1313	1313	1313	1313	1313	1313	1313	1313	1313	1313	1313
Cogen3w	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Hydro 4 West	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
Small Hydro 4 East	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
Cogen3e	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal2 (E. Wash)	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563
Cogen4w	720	720	500	170	170	100	0	0	0	0	0	0	0	0	0
Coal3 (E. Oregon)	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563
Cogen4e	1000	1000	1000	1000	1000	1000	920	550	330	0	0	0	0	0	0
Coal4 (Nevada)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal5 (W. Wa/Or)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wind1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wind2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Replacement	6268	6268	6486	6816	7164	7233	7413	7782	8002	8331	8331	8331	8331	8331	8331
Subtotal	11077	11077	11075	11075	11074	11073	11073	11072	11072	11071	11071	11071	11071	11071	11071
Total Firm Resources	16478	16478	16476	16476	16475	16474	16474	16473	16473	16472	16472	16472	16472	16472	16472

Load/Resource Balance	0	1	0	0	0	0	0	0	0	0	0	2	5	9	12

SYSTEM SUMMARY: Mean Loads and Resources (Avg MW), PARTY = IOUs
0100 Games

Operating Year	35-36	36-37	37-38	38-39	39-40	40-41	41-42	42-43	43-44	44-45	45-46	46-47	47-48	48-49	49-50
Observed Load	16454	16451	16448	16446	16443	16441	16438	16436	16434	16431	16429	16428	16427	16427	16427
Observed Rate	-0.02%	-0.02%	-0.02%	-0.02%	-0.02%	-0.02%	-0.01%	-0.01%	-0.01%	-0.01%	-0.01%	-0.01%	-0.01%	0.00%	0.00%
Existing Resources	4143	4143	4143	4143	4143	4143	4143	4143	4143	4143	4143	4143	4143	4143	4143
BPA Requirements	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CONSERVATION PROGRAMS:															
SF Res MCS	89	89	89	89	89	89	89	89	89	89	89	89	89	89	89
MF Res MCS	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
New Manuf Housing	44	43	42	40	38	37	34	32	29	27	24	21	19	16	13
Refrigerators	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
Freezers	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
Water Heat	203	203	203	203	203	203	203	203	203	203	203	203	203	203	203
Irrigation	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
Industrial	212	212	212	212	212	212	212	212	212	212	212	212	212	212	212
New Commercial	365	365	365	365	365	365	365	365	365	365	365	365	365	365	365
Comm Lost Opps Exist	72	72	72	72	72	72	72	72	72	72	72	72	72	72	72
MF Res Weath	27	27	27	27	27	27	26	24	22	20	18	16	14	12	10
SF Res Weath	40	40	40	40	40	40	39	36	32	29	25	21	18	14	11
Comm Discret Ex	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76
Subtotal	1258	1257	1256	1254	1252	1251	1246	1239	1230	1223	1214	1205	1198	1189	1181
GENERATING RESOURCES:															
Small Hydro 1 West	29	29	29	29	29	29	29	29	0	0	0	0	0	0	0
Small Hydro 1 East	43	43	43	43	43	43	43	43	10	0	0	0	0	0	0
Small Hydro 2 West	32	32	32	32	32	32	32	32	7	0	0	0	0	0	0
Small Hydro 2 East	47	47	47	47	47	47	47	47	22	0	0	0	0	0	0
Cogen1w	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Combined Cycle Mix	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen1e	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen2w	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Hydro 3 West	37	37	37	37	37	37	37	37	37	37	37	11	0	0	0
Small Hydro 3 East	56	56	56	56	56	56	56	56	56	56	56	30	4	4	4
Cogen2e	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal1 (E. Mont)	1313	1313	1125	938	750	563	375	188	0	0	0	0	0	0	0
Cogen3w	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Hydro 4 West	25	25	25	25	25	25	25	25	25	25	25	0	0	0	0
Small Hydro 4 East	32	32	32	32	32	32	32	32	32	32	32	7	0	0	0
Cogen3e	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal2 (E. Wash)	563	563	375	188	0	0	0	0	0	0	0	0	0	0	0
Cogen4w	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal3 (E. Oregon)	563	563	563	563	563	563	563	563	563	375	188	0	0	0	0
Cogen4e	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal4 (Nevada)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal5 (W. Wa/Or)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wind1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wind2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Replacement	8331	8331	8687	9061	9435	9622	9811	10004	10310	10542	10736	11032	11083	11092	11100
Subtotal	11071	11071	11051	11051	11049	11049	11050	11056	11062	11067	11074	11080	11087	11096	11104
Total Firm Resources	16472	16471	16450	16448	16444	16443	16439	16438	16435	16433	16431	16428	16428	16428	16428

