CALFED Bay-Delta Program Storage and Conveyance Refinement Process:

A Status Report on System Modeling Using DWRSIM

Hydrology and Operations Section
Modeling Support Branch
Office of State Water Project Planning
Department of Water Resources, Sacramento

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1. Introduction

System operation modeling studies are being updated and expanded in order to maintain consistency in the CALFED program. Many operational assumptions have been refined, requiring changes to the system operational modeling studies. These updated studies provide supplement information for PEIS/EIR and Phase II Reports.

Five main changes have been made in the DWRSIM model in the following areas.

1. CVPIA (b)(2) Upstream AFRP and Delta Actions.
2. Vernalis Adaptive Management Plan (VAMP) settlement agreements on the San Joaquin River.
3. Stanislaus Operations are in accordance with the New Melones Interim Operation Plan.
4. Tuolumne minimum pulse flow requirements per FERC Agreement.
5. Updated Environmental Restoration Program Plan (ERPP) flows modeling.

This brief report presents status of DWRSIM model studies activities since last quarterly report of April 24, 1998. The following information is included in this report.

a) List of Completed DWRSIM Model studies along with key assumptions.

b) Summary of comparative water supply benefits in terms of SWP and CVP deliveries

c) Summary of Water Supply Impacts on Delta exports and storages depleted.

Details of study assumptions, inputs and results for these studies are also available on the DWR's Hydrology and Operations Section home page at the URL;

http://wwwhydro.water.ca.gov/calfed.html

Study results in terms of water supply benefits of State Water Project and Central Valley Project deliveries, are presented in Tables 1 to 5. Water Supply Impacts in terms of changes in exports and storages for these studies, are presented in Tables 6 to 38 in a Delta mass balance format, both for critically dry period of 1928-1934 and long-term period of 1922-1994. Description of CALFED program alternatives referred to in this report is given in Table 39. Key results from selected studies are also presented in several graphs and charts. For updated DWRSIM Network Diagram see Figures 4-8.

2. DWRSIM MODELING STUDIES AND ASSUMPTIONS

2.1 General

CALFED Bay-Delta Program staff have requested a series of DWRSIM Model studies to provide supplemental information to the PEIS/EIR and Phase II Reports. Recently, several system operation modeling criteria/assumptions have been incorporated into DWRSIM Model as discussed below.

1. 1995 WQCP Bay-Delta Accord Standards. No minimum flows at Vernalis, including the pulse flows, are imposed. Instead, alternative flow and export requirements are imposed as discussed under CVPIA(b)(2) Delta Action 1.

2. The following CVPIA(b)(2) Actions as per November 20, 1997 CVPIA Document, are included.

   1) CVPIA(b)(2) Delta Actions

      a. Delta Action 1 - Vernalis Adaptive Management Plan Flows (VAMP)
      b. Delta Action 3 - Additional X2 days at Chipps Island from March to June
      c. Delta Action 4 - Maintain Sacramento River flows at Freeport from 9,000 to 15,000 cfs
      d. Delta Action 5 - Ramping of Delta Exports
      e. Delta Action 6 - Close Delta Cross Channel gates in October through January in all water year types
      f. Delta Action 7 - July flows and exports based on X2 position in June.

   2) CVPIA(b)(2) Upstream AFRP flows for Clear Creek, Sacramento River and American River, are included.

3. Vernalis Adaptive Management Plan (VAMP) settlement agreements on the San Joaquin River have been incorporated.

4. Stanislaus River operations have changed with the New Melones Interim Operation Plan.

5. Tuolumne minimum pulse flow requirements per FERC Agreement, have been coincided with VAMP flows during the April and May pulse period.

6. Environmental Restoration Program Plan (ERPP) flows modeling has been updated.

7. A Level II wildlife refuge demand of 140 TAF/year in the Sacramento Valley, has been imposed.

These modeling refinements will be used in all studies with exceptions mentioned under Study 702.

A. UPDATE STUDIES FOR SUPPLEMENT TO PEIS/EIR

1. Existing Conditions Study: 1995d06a-calfed-674

1995 Level of Development
South of Delta SWP Demand varies from 2.6 to 3.5 MAF/year. Maximum SWP Interruptible Demand is 84 TAF/month.
South of Delta CVP demand is 3.3 MAF/year.
No SWP Wheeling for CVP.

2. No Action with Accord Study 2020d09b-calfed-702

1995 WQCP Bay-Delta Accord Standards
2020 Level of Development
South of Delta SWP Demand varies from 3.6 to 4.2 MAF/year. Maximum SWP Interruptible Demand is 134 TAF/month.
South of Delta CVP demand is 3.5 MAF/year.
128 TAF/year SWP Wheeling for CVP.

3. No Action with CVPIA(b)(2) Study 2020d09b-calfed-675

2020 Level of Development
South of Delta SWP Demand varies from 3.6 to 4.2 MAF/year. Maximum SWP Interruptible Demand is 134 TAF/month.
South of Delta CVP demand is 3.5 MAF/year.
128 TAF/year SWP Wheeling for CVP.

4. South Delta Improvements - 2020 Level (ALT 2A) Study 2020d09b-calfed-703

No Action with reoperation, ERPP and CVPIA(b)(2 Actions, Study 676 is modified as follows.

Banks Pumping capacity increased to 10,300 cfs (ISDP).

5. **South Delta Improvements - 1995 Level (ALT 2A) Study 1995d06A-calfed-704**

1995 Level of Development
South of Delta SWP Demand varies from 2.6 to 3.5 MAF/year. Maximum SWP Interruptible Demand is 84 TAF/month.
South of Delta CVP demand is 3.3 MAF/year.
Every year upto 500 TAF/year additional demand for CVP is imposed as Surrogate Demand for SWP.
SWP Maximum wheeling for CVP.
Banks Pumping capacity increased to 10,300 cfs (ISDP).
Environmental Restoration Program Plan (ERPP).

6. **No Action Study Plus New Trinity Min - 2020d09b-calfed-705**

No Action with CVPIA(b)(2) Study 675 is modified to include new Trinity River minimum flow requirements.

7. **New Facilities - SDI, NDGS, NDSS, NDES, SDGS, SDSS & SJBSS (ALT 2B, 2E): Study 2020d09b-calfed-706**

South Delta Improvements (2020 Level) Study 703 is modified to include the following new storages as follows.

0.25 MAF North of Delta Groundwater Storage (NDGS)
2.0 MAF North of Delta Surface Storage (NDSS)
1.0 MAF North of Delta Environmental Storage (NDES)
Diversion and discharge capacities of 5,000 cfs
No trigger for diversion from Sacramento River related to mean daily flow event occurring at Chico Landing
0.5 MAF South of Delta Groundwater Storage (SDGS)
2.0 MAF South of Delta Surface Storage (SDSS) with 3500 cfs inlet and outlet capacities.
0.24 MAF San Joaquin Basin Surface Storage (SJBSS) with 1000 cfs diversion and 1000 cfs release capacities from and to Toulumne and Merced Rivers.

8. **New Facilities - SDI, NDGS, NDSS, NDES, SDGS, SDSS & SJBSS (ALT 2B, 2E): Study 2020d09b-calfed-706a**

New Facilities Storage Study 706 is modified as follows.

Release capacity from SJ Surface Storage increased from 1,000 cfs to 2,000 cfs

for Merced and Tuolumne rivers.

9. **New Facilities - SDI, NDGS, NDSS, NDES, SDGS, SDSS & SJBSS (ALT 2B, 2E): Study 1995d06a-calfed-707**

South Delta Improvements (1995 Level) Study 704 is modified to include the following new storages as follows.

0.25 MAF North of Delta Groundwater Storage (NDGS)
2.0 MAF North of Delta Surface Storage (NDSS)
1.0 MAF North of Delta Environmental Storage (NDES)
Diversion and discharge capacities of 5,000 cfs
No trigger for diversion from Sacramento River related to mean daily flow event occurring at Chico Landing
0.5 MAF South of Delta Groundwater Storage (SDGS)
2.0 MAF South of Delta Surface Storage (SDSS) with 3500 cfs inlet and outlet capacities.
0.24 MAF San Joaquin Basin Surface Storage(SJBSS).

B. UPDATE BASE STUDIES FOR PHASE II REPORT

1. **New Facilities- Alternative 3 - SDI and 10K I.F. Study 2020d09b-calfed-708**

South Delta Improvements Study 703 is modified as follows.

10,000 cfs capacity Isolated Facility (IF) and SDI
1,000 cfs minimum flow through Delta channels for South of Delta exports except a minimum of 0 cfs for April, May and June
IF not in E/I Ratio
Rio Vista flow criteria 3,000 cfs in July and August
Maximum south of Delta diversion of 5,000 cfs in May.

2. **New Facilities- Alternative 3 - SDI, 10k I.F. with all Storages Study 2020d09b-calfed-709**

Isolated Facility Study 708 is modified as follows.