Load/Resource Balance	15	17	0	0	0	0	0	0	0	0	0	0	0	0	0

SYSTEM SUMMARY: Mean Loads and Resources (Avg MW), PARTY = Generating Publics
0100 Games

Operating Year	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05
Observed Load	4284	4434	4588	4758	4922	5085	5249	5414	5579	5744	5895	6045	6196	6346	6496
Observed Rate		3.49%	3.48%	3.70%	3.44%	3.32%	3.23%	3.13%	3.05%	2.97%	2.62%	2.55%	2.49%	2.42%	2.37%
Existing Resources	2380	2378	2407	2436	2431	2431	2446	2461	2455	2449	2469	2490	2489	2489	2512
BPA Requirements	1905	2055	2181	2322	2491	2654	2803	2953	3123	3295	3425	3556	3706	3857	3984
CONSERVATION PROGRAMS:															
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GENERATING RESOURCES:															
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Firm Resources	4284	4434	4588	4758	4922	5085	5249	5414	5579	5744	5895	6045	6196	6346	6496
Load/Resource Balance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SYSTEM SUMMARY: Mean Loads and Resources (Avg MW), PARTY = Generating Publics
0100 Games

Operating Year	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20
Observed Load	6672	6847	7022	7195	7368	7361	7353	7346	7340	7333	7328	7322	7317	7313	7308
Observed Rate	2.71%	2.63%	2.55%	2.47%	2.40%	-0.11%	-0.10%	-0.09%	-0.09%	-0.08%	-0.08%	-0.07%	-0.07%	-0.06%	-0.06%
Existing Resources	2534	2534	2534	2534	2520	2361	2361	2361	2361	2361	2361	2361	2361	2361	2361
BPA Requirements	4138	4313	4487	4661	4849	5000	4992	4985	4979	4973	4967	4962	4957	4952	4948
CONSERVATION PROGRAMS:															
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GENERATING RESOURCES:															
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Firm Resources	6672	6847	7022	7195	7368	7361	7353	7346	7340	7334	7328	7322	7317	7313	7308
Load/Resource Balance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SYSTEM SUMMARY: Mean Loads and Resources (Avg MW), PARTY = Generating Publics
0100 Games

Operating Year	20-21	21-22	22-23	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-31	31-32	32-33	33-34	34-35
Observed Load	7305	7303	7300	7298	7296	7294	7292	7290	7289	7287	7286	7285	7286	7287	7288
Observed Rate	-0.04%	-0.04%	-0.03%	-0.03%	-0.03%	-0.03%	-0.03%	-0.02%	-0.02%	-0.02%	-0.02%	-0.01%	0.01%	0.01%	0.01%
Existing Resources	2361	2361	2361	2361	2361	2361	2361	2361	2361	2361	2361	2361	2361	2361	2361
BPA Requirements	4944	4942	4940	4937	4935	4933	4931	4930	4928	4926	4925	4924	4925	4926	4927
CONSERVATION PROGRAMS:															
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GENERATING RESOURCES:															
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Firm Resources	7305	7303	7300	7298	7296	7294	7292	7290	7289	7287	7286	7285	7286	7287	7288
Load/Resource Balance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SYSTEM SUMMARY: Mean Loads and Resources (Avg MW), PARTY = Generating Publics
0100 Games