0.25 MAF North of Delta Groundwater Storage (NDGS)
2.0 MAF North of Delta Surface Storage (NDSS)
1.0 MAF North of Delta Environmental Storage (NDES)
Diversion and discharge capacities of 5,000 cfs
No trigger for diversion to Sacramento River related to mean daily flow event occurring at Chico Landing
0.5 MAF South of Delta Groundwater Storage (SDGS)

2.0 MAF South of Delta Surface Storage (SDSS) with 3500 cfs inlet and outlet capacities.
0.24 MAF San Joaquin Basin Surface Storage(SJBSS).

C. UPDATE STUDIES FOR PEIS/EIR

1. **No Action with Reoperation: Study 2020d09b-calfed-688**

No Action Study 675 is modified as follows.

Every year upto 500 TAF/year additional demand for CVP is imposed as Surrogate Demand for SWP.
SWP Maximum wheeling for CVP.

2. **No Action with Reoperation and ERPP (ALT 1A): Study 2020d09b-calfed-676**

No Action with reoperation Study 688 (for maximum wheeling and surrogate demand) is modified to include Environmental Restoration Program Plan (ERPP) Criteria.

3. **New Facilities - SDI, NDGS, NDSS, NDES, SDGS, SDSS (ALT 1C): Study 2020d09b-calfed-711**

New facilities Study 706 is modified as follows.

South of Delta Surface Storage (SDSS) is 1 MAF.
There is no SBJSS storage in San Joaquin Basin.

4. **New Facilities - SDI and SDSS (ALT 2D): Study 2020d09b-calfed-712**

New facilities SDI Study 703 is modified to include South of Delta Surface Storage (SDSS) of 2 MAF.

5. **New Facilities- Alternative 3A - SDI and 5K I.F. Study 2020d09b-calfed-714**

Isolated Facility capacity in Study 708 is modified to 5,000 cfs capacity.

6. **New Facilities- Alternative 3B - SDI, 5k I.F. with all Storages Study 2020d09b-calfed-715**

Isolated Facility capacity in Study 709 is modified to 5,000 cfs capacity.

7. **New Facilities- Alternative 3 - SDI and 15K I.F. Study 2020d09b-calfed-716**

Isolated Facility capacity in Study 708 is modified to 15,000 cfs capacity.

8. **New Facilities- Alternative 3E & 3I - SDI, 15k I.F. with all Storages Study 2020d09b-calfed-717**

Isolated Facility capacity in Study 709 is modified to 15,000 cfs capacity.

9. **New Facilities - Alternative 2D - SDI, NDSS and NDES Study 2020d09b-calfed-724**

SDI Study 703 is modified to include North of Delta Surface Storage (NDSS) of 2 MAF and North of Delta Environmental Storage (NDES) of 1 MAF.

D. UPDATE SIDEBAR STUDIES FOR PHASE II REPORT

1. **South Delta Improvements with Reduced E/I Ratio - 2020 Level (ALT 2A) Study 2020d09b-calfed-719**

South Delta Improvements Study 703 is modified as follows.

Reduce Export/Inflow Ratio (E/I) to: 0.55 in November, 0.45 in December and January, 0.25 from February to June and relax E/I ratio to 0.75 in August and September.

2. **New Facilities - Storages (Alt 2B, 2E) with Reduced E/I Ratio Study 2020d09b-calfed-720**

Storages Study 706 is modified as follows.

Reduce Export/Inflow Ratio (E/I) to: 0.55 in November, 0.45 in December and January, 0.25 from February to June and relax E/I ratio to 0.75 in August and September.

3. **Isolated Facility (Alt 3) 10K I.F. with Reduced E/I Ratio - Study 2020d09b-calfed-721**

Isolated facility Study 708 is modified as follows.

Reduce Export/Inflow Ratio (E/I) to: 0.55 in November, 0.45 in December and January, 0.25 from February to June and relax E/I ratio to 0.75 in August and September.

4. **Isolated Facility (With Storages) - 10K I.F. with Reduced E/I Ratio Study 2020d09b-calfed-722**

Isolated facility Study 709 is modified as follows.

Reduce Export/Inflow Ratio (E/I) to: 0.55 in November, 0.45 in December and January, 0.25 from February to June and relax E/I ratio to 0.75 in August and September.

5. **South Delta Improvements with 1962 LOD X2 Study 2020d09b-calfed-723**

South Delta Improvements Study 703 is modified to include 1962 LOD X2 Standards for Chipps and Roe Island.

6. **New Facilities - Storages (Alt 2B, 2E) with 1962 LOD X2 Study 2020d09b-calfed-730**

Storages Study 706 is modified to include 1962 LOD X2 Standards for Chipps and Roe Island.

7. **South Delta Improvements with 1983 LOD X2 Study 2020d09b-calfed-731**

South Delta Improvements Study 703 is modified to include 1983 LOD X2 Standards for Chipps and Roe Island.

8. **New Facilities - Storages (Alt 2B, 2E) with 1983 LOD X2 Study 2020d09b-calfed-732**

Storages Study 706 is modified to include 1983 LOD X2 Standards for Chipps and Roe Island.

9. **Isolated Facility (Alt 3) 10K I.F. with 1962 LOD X2 Study 2020d09b-calfed-733**

Isolated facility Study 708 is modified to include 1962 LOD X2 Standards for Chipps and Roe Island.

10. **Isolated Facility (With Storages) - 10K I.F. with 1962 LOD X2 Study 2020d09b-calfed-734**

Isolated facility Study 709 is modified to include 1962 LOD X2 Standards for Chipps and Roe Island.

11. **Isolated Facility (Alt 3) 10K I.F. with 1983 LOD X2 Study 2020d09b-calfed-735**

Isolated facility Study 708 is modified to include 1983 LOD X2 Standards for Chipps and Roe Island.

12. **Isolated Facility (With Storages) - 10K I.F. with 1983 LOD X2 Study 2020d09b-calfed-736**

Isolated facility Study 709 is modified to include 1983 LOD X2 Standards for Chipps and Roe Island.

E. DEFT STUDIES

1. **DEFT-1 Study 1995d06a-calfeddeft1-689**

Assumptions for this Study are the same as Study 674 except the following.

- Banks Pumping Plant capacity of 10,300 cfs.

- Full and unlimited Joint Point of Diversion with maximum SWP Wheeling for CVP.

- New refuge demand of 140 TAF/year for CVP north of the Delta, is not included.

- DMC/California Aqueduct 400 cfs Intertie: For modeling convenience, increase the capacity in the upper Delta Mendota Canal to 4,600 cfs.

- The Madera Ranch Groundwater Bank is modeled as a CVP facility. During wetter conditions, water is pumped from the groundwater bank into the Mendota Pool for delivery to CVP water users. The groundwater bank physical features are as follows:

  Groundwater Bank Capacity: 390 TAF
  Recharge Capacity: 400 cfs
  Pump Capacity: 200 cfs

- Reduce the export/inflow (E/I) ratios in November through June to the following: Nov: 55%, Dec - Jan: 45%, Feb - Jun: 25%. Relax the export/inflow (E/I) ratios in Aug and Sep to 75%.

- Extend the VAMP target flows and exports to 61 days (April 1 through May 31). Additional water needed to meet the VAMP target flows in

April and May is provided from Lake McClure and New Don Pedro Reservoir. The additional water is capped at 300 TAF/year. It is noted that the 61 days VAMP export restriction supersedes ramping of exports in AFRP Delta Action 5.

2. **DEFT-2 Study 1995d06a-calfeddeft2-690**

Study 674 assumptions are modified as follows.

- Reduce the export/inflow (E/I) ratio to 0.25 from Feb to June only.

- New refuge demand of 140 TAF/year for CVP north of the Delta, is not included.

3. **DEFT-3 Study 1995d06a-calfeddeft3-691**

Study 674 assumptions are modified as follows.

- Reduce the export/inflow (E/I) ratio to 0.55 for Nov and 0.45 from Dec to Jan only.

- New refuge demand of 140 TAF/year for CVP north of the Delta, is not included.

4. **DEFT-4 Study 1995d06a-calfeddeft4-692**

Study 674 assumptions are modified as follows.

- Extend the VAMP target flows and exports to 61 days (April 1 through May 31). Additional water needed to meet the VAMP target flows in April and May is provided from Lake McClure and New Don Pedro Reservoir. The additional water is capped at 300 TAF/year. It is noted that the 61 days VAMP export restriction supersedes ramping of exports in AFRP Delta Action 5.

- New refuge demand of 140 TAF/year for CVP north of the Delta, is not included.