Operating Year	35-36	36-37	37-38	38-39	39-40	40-41	41-42	42-43	43-44	44-45	45-46	46-47	47-48	48-49	49-50
Observed Load	7288	7289	7290	7291	7291	7292	7293	7293	7294	7294	7295	7295	7295	7295	7295
Observed Rate	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.00%	-0.01%	-0.01%
Existing Resources	2361	2361	2361	2361	2361	2361	2361	2361	2361	2361	2361	2361	2361	2361	2361
BPA Requirements	4928	4929	4929	4930	4931	4931	4932	4933	4933	4934	4934	4935	4935	4934	4934
CONSERVATION PROGRAMS:															
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GENERATING RESOURCES:															
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Firm Resources	7288	7289	7290	7291	7291	7292	7293	7293	7294	7294	7295	7295	7295	7295	7295
Load/Resource Balance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SYSTEM SUMMARY: Mean Loads and Resources (Avg MW), PARTY = REGION
0100 Games

Operating Year	90-91	91-92	92-93	93-94	94-95	95-96	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04	04-05
Observed Load	17723	18317	18922	19551	20193	20811	21431	22050	22669	23288	23899	24509	25120	25730	26341
Observed Rate		3.35%	3.30%	3.32%	3.28%	3.07%	2.97%	2.89%	2.81%	2.73%	2.62%	2.56%	2.49%	2.43%	2.37%
DSI Firm Load	2261	2268	2278	2288	2298	2308	2319	2329	2339	2350	2360	2371	2381	2392	2403
Existing Resources	20443	20605	20585	20564	19997	19429	19495	19560	19475	19389	19538	19687	19458	19229	19225
CONSERVATION PROGRAMS:															
SF Res MCS	0	8	17	26	36	44	54	65	76	87	99	111	125	137	149
MF Res MCS	0	2	3	6	7	9	11	13	15	17	19	21	24	25	27
Water Heat	0	0	0	0	9	29	50	70	91	113	136	161	185	209	234
Refrigerators	0	0	0	0	3	9	14	20	26	32	39	46	54	61	69
Freezers	0	0	0	0	1	2	4	5	7	9	10	13	15	17	19
New Manuf Housing	0	2	4	7	10	13	17	23	27	32	38	42	47	53	58
Irrigation	0	0	2	3	5	9	12	16	20	23	27	30	33	35	36
Industrial	0	4	16	36	58	81	104	128	151	174	196	219	243	266	289
New Commercial	0	18	51	83	114	142	171	201	232	264	294	322	352	382	413
Comm Discret Ex	0	4	15	30	45	60	75	90	105	120	135	150	161	162	162
Comm Lost Opps Exist	0	4	12	19	27	34	41	48	56	64	71	79	86	94	102
SF Res Weath	0	3	10	20	29	38	47	56	66	75	84	93	101	102	102
MF Res Weath	0	1	4	7	9	12	15	17	20	23	25	28	31	33	36
Subtotal	0	46	134	237	353	482	615	752	892	1033	1173	1315	1457	1576	1696
GENERATING RESOURCES:															
Hydro Eff Imp	0	0	20	40	60	80	100	100	100	100	100	100	100	100	100
Trans Eff Imp	0	0	11	22	33	34	34	34	34	34	34	34	34	34	34
Small Hydro 1 East	0	0	0	48	57	57	57	57	57	57	57	57	57	57	57
Small Hydro 2 East	0	0	0	36	61	61	61	61	61	61	61	61	61	61	61
Small Hydro 3 East	0	0	0	0	0	0	37	71	71	71	71	71	75	75	75
Small Hydro 4 East	0	0	0	0	0	0	36	43	43	43	43	43	43	43	43
Small Hydro 1 West	0	0	0	39	39	39	39	39	39	39	39	39	39	39	39
Small Hydro 2 West	0	0	0	36	43	43	43	43	43	43	43	43	43	43	43
Small Hydro 3 West	0	0	0	0	0	0	37	48	48	48	48	48	48	48	48
Small Hydro 4 West	0	0	0	0	0	0	32	32	32	32	32	32	32	32	32
Combined Cycle BPA	0	0	0	0	0	0	0	349	349	349	349	349	349	697	697
Combined Cycle Mix	0	0	0	0	698	698	698	698	698	698	698	698	698	698	698
Cogen1e	0	0	40	40	40	40	40	40	40	40	40	40	40	40	40
Cogen2e	0	0	0	180	180	180	240	240	240	240	240	240	240	240	240
Cogen3e	0	0	0	0	140	360	360	360	360	360	360	460	480	480	480
Cogen4e	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen1w	0	0	40	40	40	40	40	40	40	40	40	40	40	40	40
Cogen2w	0	0	240	240	240	240	240	240	240	240	240	240	240	240	240
Cogen3w	0	0	0	0	360	360	360	360	360	360	480	480	480	480	480
Cogen4w	0	0	0	0	0	620	780	780	780	780	780	780	1000	1330	1330
Coal1 (E. Mont)	0	0	0	0	0	0	0	188	375	563	750	938	1125	1313	1313
Coal2 (E. Wash)	0	0	0	0	0	0	0	188	375	563	563	563	563	563	563
Coal3 (E. Oregon)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	188
Coal4 (Nevada)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal5 (W. Wa/Or)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FBCoal1 (E. Mnt)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FBCoal2 (E. Wa)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FBCoal3 (E. Ore)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FBCoal4 (Nev)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FBCoal5 (WWa/Or)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GCoal1 (EMont)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GCoal2 (EWash)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