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TABLE 1
UPDATE STUDIES FOR SUPPLIMENT TO PEIS/EIR
PRELIMINARY DWRSIM STUDIES RESULTS WATER SUPPLY DELIVERIES OF CALFED STORAGE AND CONVEYANCE FACILITIES

ID	VER	DATE	COMPONENT	SWP DELIVERIES CR	SWP DELIVERIES 73YRS	CVP DELIVERIES CR	CVP DELIVERIES 73 YRS	INTER DELIVERIES CR.	INTER DELIVERIES 73 YRS	SWP+CVP+INTER DELIVERIES CR	SWP+CVP+INTER DELIVERIES 73 YRS
674	906O	10/06/98	EXISTING CONDITIONS WITH CVPIA(B)(2)	2054	2766	1741	2397	13	145	3808	5308
702	906Q	10/13/98	NO ACTION WITH WQCP BAY-DELTA-ACCORD	2123	3268	1754	2452	57	156	3934	5876
675	906S	10/21/98	NO ACTION WITH CVPIA(B)(2)	2076	3203	1712	2390	3	107	3791	5700
703	906S	10/22/98	S.675+ERPP+ISDP+SURR+WHL.	2079	3333	1708	2505	79	253	3866	6091
704	906S	10/22/98	S.674+ISDP+ERPP+WHL.+SURR	2143	3062	1736	2492	62	236	3941	5790
705	906O	10/06/98	S.675+NEW TRINITY MIN.FLOW REQIR.	2065	3197	1642	2365	2	102	3709	5664
706	906T	10/04/98	S.703+NDGS+NDSS+NDES+SDGS+SDSS+SJBSS	2838	4047	1698	2487	2	48	4538	6582
706a	906T	10/04/98	S.703+NDGS+NDSS+NDES+SDGS+SDSS+SJBSS	2838	4047	1698	2487	2	48	4538	6582
707	906S	10/21/98	S.704+NDGS+NDSS+NDES+SDGS+SDSS+SJBSS	3009	3502	1728	2515	2	144	4739	6161

TABLE 2
UPDATE BASE STUDIES FOR PHASE II REPORT
PRELIMINARY DWRSIM STUDIES RESULTS WATER SUPPLY DELIVERIES OF CALFED STORAGE AND CONVEYANCE FACILITIES

ID	VER	DATE	COMPONENT	SWP DELIVERIES CR	SWP DELIVERIES 73YRS	CVP DELIVERIES CR	CVP DELIVERIES 73 YRS	INTER DELIVERIES CR.	INTER DELIVERIES 73 YRS	SWP+CVP+INTER DELIVERIES CR	SWP+CVP+INTER DELIVERIES 73 YRS
708	906S	10/21/98	S.703+10K I.F 3K RIÒ VISTA IN JUL,AUG	2054	3251	1467	2448	130	364	3651	6063
709	906T	11/04/98	S.708+NDGS+NDSS+NDES+SDGS+SDSS+SJBSS	3179	4168	1412	2465	5	99	4596	6732

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TABLE 3
UPDATE STUDIES FOR PEIS/EIR
PRELIMINARY DWRSIM STUDIES RESULTS WATER SUPPLY DELIVERIES OF CALFED STORAGE AND CONVEYANCE FACILITIES

ID	VER	DATE	COMPONENT	SWP DELIVERIES		CVP DELIVERIES		INTER DELIVERIES		SWP+CVP+INTER DELIVERIES	
				CR	73YRS	CR	73 YRS	CR.	73 YRS	CR	73 YRS
688	906S	10/21/98	S.675+SURR+MAX WHL.	2075	3268	1702	2399	17	100	3974	5767
676	906S	10/21/98	S.688+ERPP	2081	3275	1701	2398	20	103	3802	5776
711	906T	11/04/98	S.706+NDGS+NDSS+NDES+SDGS	2770	3985	1704	2493	2	52	4476	6530
712	906S	10/21/98	S.703+SDSS 2 MAF	2424	3804	1696	2475	2	52	4122	6331
714	906S	10/25/98	S.708 I.F MODIFIED TO 5K CFS	2093	3285	1537	2474	114	361	3744	6120
715	906T	11/04/98	S.709 I.F MODIFIED TO 5KCFS	3135	4164	1512	2513	5	99	4652	6776
716	906S	10/23/98	S.708 I.F MODIFIED TO 15K CFS	2044	3236	1445	2434	138	353	3267	6023
717	906T	11/02/98	S.709 I.F MODIFIED TO 15K CFS	3054	4146	1384	2445	4	98	4442	6689
724	906T	11/02/98	S.703+NDSS 2 MAF+NDES 1 MAF	2522	3800	1712	2479	40	178	4274	6457

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TABLE 4
UPDATE STUDIES FOR PHASE II REPORTS
PRELIMINARY DWRSIM STUDIES RESULTS WATER SUPPLY DELIVERIES OF CALFED STORAGE AND CONVEYANCE FACILITIES

ID	VER	DATE	COMPONENT	SWP DELIVERIES		CVP DELIVERIES		INTER DELIVERIES		SWP+CVP+INTER DELIVERIES	
				CR	73YRS	CR	73 YRS	CR.	73 YRS	CR	73 YRS
719	906T	10/30/98	S.703 W/MODIFIED E/I RATIOS	1788	3181	1607	2326	0	167	3395	5674
720	906T	11/04/98	S.706 W/MODIFIED E/I RATIOS	2218	3750	1570	2287	0	22	3788	6059
721	906T	10/29/98	S.708 W/MODIFIED E/I/RATIOS	2054	3251	1467	2448	130	364	3651	6063
722	906T	11/05/98	S.709/W/MODIFIED E/I RATIOS	3195	4167	1400	2462	5	99	4600	6728
723	906T	11/04/98	S.703 1962 LOD X2 (CHIPPS AND ROE)	2058	3319	1694	2504	80	250	3832	6073
730	906T	10/10/98	S.706 1962 LOD X2 (CHIPPS AND ROE)	2803	4036	1684	2489	2	51	4489	6576
731	906T	10/10/98	S.703 1983 LOD X2 (CHIPPS AND ROE)	2194	3372	1742	2490	78	252	4014	6114
732	906T	10/13/98	S.706 1983 LOD X2 (CHIPPS AND ROE)	2915	4062	1738	2455	2	46	4655	6563
733	906T	10/10/98	S.708 1962 LOD X2 (CHIPPS AND ROE)	2032	3240	1444	2440	135	358	3611	6038
734	906T	11/16/98	S.709 1962 LOD X2 (CHIPPS AND ROE)	3099	4155	1425	2460	4	95	4528	6710
735	906T	11/10/98	S.708 1983 LOD X2 (CHIPPS AND ROE)	2146	3309	1528	2464	193	379	3867	6152
736	906T	11/10/98	S.709 1983 LOD X2 (CHIPPS AND ROE)	3378	4209	1501	2490	5	108	4884	6807

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TABLE 5
DEFT STUDIES
PRELIMINARY DWRSIM STUDIES RESULTS WATER SUPPLY DELIVERIES OF CALFED STORAGE AND CONVEYANCE FACILITIES

ID	VER	DATE	COMPONENT	SWP DELIVERIES		CVP DELIVERIES		INTER DELIVERIES		SWP+CVP+INTER DELIVERIES	
				CR	73YRS	CR	73 YRS	CR.	73 YRS	CR	73 YRS
689	cvpGW_user	9/04/98	S.674+ISDP+Red E/I+ISDP+ JPOD+DMC	1821	2669	1686	2207	0	206	3507	5082
690	vamp_fix2	9/04/98	S.674+APR-MAY VAMP	2037	2731	1689	2214	0	169	3726	5114
691	vamp_fix2	9/10/98	S.674+0.25 E/I FEB-JUN	1937	2716	1754	2361	0	176	3691	5253
692	CaFed_Deft	9/16/98	S.674+0.55 E/I NOV+Red E/I DEC-JAN	2141	2753	1759	2349	0	178	3900	5280]

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TABLE 6

SUMMARY OF WATER SUPPLY IMPACT

All values in Thousand Acre-Feet / Year

I. HISTORIC DRY PERIOD AVERAGES (May 1928 - Oct 1934)	2020D09B-CALFED-675			2020D09B-CALFED-703		
	TOTAL	CVP	SWP	TOTAL	CVP	SWP
A. (i) Total Delta Exports	4062	1978	2083	4150 (88)	1989 (11)	2160 (77)
(ii) Net Storage Used	1204	886	317	1204 (0)	897 (-10)	307 (10)
(a) Existing North-of-Delta		886	317		897 (-10)	307 (10)
(b) New North-of-Delta			0			0 (0)
WATER SUPPLY IMPACT (i+ii)				88		
(iii) Add water from CP81 & CP20	30			30 (0)		
(iv) Other Storage Used	173	70	103	161 (12)	55 (15)	106 (-2)
(b) New In-Delta			0			0 (0)
(a) Existing South-of-Delta		70	103		55 (15)	106 (-2)
(b) New South-of-Delta			0			0 (0)
B. Total Delta Outflow	5113			5234 (120)		

II. 73-YEAR (1922-1994) AVERAGES (Oct 1921 - Sep 1994)						
A. Total Delta Exports	6096	2650	3446	6488 (391)	2764 (114)	3723 (276)
WATER SUPPLY IMPACT				391		
B. Add water	39			39 (0)		
C. EOM SEPT SACTO BASIN	6915	4922	1992	6804 (-110)	4891 (-31)	1913 (-79)
(i) Existing Sacto Basin		4922	1992		4891 (-31)	1913 (-79)
(ii) New Sacto Basin			0			0 (0)
D. E.O.M Sept. New Melones	1225			1225 (0)		
E. Total Delta Outflow	14426			14337 (-88)		

TABLE 7

SUMMARY OF WATER SUPPLY IMPACT

All values in Thousand Acre-Feet / Year

1. HISTORIC DRY PERIOD AVERAGES (May 1928 - Oct 1934)	2020D09B-CALFED-675			2020D09B-CALFED-705		
	TOTAL	CVP	SWP	TOTAL	CVP	SWP
A. (i) Total Delta Exports	4085	2018	2066	3991(-93)	1921(-96)	2069(3)
(ii) Net Storage Used	1214	893	320	1183 (31)	864(29)	318(1)
(a) Existing North-of-Delta		893	320		864(29)	318(1)
(b) New North-of-Delta			0			0(0)
WATER SUPPLY IMPACT (i+ii)				------ -62		
(iii) Add water from CP81 & CP20	30			30(0)		
(iv) Other Storage Used	177	74	103	178(0)	75(-1)	103(0)
(b) New In-Delta			0			0(0)
(a) Existing South-of-Delta		74	103		75(-1)	103(0)
(b) New South-of-Delta			0			0(0)
B. Total Delta Outflow	5101				5091(-9)	
II. 73-YEAR (1922-1994) AVERAGES (Oct 1921 - Sep 1994)						
A. Total Delta Exports	6101	2659	3442	6068(-33)	2633(-26)	3434(-7)
WATER SUPPLY IMPACT				----- -33		
B. Add water	39			39(0)		
C. EOM SEPT SACTO BASIN	6900	4911	1988	6665(-234)	4684(-226)	1980(-8)
(i) Existing Sacto Basin		4911	1988		4684(-226)	1980(-8)
(ii) New Sacto Basin			0			0 (0)
D. E.O.M Sept. New Melones	1225				1225 (0)	
E. Total Delta Outflow	14422				14276(-145)	

D-011876

TABLE 8

SUMMARY OF WATER SUPPLY IMPACT

All values in Thousand Acre-Feet / Year

1. HISTORIC DRY PERIOD AVERAGES (May 1928 - Oct 1934)	2020D09B-CALFED-675			2020D09B-CALFED-706		
	TOTAL	CVP	SWP	TOTAL	CVP	SWP
A. (i) Total Delta Exports	4062	1978	2083	4606(544)	1971(-6)	2635(551)
(ii) Net Storage Used	1204	886	317	1516(-312)	898(-11)	617(-300)
(a) Existing North-of-Delta		886	317		898(-11)	316 (1)
(b) New North-of-Delta			0			301(-301)
WATER SUPPLY IMPACT (i+ii)				232		
(iii) Add water from CP81 & CP20	30			30(0)		
(iv) Other Storage Used	173	70	103	375(-201)	62(7)	312(-209)
(b) New In-Delta			0			0(0)
(a) Existing South-of-Delta		70	103		62(7)	78(24)
(b) New South-of-Delta			0			233(-233)
B. Total Delta Outflow	5113			5074(-38)		
II. 73-YEAR (1922-1994) AVERAGES (Oct 1921 - Sep 1994)						
A. Total Delta Exports	6096	2650	3446	6985(888)	2742(92)	4243(796)
WATER SUPPLY IMPACT				888		
B. Add water	39			39(0)		
C. EOM SEPT SACTO BASIN	6915	4922	1992	8317(1402)	4793(-129)	3524(1532)
(i) Existing Sacto Basin		4922	1992		4793(-129)	2450(458)
(ii) New Sacto Basin			0			1073(-1073)
D. E.O.M Sept. New Melones	1225			1225(0)		
E. Total Delta Outflow	14426			13718(-707)		

TABLE 9

SUMMARY OF WATER SUPPLY IMPACT

All values in Thousand Acre-Feet / Year

I. HISTORIC DRY PERIOD AVERAGES (May 1928 - Oct 1934)	2020D09B-CALFED-675			2020D09B-CALFED-706A		
	TOTAL	CVP	SWP	TOTAL	CVP	SWP
A. (i) Total Delta Exports	4062	1978	2083	4606(544)	1971(-6)	2635 (551)
(ii) Net Storage Used	1204	886	317	1516(-312)	898(-11)	617 (-300)
(a) Existing North-of-Delta		886	317		898(-11)	316 (1)
(b) New North-of-Delta			0			301(-301)
WATER SUPPLY IMPACT (i+ii)				232		
(iii) Add water from CP81 & CP20	30			30(0)		
(iv) Other Storage Used	173	70	103	375(-201)	62(7)	312(-209)
(b) New In-Delta			0			0 (0)
(a) Existing South-of-Delta		70	103		62(7)	78(24)
(b) New South-of-Delta			0			233 (-233)
B. Total Delta Outflow	5113			5083(-29)		
II. 73-YEAR (1922-1994) AVERAGES (Oct 1921 - Sep 1994)						
A. Total Delta Exports	6096	2650	3446	6985(888)	2742(92)	4243(796)
WATER SUPPLY IMPACT				888		
B. Add water	39			39(0)		
C. EOM SEPT SACTO BASIN	6915	4922	1992	8317(1402)	4793(-129)	3524(1532)
(i) Existing Sacto Basin		4922	1992		4793(-129)	2450(458)
(ii) New Sacto Basin			0			1073(-1073)
D. E.O.M Sept. New Melones	1225				1225 (0)	
E. Total Delta Outflow	14426				13718(-707)	

D-011878

TABLE 10

SUMMARY OF WATER SUPPLY IMPACT

All values in Thousand Acre-Feet / Year

I. HISTORIC DRY PERIOD AVERAGES (May 1928 - Oct 1934)	1995D06A-CALFED-674 TOTAL	CVP	SWP	1995D06A-CALFED-707 TOTAL		CVP		SWP	
A. (i) Total Delta Exports	4078	2015	2062	4665	(587)	1999	(-16)	2666	(603)
(ii) Net Storage Used	1215	893	321	1500	(-285)	879	(13)	620	(-298)
(a) Existing North-of-Delta		893	321			879	(13)	317	(3)
(b) New North-of-Delta			0					302	(-302)
WATER SUPPLY IMPACT (i+ii)					302				
(iii) Add water from CP81 & CP20	28			33	(-4)				
(iv) Other Storage Used	172	61	110	516	(-344)	65	(-3)	451	(-340)
(b) New In-Delta			0					0	(0)
(a) Existing South-of-Delta		61	110			65	(-3)	116	(-6)
(b) New South-of-Delta			0					334	(-334)
B. Total Delta Outflow	5057			5135	(77)				
II. 73-YEAR (1922-1994) AVERAGES (Oct 1921 - Sep 1994)									
A. Total Delta Exports	5699	2645	3053	6578	(879)	2761	(115)	3817	(764)
WATER SUPPLY IMPACT					879				
B. Add water	41			40	(1)				
C. EOM SEPT SACTO BASIN	7090	4964	2125	8698	(1607)	4899	(-64)	3798	(1672)
(i) Existing Sacto Basin		4964	2125			4899	(-64)	2595	(469)
(ii) New Sacto Basin			0					1203	(-1203)
D. E.O.M Sept. New Melones	1232			1236	(4)				
E. Total Delta Outflow	14791			14291	(-500)				

TABLE 11

SUMMARY OF WATER SUPPLY IMPACT

All values in Thousand Acre-Feet/Year

I. HISTORIC DRY PERIOD AVERAGES (May 1928 - Oct 1934)	2020D09B-CALFED-675			2020D09B-CALFED-708		
	TOTAL	CVP	SWP	TOTAL	CVP	SWP
A. (i) Total Delta Exports	4062	1978	2083	3940(-121)	1744(-233)	2195(112)
(ii) Net Storage Used	1204	886	317	1293 (-89)	990(-103)	302 (14)
(a) Existing North-of-Delta	886	317		990(-103)	302 (14)	
(b) New North-of-Delta			0			0 (0)
WATER SUPPLY IMPACT (i+ii)				-313		
(iii) Add water from CP81 & CP20	30			31 (-1)		
(iv) Other Storage Used	173	70	103	158 (15)	60 (9)	97 (5)
(b) New In-Delta			0			0 (0)
(a) Existing South-of-Delta		70	103		60 (9)	97 (5)
(b) New South-of-Delta			0			0 (0)
B. Total Delta Outflow	5113			5528(415)		
II. 73-YEAR (1922-1994) AVERAGES (Oct 1921 - Sep 1994)						
A. Total Delta Exports	6096	2650	3446	6484(387)	2717(67)	3767(320)
WATER SUPPLY IMPACT				387		
B. Add water	39			39(0)		
C. EOM SEPT SACTO BASIN	6915	4922	1992	6360(-554)	4648(-274)	1712(-279)
(i) Existing Sacto Basin		4922	1992	4648(-274)	1712(-279)	
(ii) New Sacto Basin			0			0 (0)
D. E.O.M Sept. New Melones	1225			1225 (0)		
E. Total Delta Outflow	14426			14379(-46)		