GCoal3 (EOre)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GCoal4 (Nev)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GCoal5 (WWaOr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Replacement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WNP 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WNP 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Geothermal1	0	0	0	27	27	27	27	27	27	27	27	27	27	27	27
Geothermal2	0	0	0	0	45	90	135	180	225	270	315	360	383	383	383
Solar1	0	0	0	22	22	22	22	22	22	22	22	22	22	22	22
Solar2	0	0	0	22	22	22	22	22	22	22	22	22	22	22	22
Solar3	0	0	0	42	42	42	42	42	42	42	42	42	42	42	42
Wind1	0	0	0	17	33	49	66	66	66	66	66	66	66	66	66
Wind2	0	0	0	24	49	73	97	121	146	170	194	219	243	267	292
Subtotal	0	0	351	875	2231	3177	3645	4491	4935	5380	5756	6114	6592	7482	7695
Total Firm Resources	20443	20652	21069	21675	22582	23091	23757	24803	25300	25801	26469	27118	27505	28288	28612
Load/Resource Balance	459	67	-130	-164	91	-29	8	424	292	163	210	238	4	166	-131

SYSTEM SUMMARY: Mean Loads and Resources (Avg MW), PARTY = REGION
0100 Games

Operating Year	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20
Observed Load	27069	27796	28524	29251	29979	29979	29979	29979	29979	29979	29979	29979	29979	29979	29979
Observed Rate	2.76%	2.69%	2.62%	2.55%	2.49%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
DSI Firm Load	2413	2424	2435	2446	2457	2457	2457	2457	2457	2457	2457	2457	2457	2457	2457
Existing Resources	19221	19312	19402	19478	19423	17845	17453	17054	16917	16631	16119	15204	15079	14861	13677
CONSERVATION PROGRAMS:															
SF Res MCS	162	174	188	201	215	215	215	215	215	215	215	215	215	215	215
MF Res MCS	30	31	33	36	37	37	37	37	37	37	37	37	37	37	37
Water Heat	257	282	309	336	362	362	362	362	362	362	362	362	362	362	362
Refrigerators	76	83	90	100	110	110	110	110	110	110	110	110	110	110	110
Freezers	20	22	24	27	30	30	30	30	30	30	30	30	30	30	30
New Manuf Housing	62	68	72	77	83	83	83	83	83	83	83	83	83	83	83
Irrigation	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
Industrial	311	334	357	381	400	400	400	400	400	400	400	400	400	400	400
New Commercial	444	476	510	544	579	579	579	579	579	579	579	579	579	579	579
Comm Discret Ex	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162
Comm Lost Opps Exist	109	116	123	131	139	139	139	139	139	139	139	139	139	139	139
SF Res Weath	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102
MF Res Weath	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
Subtotal	1807	1922	2042	2169	2291	2291	2291	2291	2291	2291	2291	2291	2291	2291	2291
GENERATING RESOURCES:															
Hydro Eff Imp	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Trans Eff Imp	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34
Small Hydro 1 East	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
Small Hydro 2 East	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61
Small Hydro 3 East	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75