TABLE 12

SUMMARY OF WATER SUPPLY IMPACT

All values in Thousand Acre-Feet / Year

I. HISTORIC DRY PERIOD AVERAGES (May 1928 - Oct 1934)	2020D09B-CALFED-675			2020D09B-CALFED-709		
	TOTAL	CVP	SWP	TOTAL	CVP	SWP
A. (i) Total Delta Exports	4062	1978	2083	4551(489)	1695(-283)	2855(772)
(ii) Net Storage Used	1204	886	317	1600(-396)	1015(-128)	584(-267)
(a) Existing North-of-Delta		886	317		1015(-128)	316 (1)
(b) New North-of-Delta			0			268(-268)
WATER SUPPLY IMPACT (i+ii)				93		
(iii) Add water from CP81 & CP20	30			31(-1)		
(iv) Other Storage Used	173	70	103	490(-316)	54 (16)	436(-333)
(b) New In-Delta			0			0 (0)
(a) Existing South-of-Delta		70	103		54 (16)	113 (-10)
(b) New South-of-Delta			0			322(-322)
B. Total Delta Outflow	5113			5191 (78)		
II. 73-YEAR (1922-1994) AVERAGES (Oct 1921 - Sep 1994)						
A. Total Delta Exports	6096	2650	3446	7196(1099)	2731(81)	4464(1017)
WATER SUPPLY IMPACT				1099		
B. Add water	39			39 (0)		
C. EOM SEPT SACTO BASIN	6915	4922	1992	7785(869)	4507(-415)	3277(1285)
(i) Existing Sacto Basin		4922	1992		4507(-415)	2277 (284)
(ii) New Sacto Basin			0			1000(-1000)
D. E.O.M Sept. New Melones	1225			1225 (0)		
E. Total Delta Outflow	14426			13559(-867)		

TABLE 13

SUMMARY OF WATER SUPPLY IMPACT

All values in Thousand Acre-Feet / Year

I. HISTORIC DRY PERIOD AVERAGES (May 1928 - Oct 1934)	2020D09B-CALFED-675			2020D09B-CALFED-688		
	TOTAL	CVP	SWP	TOTAL	CVP	SWP
A. (i) Total Delta Exports	4062	1978	2083	4082 (20)	1984 (5)	2098(14)
(ii) Net Storage Used	1204	886	317	1219(-15)	900(-13)	319(-1)
(a) Existing North-of-Delta		886	317		900(-13)	319(-1)
(b) New North-of-Delta			0			0 (0)
WATER SUPPLY IMPACT (i+ii)				5		
(iii) Add water from CP81 & CP20	30			30 (0)		
(iv) Other Storage Used	173	70	103	158 (15)	56 (14)	102 (0)
(b) New In-Delta			0			0 (0)
(a) Existing South-of-Delta		70	103		56 (14)	102 (0)
(b) New South-of-Delta			0			0 (0)
B. Total Delta Outflow	5113			5108 (-5)		
II. 73-YEAR (1922-1994) AVERAGES (Oct 1921 - Sep 1994)						
A. Total Delta Exports	6096	2650	3446	6157 (60)	2660 (10)	3497(50)
WATER SUPPLY IMPACT				60		
B. Add water	39			39 (0)		
C. EOM SEPT SACTO BASIN	6915	4922	1992	6889(-25)	4902 (-20)	1986(-5)
(i) Existing Sacto Basin		4922	1992		4902 (-20)	1986(-5)
(ii) New Sacto Basin			0			0 (0)
D. E.O.M Sept. New Melones	1225			1225 (0)		
E. Total Delta Outflow	14426			14366(-59)		

TABLE 14

SUMMARY OF WATER SUPPLY IMPACT

All values in Thousand Acre-Feet / Year

I. HISTORIC DRY PERIOD AVERAGES (May 1928 - Oct 1934)	2020D09B-CALFED-675 TOTAL	CVP	SWP	2020D09B-CALFED-676 TOTAL	CVP	SWP
A. (i) Total Delta Exports	4062	1978	2083	4088(26)	1982(3)	2106(22)
(ii) Net Storage Used	1204	886	317	1215(-11)	898(-11)	317(0)
(a) Existing North-of-Delta		886	317		898(-11)	317(0)
(b) New North-of-Delta			0			0(0)
WATER SUPPLY IMPACT (i+ii)				15		
(iii) Add water from CP81 & CP20	30			30(0)		
(iv) Other Storage Used	173	70	103	159(14)	56(14)	103(0)
(b) New In-Delta			0			0(0)
(a) Existing South-of-Delta		70	103		56(14)	103(0)
(b) New South-of-Delta			0			0(0)
B. Total Delta Outflow	5113			5307(194)		
II. 73-YEAR (1922-1994) AVERAGES (Oct 1921 - Sep 1994)						
A. Total Delta Exports	6096	2650	3446	6164(67)	2658(8)	3505(59)
WATER SUPPLY IMPACT				67		
B. Add water	39			39(0)		
C. EOM SEPT SACTO BASIN	6915	4922	1992	6920(5)	4920(-1)	1999(7)
(i) Existing Sacto Basin		4922	1992		4920(-1)	1999(7)
(ii) New Sacto Basin			0			0(0)
D. E.O.M Sept. New Melones	1225			1225(0)		
E. Total Delta Outflow	14426			14653(227)		

D-011883

TABLE 15

SUMMARY OF WATER SUPPLY IMPACT

All values in Thousand Acre-Feet / Year

I. HISTORIC DRY PERIOD AVERAGES (May 1928 - Oct 1934)	2020D09B-CALFED-675 TOTAL	CVP	SWP	2020D09B-CALFED-711 TOTAL		CVP		SWP	
A. (i) Total Delta Exports	4062	1978	2083	4588	(526)	1975	(-3)	2613	(529)
(ii) Net Storage Used	1204	886	317	1503	(-298)	904	(-17)	598	(-280)
(a) Existing North-of-Delta		886	317			904	(-17)	317	(0)
(b) New North-of-Delta			0					280	(-280)
WATER SUPPLY IMPACT (i+ii)					228				
(iii) Add water from CP81 & CP20	30			30	(0)				
(iv) Other Storage Used	173	70	103	327	(-153)	65	(4)	261	(-158)
(b) New In-Delta			0					0	(0)
(a) Existing South-of-Delta		70	103			65	(4)	92	(11)
(b) New South-of-Delta			0					169	(-169)
B. Total Delta Outflow	5113			5079	(-33)				
II. 73-YEAR (1922-1994) AVERAGES (Oct 1921 - Sep 1994)									
A. Total Delta Exports	6096	2650	3446	6929	(832)	2749	(99)	4179	(732)
WATER SUPPLY IMPACT					832				
B. Add water	39			39	(0)				
C. EOM SEPT SACTO BASIN	6915	4922	1992	8409	(1494)	4823	(-99)	3586	(1593)
(i) Existing Sacto Basin		4922	1992			4823	(-99)	2464	(472)
(ii) New Sacto Basin			0					1121	(-1121)
D. E.O.M Sept. New Melones	1225			1225	(0)				
E. Total Delta Outflow	14426			13774	(-651)				

TABLE 16

SUMMARY OF WATER SUPPLY IMPACT

All values in Thousand Acre-Feet / Year

I. HISTORIC DRY PERIOD AVERAGES (May 1928 - Oct 1934)	2020D09B-CALFED-675			2020D09B-CALFED-712					
	TOTAL	CVP	SWP	TOTAL		CVP		SWP	
A. (i) Total Delta Exports	4062	1978	2083	4233(	171)	1977(	0)	2255(	172)
(ii) Net Storage Used	1204	886	317	1220(	-16)	897(	-10)	322(	-5)
(a) Existing North-of-Delta		886	317			897(	-10)	322(	-5)
(b) New North-of-Delta			0					0(	0)
WATER SUPPLY IMPACT (i+ii)					155				
(iii) Add water from CP81 & CP20	30			30(	0)				
(iv) Other Storage Used	173	70	103	333(	-159)	55(	15)	277(	-174)
(b) New In-Delta			0					0(	0)
(a) Existing South-of-Delta		70	103			55(	15)	89(	13)
(b) New South-of-Delta			0					188(	-188)
B. Total Delta Outflow	5113			5166(	52)				
II. 73-YEAR (1922-1994) AVERAGES (Oct 1921 - Sep 1994)									
A. Total Delta Exports	6096	2650	3446	6750(	653)	2733(	83)	4016(	569)
WATER SUPPLY IMPACT					653				
B. Add water	39			39(	0)				
C. EOM SEPT SACTO BASIN	6915	4922	1992	6718(	-197)	4895(	-26)	1822(	-170)
(i) Existing Sacto Basin		4922	1992			4895(	-26)	1822(	-170)
(ii) New Sacto Basin			0					0(	0)
D. E.O.M Sept. New Melones	1225			1225(	0)				
E. Total Delta Outflow	14426			14077(	-348)				

TABLE 17

SUMMARY OF WATER SUPPLY IMPACT

All values in Thousand Acre-Feet / Year

I. HISTORIC DRY PERIOD AVERAGES	2020D09B-CALFED-675			2020D09B-CALFED-714		
(May 1928 - Oct 1934)	TOTAL	CVP	SWP	TOTAL	CVP	SWP
A. (i) Total Delta Exports	4062	1978	2083	4026(-35)	1810(-168)	2215(132)
(ii) Net Storage Used	1204	886	317	1283(-79)	986 (-99)	297 (19)
(a) Existing North-of-Delta		886	317		986 (-99)	297 (19)
(b) New North-of-Delta			0			0 (0)
WATER SUPPLY IMPACT (i+ii)				------ -114		
(iii) Add water from CP81 & CP20	30			31 (0)		
(iv) Other Storage Used	173	70	103	163 (10)	64 (6)	99 (3)
(b) New In-Delta			0			0 (0)
(a) Existing South-of-Delta		70	103		64 (6)	99 (3)
(b) New South-of-Delta			0			0 (0)
B. Total Delta Outflow	5113			5434(321)		
II. 73-YEAR (1922-1994) AVERAGES (Oct 1921 - Sep 1994)						
A. Total Delta Exports	6096	2650	3446	6540(443)	2742 (92)	3798(351)
WATER SUPPLY IMPACT				------ 443		
B. Add water	39			39 (0)		
C. EOM SEPT SACTO BASIN	6915	4922	1992	6478(-437)	4741(-181)	1736(-255)
(i) Existing Sacto Basin		4922	1992		4741(-181)	1736(-255)
(ii) New Sacto Basin			0			0 (0)
D. E.O.M Sept. New Melones	1225			1225 (0)		
E. Total Delta Outflow	14426			14317(-108)		

D-011886

TABLE 18

SUMMARY OF WATER SUPPLY IMPACT

All values in Thousand Acre-Feet / Year

I. HISTORIC DRY PERIOD AVERAGES (May 1928 - Oct 1934)	2020D09B-CALFED-675			2020D09B-CALFED-715		
	TOTAL	CVP	SWP	TOTAL	CVP	SWP
A. (i) Total Delta Exports	4062	1978	2083	4621(559)	1782(-195)	2838 (755)
(ii) Net Storage Used	1204	886	317	1593(-389)	985 (-99)	607(-290)
(a) Existing North-of-Delta		886	317		985 (-99)	317 (0)
(b) New North-of-Delta			0			290(-290)
WATER SUPPLY IMPACT (i+ii)				--- 170		
(iii) Add water from CP81 & CP20	30			31 (0)		
(iv) Other Storage Used	173	70	103	476(-302)	67 (3)	408(-305)
(b) New In-Delta			0			0 (0)
(a) Existing South-of-Delta		70	103		67 (3)	108 (-4)
(b) New South-of-Delta			0			300(-300)
B. Total Delta Outflow	5113			5125 (12)		
II. 73-YEAR (1922-1994) AVERAGES (Oct 1921 - Sep 1994)						
A. Total Delta Exports	6096	2650	3446	7237 (1140)	2781(131)	4456(1009)
WATER SUPPLY IMPACT				--- 1141		
B. Add water	39			38 (0)		
C. EOM SEPT SACTO BASIN	6915	4922	1992	7954 (1039)	4607(-314)	3346 (1354)
(i) Existing Sacto Basin		4922	1992		4607(-314)	2324 (332)
(ii) New Sacto Basin			0			1021(-1021)
D. E.O.M Sept. New Melones	1225			1225 (0)		
E. Total Delta Outflow	14426			13513(-912)		

TABLE 19

SUMMARY OF WATER SUPPLY IMPACT

All values in Thousand Acre-Feet / Year

I. HISTORIC DRY PERIOD AVERAGES (May 1928 - Oct 1934)	2020D09B-CALFED-675			2020D09B-CALFED-716					
	TOTAL	CVP	SWP	TOTAL		CVP		SWP	
A. (i) Total Delta Exports	4062	1978	2083	3920(	-141)	1726(	-252)	2193(	110)
(ii) Net Storage Used	1204	886	317	1303(	-98)	997(	-110)	305(	11)
(a) Existing North-of-Delta		886	317			997(	-110)	305(	11)
(b) New North-of-Delta			0					0(	0)
WATER SUPPLY IMPACT (i+ii)					------ -239				
(iii) Add water from CP81 & CP20	30			31(	-1)				
(iv) Other Storage Used	173	70	103	153(	20)	56(	13)	96(	6)
(b) New In-Delta			0					0(	0)
(a) Existing South-of-Delta		70	103			56(	13)	96(	6)
(b) New South-of-Delta			0					0(	0)
B. Total Delta Outflow	5113			5556(	443)				
II. 73-YEAR (1922-1994) AVERAGES (Oct 1921 - Sep 1994)									
A. Total Delta Exports	6096	2650	3446	6440(	343)	2703(	53)	3737(	290)
WATER SUPPLY IMPACT					------ 343				
B. Add water	39			39(	0)				
C. EOM SEPT SACTO BASIN	6915	4922	1992	6289(	-625)	4588(	-334)	1701(	-291)
(i) Existing Sacto Basin		4922	1992			4588(	-334)	1701(	-291)
(ii) New Sacto Basin			0					0(	0)
D. E.O.M Sept. New Melones	1225			1225(	0)				
E. Total Delta Outflow	14426			14431(	4)				

TABLE 20

SUMMARY OF WATER SUPPLY IMPACT

All values in Thousand Acre-Feet / Year

I. HISTORIC DRY PERIOD AVERAGES (May 1928 - Oct 1934)	2020D09B-CALFED-675 TOTAL	CVP	SWP	2020D09B-CALFED-717 TOTAL	CVP	SWP
A. (i) Total Delta Exports	4062	1978	2083	4417(355)	1676(-301)	2741(657)
(ii) Net Storage Used	1204	886	317	1550(-345)	1030(-143)	519(-202)
(a) Existing North-of-Delta		886	317		1030(-143)	306(10)
(b) New North-of-Delta			0			213(-213)
WATER SUPPLY IMPACT (i+ii)				--- 10		
(iii) Add water from CP81 & CP20	30			26(4)		
(iv) Other Storage Used	173	70	103	470(-296)	45(25)	425(-322)
(b) New In-Delta			0			0(0)
(a) Existing South-of-Delta		70	103		45(25)	115(-12)
(b) New South-of-Delta			0			309(-309)
B. Total Delta Outflow	5113			5273(160)		
II. 73-YEAR (1922-1994) AVERAGES (Oct 1921 - Sep 1994)						
A. Total Delta Exports	6096	2650	3446	7147(1050)	2711(61)	4435(988)
WATER SUPPLY IMPACT				--- 1050		
B. Add water	39			38(0)		
C. EOM SEPT SACTO BASIN	6915	4922	1992	7614(699)	4428(-493)	3185(1193)
(i) Existing Sacto Basin		4922	1992		4428(-493)	2226(234)
(ii) New Sacto Basin			0			958(-958)
D. E.O.M Sept. New Melones	1225			1225(0)		
E. Total Delta Outflow	14426			13616(-809)		

TABLE 21

SUMMARY OF WATER SUPPLY IMPACT

All values in Thousand Acre-Feet / Year

I. HISTORIC DRY PERIOD AVERAGES (May 1928 - Oct 1934)	2020D09B-CALFED-675			2020D09B-CALFED-719					
	TOTAL	CVP	SWP	TOTAL		CVP		SWP	
A. (i) Total Delta Exports	4062	1978	2083	3637	(-424)	1848	(-129)	1788	(-295)
(ii) Net Storage Used	1204	886	317	1186	(17)	866	(20)	320	(-2)
(a) Existing North-of-Delta		886	317			866	(20)	320	(-2)
(b) New North-of-Delta			0					0	(0)
WATER SUPPLY IMPACT (i+ii)					------ -407				
(iii) Add water from CP81 & CP20	30			31	(0)				
(iv) Other Storage Used	173	70	103	203	(-29)	95	(-24)	108	(-4)
(b) New In-Delta			0					0	(0)
(a) Existing South-of-Delta		70	103			95	(-24)	108	(-4)
(b) New South-of-Delta			0					0	(0)
B. Total Delta Outflow	5113			5733	(620)				
II. 73-YEAR (1922-1994) AVERAGES (Oct 1921 - Sep 1994)									
A. Total Delta Exports	6096	2650	3446	6054	(-42)	2581	(-68)	3472	(25)
WATER SUPPLY IMPACT					------ -42				
B. Add water	39			39	(0)				
C. EOM SEPT SACTO BASIN	6915	4922	1992	6759	(-155)	4941	(18)	1818	(-174)
(i) Existing Sacto Basin		4922	1992			4941	(18)	1818	(-174)
(ii) New Sacto Basin			0					0	(0)
D. E.O.M Sept. New Melones	1225			1224	(0)				
E. Total Delta Outflow	14426			14757	(331)				