Small Hydro 4 East	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43
Small Hydro 1 West	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39
Small Hydro 2 West	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43
Small Hydro 3 West	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
Small Hydro 4 West	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
Combined Cycle BPA	697	697	697	697	697	697	697	697	697	697	697	697	697	697	697
Combined Cycle Mix	698	698	698	698	698	698	698	698	698	698	698	698	698	698	698
Cogen1e	40	40	40	40	40	40	40	0	0	0	0	0	0	0	0
Cogen2e	240	240	240	240	240	240	240	240	60	60	60	0	0	0	0
Cogen3e	480	480	480	480	480	480	480	480	480	340	120	120	120	120	120
Cogen4e	0	80	450	670	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Cogen1w	40	40	40	40	40	40	40	0	0	0	0	0	0	0	0
Cogen2w	240	240	240	240	240	240	240	0	0	0	0	0	0	0	0
Cogen3w	480	480	480	480	480	480	480	480	480	120	120	120	120	120	120
Cogen4w	1400	1500	1610	1610	1610	1610	1610	1610	1610	1610	990	830	830	830	830
Coal1 (E. Mont)	1313	1313	1313	1313	1313	1313	1313	1313	1313	1313	1313	1313	1313	1313	1313
Coal2 (E. Wash)	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563
Coal3 (E. Oregon)	375	563	563	563	563	563	563	563	563	563	563	563	563	563	563
Coal4 (Nevada)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal5 (W. Wa/Or)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FBCoal1 (E. Mnt)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FBCoal2 (E. Wa)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FBCoal3 (E. Ore)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FBCoal4 (Nev)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FBCoal5 (WWa/Or)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GCoal1 (EMont)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GCoal2 (EWash)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

GCoal3 (EOre)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GCoal4 (Nev)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GCoal5 (WWaOr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Replacement	0	0	0	0	0	1441	1710	1988	1988	2800	4064	5396	5881	6309	7573
WNP 3	0	0	0	806	806	806	806	806	806	806	806	806	806	806	806
WNP 1	813	813	813	813	813	813	813	813	813	813	813	813	813	813	813
Geothermal1	27	27	27	27	27	27	27	27	0	0	0	0	0	0	0
Geothermal2	383	383	383	383	383	383	383	383	383	383	383	383	383	383	383
Solar1	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
Solar2	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
Solar3	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42
Wind1	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66
Wind2	292	308	308	308	308	308	308	308	308	308	308	308	308	308	308
Subtotal	8765	9149	9629	10655	10985	12426	12695	12653	12446	12758	13182	14294	14779	15207	16471
Total Firm Resources	29792	30383	31073	32298	32696	32559	32436	31995	31651	31677	31589	31786	32146	32356	32436
Load/Resource Balance	310	162	114	601	260	123	0	-441	-785	-759	-847	-650	-290	-80	0