TABLE 22

SUMMARY OF WATER SUPPLY IMPACT

All values in Thousand Acre-Feet / Year

I. HISTORIC DRY PERIOD AVERAGES (May 1928 - Oct 1934)	2020D09B-CALFED-675			2020D09B-CALFED-720					
	TOTAL	CVP	SWP	TOTAL		CVP		SWP	
A. (i) Total Delta Exports	4062	1978	2083	3909	(-152)	1814	(-164)	2095	(12)
(ii) Net Storage Used	1204	886	317	1416	(-212)	903	(-16)	513	(-196)
(a) Existing North-of-Delta		886	317			903	(-16)	341	(-24)
(b) New North-of-Delta			0					171	(-171)
WATER SUPPLY IMPACT (i+ii)					-364				
(iii) Add water from CP81 & CP20	30			31	(0)				
(iv) Other Storage Used	173	70	103	317	(-143)	92	(-21)	225	(-121)
(b) New In-Delta			0					0	(0)
(a) Existing South-of-Delta		70	103			92	(-21)	53	(49)
(b) New South-of-Delta			0					171	(-171)
B. Total Delta Outflow	5113			5683	(570)				
II. 73-YEAR (1922-1994) AVERAGES (Oct 1921 - Sep 1994)									
A. Total Delta Exports	6096	2650	3446	6436	(339)	2541	(-108)	3894	(447)
WATER SUPPLY IMPACT					339				
B. Add water	39			39	(0)				
C. EOM SEPT SACTO BASIN	6915	4922	1992	8007	(1092)	4838	(-83)	3168	(1176)
(i) Existing Sacto Basin		4922	1992			4838	(-83)	2257	(264)
(ii) New Sacto Basin			0					911	(-911)
D. E.O.M Sept. New Melones	1225			1224	(0)				
E. Total Delta Outflow	14426			14260	(-165)				

TABLE 23

SUMMARY OF WATER SUPPLY IMPACT

All values in Thousand Acre-Feet / Year

I. HISTORIC DRY PERIOD AVERAGES (May 1928 - Oct 1934)	2020D09B-CALFED-675 TOTAL	CVP	SWP	2020D09B-CALFED-721 TOTAL		CVP		SWP	
A. (i) Total Delta Exports	4062	1978	2083	3940	(-121)	1744	(-233)	2195	(112)
(ii) Net Storage Used	1204	886	317	1293	(-89)	990	(-103)	302	(14)
(a) Existing North-of-Delta		886	317			990	(-103)	302	(14)
(b) New North-of-Delta			0					0	(0)
WATER SUPPLY IMPACT (i+ii)					-210				
(iii) Add water from CP81 & CP20	30			31	(-1)				
(iv) Other Storage Used	173	70	103	158	(15)	60	(9)	97	(5)
(b) New In-Delta			0					0	(0)
(a) Existing South-of-Delta		70	103			60	(9)	97	(5)
(b) New South-of-Delta			0					0	(0)
B. Total Delta Outflow	5113			5528	(415)				
II. 73-YEAR (1922-1994) AVERAGES (Oct 1921 - Sep 1994)									
A. Total Delta Exports	6096	2650	3446	6483	(386)	2717	(67)	3766	(319)
WATER SUPPLY IMPACT					386				
B. Add water	39			39	(0)				
C. EOM SEPT SACTO BASIN	6915	4922	1992	6360	(-554)	4649	(-273)	1711	(-280)
(i) Existing Sacto Basin		4922	1992			4649	(-273)	1711	(-280)
(ii) New Sacto Basin			0					0	(0)
D. E.O.M Sept. New Melones	1225			1225	(0)				
E. Total Delta Outflow	14426			14380	(-45)				

TABLE 24

SUMMARY OF WATER SUPPLY IMPACT

All values in Thousand Acre-Feet / Year

I. HISTORIC DRY PERIOD AVERAGES (May 1928 - Oct 1934)	2020D09B-CALFED-675			2020D09B-CALFED-722					
	TOTAL	CVP	SWP	TOTAL		CVP		SWP	
A. (i) Total Delta Exports	4062	1978	2083	4557	(495)	1687	(-290)	2869	(786)
(ii) Net Storage Used	1204	886	317	1615	(-411)	1022	(-135)	593	(-275)
(a) Existing North-of-Delta		886	317			1022	(-135)	320	(-3)
(b) New North-of-Delta			0					272	(-272)
WATER SUPPLY IMPACT (i+ii)					84				
(iii) Add water from CP81 & CP20	30			31	(-1)				
(iv) Other Storage Used	173	70	103	487	(-313)	49	(21)	437	(-334)
(b) New In-Delta			0					0	(0)
(a) Existing South-of-Delta		70	103			49	(21)	113	(-10)
(b) New South-of-Delta			0					324	(-324)
B. Total Delta Outflow	5113			5201	(88)				
II. 73-YEAR (1922-1994) AVERAGES (Oct 1921 - Sep 1994)									
A. Total Delta Exports	6096	2650	3446	7194	(1097)	2730	(80)	4463	(1016)
WATER SUPPLY IMPACT					1097				
B. Add water	39			39	(0)				
C. EOM SEPT SACTO BASIN	6915	4922	1992	7769	(854)	4512	(-410)	3257	(1264)
(i) Existing Sacto Basin		4922	1992			4512	(-410)	2260	(268)
(ii) New Sacto Basin			0					996	(-996)
D. E.O.M Sept. New Melones	1225			1225	(0)				
E. Total Delta Outflow	14426			13561	(-864)				

TABLE 25

SUMMARY OF WATER SUPPLY IMPACT

All values in Thousand Acre-Feet / Year

I. HISTORIC DRY PERIOD AVERAGES (May 1928 - Oct 1934)	2020D09B-CALFED-703			2020D09B-CALFED-723					
	TOTAL	CVP	SWP	TOTAL		CVP		SWP	
A. (i) Total Delta Exports	4150	1989	2160	4116(	-33)	1976(	-12)	2139(	-20)
(ii) Net Storage Used	1204	897	307	1206(	-2)	898(	-1)	307(	0)
(a) Existing North-of-Delta		897	307			898(	-1)	307(	0)
(b) New North-of-Delta			0					0(	0)
WATER SUPPLY IMPACT (i+ii)					-35				
(iii) Add water from CP81 & CP20	30			30(	0)				
(iv) Other Storage Used	161	55	106	160(	0)	55(	0)	105(	0)
(b) New In-Delta			0					0(	0)
(a) Existing South-of-Delta		55	106			55(	0)	105(	0)
(b) New South-of-Delta			0					0(	0)
B. Total Delta Outflow	5234			5255(	21)				
II. 73-YEAR (1922-1994) AVERAGES (Oct 1921 - Sep 1994)									
A. Total Delta Exports	6488	2764	3723	6470(	-18)	2763(	0)	3706(	-17)
WATER SUPPLY IMPACT					-18				
B. Add water	39			39(	0)				
C. EOM SEPT SACTO BASIN	6804	4891	1913	6726(	-78)	4860(	-30)	1865(	-47)
(i) Existing Sacto Basin		4891	1913			4860(	-30)	1865(	-47)
(ii) New Sacto Basin			0					0(	0)
D. E.O.M Sept. New Melones	1225			1225(	0)				
E. Total Delta Outflow	14337			14355(	17)				

TABLE 26

SUMMARY OF WATER SUPPLY IMPACT

All values in Thousand Acre-Feet / Year

I. HISTORIC DRY PERIOD AVERAGES (May 1928 - Oct 1934)	2020D09B-CALFED-675			2020D09B-CALFED-724					
	TOTAL	CVP	SWP	TOTAL		CVP		SWP	
A. (i) Total Delta Exports	4062	1978	2083	4564	(502)	1992	(14)	2572	(488)
(ii) Net Storage Used	1204	886	317	1478	(-274)	879	(7)	599	(-281)
(a) Existing North-of-Delta		886	317			879	(7)	333	(-16)
(b) New North-of-Delta			0					265	(-265)
WATER SUPPLY IMPACT (i+ii)					228				
(iii) Add water from CP81 & CP20	30			30	(0)				
(iv) Other Storage Used	173	70	103	153	(20)	56	(14)	97	(6)
(b) New In-Delta			0					0	(0)
(a) Existing South-of-Delta		70	103			56	(14)	97	(6)
(b) New South-of-Delta			0					0	(0)
B. Total Delta Outflow	5113			5077	(-35)				
II. 73-YEAR (1922-1994) AVERAGES (Oct 1921 - Sep 1994)									
A. Total Delta Exports	6096	2650	3446	6845	(748)	2739	(89)	4106	(659)
WATER SUPPLY IMPACT					748				
B. Add water	39			39	(0)				
C. EOM SEPT SACTO BASIN	6915	4922	1992	8127	(1212)	4804	(-117)	3322	(1330)
(i) Existing Sacto Basin		4922	1992			4804	(-117)	2442	(450)
(ii) New Sacto Basin			0					879	(-879)
D. E.O.M Sept. New Melones	1225			1225	(0)				
E. Total Delta Outflow	14426			13856	(-569)				