SYSTEM SUMMARY: Mean Loads and Resources (Avg MW), PARTY = REGION
0100 Games

Operating Year	20-21	21-22	22-23	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-31	31-32	32-33	33-34	34-35
Observed Load	29979	29979	29979	29979	29979	29979	29979	29979	29979	29979	29979	29979	29979	29979	29979
Observed Rate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
DSI Firm Load	2457	2457	2457	2457	2457	2457	2457	2457	2457	2457	2457	2457	2457	2457	2457
Existing Resources	13231	13231	13231	13231	13231	13231	13231	13231	13231	13231	13231	13231	13231	13231	13231
CONSERVATION PROGRAMS:															
SF Res MCS	215	215	215	215	215	215	215	215	215	215	215	215	215	215	215
MF Res MCS	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37
Water Heat	362	362	362	362	362	362	362	362	362	362	362	362	362	362	362
Refrigerators	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110
Freezers	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
New Manuf Housing	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83
Irrigation	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
Industrial	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400
New Commercial	579	579	579	579	579	579	579	579	579	579	579	579	579	579	579
Comm Discret Ex	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162
Comm Lost Opps Exist	139	139	139	139	139	139	139	139	139	139	139	139	139	139	139
SF Res Weath	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102
MF Res Weath	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
Subtotal	2291	2291	2291	2291	2291	2291	2291	2291	2291	2291	2291	2291	2291	2291	2291
GENERATING RESOURCES:															
Hydro Eff Imp	100	100	80	60	40	20	0	0	0	0	0	0	0	0	0
Trans Eff Imp	34	34	23	12	1	0	0	0	0	0	0	0	0	0	0
Small Hydro 1 East	57	57	57	57	57	57	57	57	57	57	57	57	57	57	57
Small Hydro 2 East	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61
Small Hydro 3 East	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75
Small Hydro 4 East	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43
Small Hydro 1 West	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39
Small Hydro 2 West	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43
Small Hydro 3 West	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
Small Hydro 4 West	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
Combined Cycle BPA	697	697	697	697	697	697	697	349	349	349	349	349	349	0	0
Combined Cycle Mix	698	698	698	698	0	0	0	0	0	0	0	0	0	0	0
Cogen1e	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen2e	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen3e	120	20	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen4e	1000	1000	1000	1000	1000	1000	920	550	330	0	0	0	0	0	0
Cogen1w	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen2w	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen3w	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen4w	830	830	610	280	280	210	110	0	0	0	0	0	0	0	0
Coal1 (E. Mont)	1313	1313	1313	1313	1313	1313	1313	1313	1313	1313	1313	1313	1313	1313	1313
Coal2 (E. Wash)	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563
Coal3 (E. Oregon)	563	563	563	563	563	563	563	563	563	563	563	563	563	563	563
Coal4 (Nevada)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal5 (W. Wa/Or)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FBCoal1 (E. Mnt)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FBCoal2 (E. Wa)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FBCoal3 (E. Ore)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FBCoal4 (Nev)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FBCoal5 (WWa/Or)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GCoal1 (EMont)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GCoal2 (EWash)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

GCoal3 (EOre)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GCoal4 (Nev)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GCoal5 (WWaOr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Replacement	8139	8240	8510	8958	9731	9867	10112	10985	11251	11625	11671	11717	11744	12136	12180
WNP 3	806	806	806	806	806	806	806	806	806	806	806	806	806	806	806
WNP 1	813	813	813	813	813	813	813	813	813	813	813	813	813	813	813
Geothermal1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Geothermal2	383	383	383	383	338	293	248	202	157	113	67	23	0	0	0
Solar1	22	22	22	0	0	0	0	0	0	0	0	0	0	0	0
Solar2	22	22	22	0	0	0	0	0	0	0	0	0	0	0	0
Solar3	42	42	42	0	0	0	0	0	0	0	0	0	0	0	0
Wind1	66	66	66	66	66	66	66	66	66	66	66	66	66	49	33
Wind2	308	308	308	308	308	308	308	308	308	308	308	308	308	284	259
Subtotal	16917	16918	16917	16918	16917	16917	16917	16916	16917	16917	16917	16919	16923	16925	16928
Total Firm Resources	32436	32437	32436	32436	32436	32436	32436	32435	32436	32435	32436	32437	32442	32444	32448
Load/Resource Balance	0	1	0	0	0	0	0	-1	0	-1	0	1	6	9	12

SYSTEM SUMMARY: Mean Loads and Resources (Avg MW), PARTY = REGION
0100 Games

Operating Year	35-36	36-37	37-38	38-39	39-40	40-41	41-42	42-43	43-44	44-45	45-46	46-47	47-48	48-49	49-50
Observed Load	29979	29979	29979	29979	29979	29979	29979	29979	29979	29979	29979	29979	29979	29979	29979
Observed Rate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
DSI Firm Load	2457	2457	2457	2457	2457	2457	2457	2457	2457	2457	2457	2457	2457	2457	2457
Existing Resources	13231	13231	13231	13231	13231	13231	13231	13231	13231	13231	13231	13231	13231	13231	13231
CONSERVATION PROGRAMS:															
SF Res MCS	215	215	215	215	215	215	215	215	215	215	215	215	215	215	215
MF Res MCS	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37
Water Heat	362	362	362	362	362	362	362	362	362	362	362	362	362	362	362
Refrigerators	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110
Freezers	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
New Manuf Housing	83	81	79	76	72	69	65	60	55	51	45	40	36	30	25
Irrigation	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
Industrial	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400
New Commercial	579	579	579	579	579	579	579	579	579	579	579	579	579	579	579
Comm Discret Ex	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162
Comm Lost Opps Exist	139	139	139	139	139	139	139	139	139	139	139	139	139	139	139
SF Res Weath	102	102	102	102	102	102	99	92	82	74	64	54	46	36	28
MF Res Weath	36	36	36	36	36	36	35	32	29	27	24	21	19	16	13
Subtotal	2291	2289	2287	2284	2280	2277	2269	2254	2236	2222	2203	2185	2171	2152	2136
GENERATING RESOURCES:															
Hydro Eff Imp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trans Eff Imp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Hydro 1 East	57	57	57	57	57	57	57	57	10	0	0	0	0	0	0
Small Hydro 2 East	61	61	61	61	61	61	61	61	26	0	0	0	0	0	0
Small Hydro 3 East	75	75	75	75	75	75	75	75	75	75	75	37	4	4	4
Small Hydro 4 East	43	43	43	43	43	43	43	43	43	43	43	7	0	0	0
Small Hydro 1 West	39	39	39	39	39	39	39	39	0	0	0	0	0	0	0
Small Hydro 2 West	43	43	43	43	43	43	43	43	7	0	0	0	0	0	0
Small Hydro 3 West	48	48	48	48	48	48	48	48	48	48	48	11	0	0	0
Small Hydro 4 West	32	32	32	32	32	32	32	32	32	32	32	0	0	0	0
Combined Cycle BPA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Combined Cycle Mix	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen1e	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen2e	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen3e	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen4e	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen1w	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen2w	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen3w	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cogen4w	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal1 (E. Mont)	1313	1313	1125	938	750	563	375	188	0	0	0	0	0	0	0
Coal2 (E. Wash)	563	563	375	188	0	0	0	0	0	0	0	0	0	0	0
Coal3 (E. Oregon)	563	563	563	563	563	563	563	563	563	375	188	0	0	0	0
Coal4 (Nevada)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coal5 (W. Wa/Or)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FBCoal1 (E. Mnt)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FBCoal2 (E. Wa)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FBCoal3 (E. Ore)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FBCoal4 (Nev)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FBCoal5 (WWa/Or)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GCoal1 (EMont)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GCoal2 (EWash)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

GCoal3 (EOre)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GCoal4 (Nev)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GCoal5 (WWaOr)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Replacement	12224	12269	12653	13056	13458	13674	13893	14120	14507	14778	15795	16158	16226	17050	17066
WNP 3	806	806	806	806	806	806	806	806	806	806	806	806	806	0	0
WNP 1	813	813	813	813	813	813	813	813	813	813	0	0	0	0	0
Geothermal1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Geothermal2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Solar1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Solar2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Solar3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wind1	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wind2	235	211	186	162	138	113	89	65	41	16	16	0	0	0	0
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Subtotal	16932	16936	16919	16924	16926	16930	16937	16953	16971	16986	17003	17019	17036	17054	17070
Total Firm Resources	32451	32453	32436	32436	32436	32437	32435	32436	32436	32436	32436	32436	32436	32436	32436
Load/Resource Balance	15	17	0	0	0	1	0	0	0	0	0	0	0	1	0

DOE/BP-2076
February 1993
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