TABLE 27

SUMMARY OF WATER SUPPLY IMPACT

All values in Thousand Acre-Feet / Year

I. HISTORIC DRY PERIOD AVERAGES (May 1928 - Oct 1934)	2020D09B-CALFED-706			2020D09B-CALFED-730					
	TOTAL	CVP	SWP	TOTAL		CVP		SWP	
A. (i) Total Delta Exports	4606	1971	2635	4555	(-51)	1957	(-14)	2597	(-37)
(ii) Net Storage Used	1516	898	617	1509	(6)	897	(0)	611	(5)
(a) Existing North-of-Delta		898	316			897	(0)	327	(-10)
(b) New North-of-Delta			301					284	(16)
WATER SUPPLY IMPACT (i+ii)					-45				
(iii) Add water from CP81 & CP20	30			30	(0)				
(iv) Other Storage Used	375	62	312	375	(0)	63	(-1)	311	(0)
(b) New In-Delta			0					0	(0)
(a) Existing South-of-Delta		62	78			63	(-1)	79	(0)
(b) New South-of-Delta			233					232	(1)
B. Total Delta Outflow	5074			5103	(28)				
II. 73-YEAR (1922-1994) AVERAGES (Oct 1921 - Sep 1994)									
A. Total Delta Exports	6985	2742	4243	6981	(-4)	2744	(2)	4237	(-6)
WATER SUPPLY IMPACT					-4				
B. Add water	39			39	(0)				
C. EOM SEPT SACTO BASIN	8317	4793	3524	8186	(-131)	4759	(-33)	3426	(-98)
(i) Existing Sacto Basin		4793	2450			4759	(-33)	2396	(-54)
(ii) New Sacto Basin			1073					1030	(43)
D. E.O.M Sept. New Melones	1225			1225	(0)				
E. Total Delta Outflow	13718			13720	(1)				

TABLE 28

SUMMARY OF WATER SUPPLY IMPACT

All values in Thousand Acre-Feet / Year

I. HISTORIC DRY PERIOD AVERAGES (May 1928 - Oct 1934)	2020D09B-CALFED-703 TOTAL	CVP	SWP	2020D09B-CALFED-731 TOTAL		CVP		SWP	
A. (i) Total Delta Exports	4150	1989	2160	4300(	150)	2024(	35)	2276(	115)
(ii) Net Storage Used	1204	897	307	1159(	44)	874(	22)	284(	22)
(a) Existing North-of-Delta		897	307			874(	22)	284(	22)
(b) New North-of-Delta			0					0(	0)
WATER SUPPLY IMPACT (i+ii)					194				
(iii) Add water from CP81 & CP20	30			30(	0)				
(iv) Other Storage Used	161	55	106	159(	1)	54(	0)	105(	0)
(b) New In-Delta			0					0(	0)
(a) Existing South-of-Delta		55	106			54(	0)	105(	0)
(b) New South-of-Delta			0					0(	0)
B. Total Delta Outflow	5234			5077(	-157)				
II. 73-YEAR (1922-1994) AVERAGES (Oct 1921 - Sep 1994)									
A. Total Delta Exports	6488	2764	3723	6509(	20)	2749(	-15)	3759(	35)
WATER SUPPLY IMPACT					20				
B. Add water	39			39(	0)				
C. EOM SEPT SACTO BASIN	6804	4891	1913	6992(	187)	4965(	73)	2027(	114)
(i) Existing Sacto Basin		4891	1913			4965(	73)	2027(	114)
(ii) New Sacto Basin			0					0(	0)
D. E.O.M Sept. New Melones	1225			1225(	0)				
E. Total Delta Outflow	14337			14316(	-21)				

D-011897

TABLE 29

SUMMARY OF WATER SUPPLY IMPACT

All values in Thousand Acre-Feet / Year

I. HISTORIC DRY PERIOD AVERAGES (May 1928 - Oct 1934)	2020D09B-CALFED-706			2020D09B-CALFED-732					
	TOTAL	CVP	SWP	TOTAL		CVP		SWP	
A. (i) Total Delta Exports	4606	1971	2635	4753(	146)	2018(	46)	2734(	99)
(ii) Net Storage Used	1516	898	617	1489(	27)	887(	11)	602(	15)
(a) Existing North-of-Delta		898	316			887(	11)	302(	13)
(b) New North-of-Delta			301					299(	1)
WATER SUPPLY IMPACT (i+ii)					173				
(iii) Add water from CP81 & CP20	30			30(	0)				
(iv) Other Storage Used	375	62	312	345(	29)	56(	6)	289(	22)
(b) New In-Delta			0					0(	0)
(a) Existing South-of-Delta		62	78			56(	6)	81(	-3)
(b) New South-of-Delta			233					207(	26)
B. Total Delta Outflow	5074			4934(	-139)				
II. 73-YEAR (1922-1994) AVERAGES (Oct 1921 - Sep 1994)									
A. Total Delta Exports	6985	2742	4243	6965(	-19)	2711(	-30)	4254(	11)
WATER SUPPLY IMPACT					-19				
B. Add water	39			39(	0)				
C. EOM SEPT SACTO BASIN	8317	4793	3524	8543(	225)	4880(	86)	3663(	138)
(i) Existing Sacto Basin		4793	2450			4880(	86)	2533(	82)
(ii) New Sacto Basin			1073					1130(	-56)
D. E.O.M Sept. New Melones	1225			1225(	0)				
E. Total Delta Outflow	13718			13729(	11)				

TABLE 30

SUMMARY OF WATER SUPPLY IMPACT

All values in Thousand Acre-Feet / Year

I. HISTORIC DRY PERIOD AVERAGES (May 1928 - Oct 1934)	2020D09B-CALFED-675 TOTAL	CVP	SWP	2020D09B-CALFED-733 TOTAL		CVP		SWP	
A. (i) Total Delta Exports	4062	1978	2083	3900	(-161)	1722	(-255)	2178	(94)
(ii) Net Storage Used	1204	886	317	1303	(-99)	1000	(-113)	303	(13)
(a) Existing North-of-Delta		886	317			1000	(-113)	303	(13)
(b) New North-of-Delta			0					0	(0)
WATER SUPPLY IMPACT (i+ii)					-260				
(iii) Add water from CP81 & CP20	30			31	(-1)				
(iv) Other Storage Used	173	70	103	155	(18)	58	(12)	97	(5)
(b) New In-Delta			0					0	(0)
(a) Existing South-of-Delta		70	103			58	(12)	97	(5)
(b) New South-of-Delta			0					0	(0)
B. Total Delta Outflow	5113			5562	(448)				
II. 73-YEAR (1922-1994) AVERAGES (Oct 1921 - Sep 1994)									
A. Total Delta Exports	6096	2650	3446	6459	(362)	2708	(58)	3750	(303)
WATER SUPPLY IMPACT					362				
B. Add water	39			39	(0)				
C. EOM SEPT SACTO BASIN	6915	4922	1992	6276	(-638)	4607	(-315)	1668	(-323)
(i) Existing Sacto Basin		4922	1992			4607	(-315)	1668	(-323)
(ii) New Sacto Basin			0					0	(0)
D. E.O.M Sept. New Melones	1225			1225	(0)				
E. Total Delta Outflow	14426			14403	(-23)				

TABLE 31

SUMMARY OF WATER SUPPLY IMPACT

All values in Thousand Acre-Feet / Year

I. HISTORIC DRY PERIOD AVERAGES (May 1928 - Oct 1934)	2020D09B-CALFED-675			2020D09B-CALFED-734					
	TOTAL	CVP	SWP	TOTAL		CVP		SWP	
A. (i) Total Delta Exports	4062	1978	2083	4477	(415)	1708	(-270)	2769	(686)
(ii) Net Storage Used	1204	886	317	1581	(-377)	1009	(-122)	572	(-254)
(a) Existing North-of-Delta		886	317			1009	(-122)	313	(3)
(b) New North-of-Delta			0					258	(-258)
WATER SUPPLY IMPACT (i+ii)					38				
(iii) Add water from CP81 & CP20	30			31	(-1)				
(iv) Other Storage Used	173	70	103	496	(-322)	54	(16)	442	(-338)
(b) New In-Delta			0					0	(0)
(a) Existing South-of-Delta		70	103			54	(16)	115	(-11)
(b) New South-of-Delta			0					327	(-327)
B. Total Delta Outflow	5113			5240	(126)				
II. 73-YEAR (1922-1994) AVERAGES (Oct 1921 - Sep 1994)									
A. Total Delta Exports	6096	2650	3446	7173	(1076)	2726	(76)	4447	(1000)
WATER SUPPLY IMPACT					1076				
B. Add water	39			38	(0)				
C. EOM SEPT SACTO BASIN	6915	4922	1992	7686	(771)	4486	(-435)	3199	(1207)
(i) Existing Sacto Basin		4922	1992			4486	(-435)	2229	(237)
(ii) New Sacto Basin			0					969	(-969)
D. E.O.M Sept. New Melones	1225			1225	(0)				
E. Total Delta Outflow	14426			13580	(-845)				

TABLE 32

SUMMARY OF WATER SUPPLY IMPACT

All values in Thousand Acre-Feet / Year

I. HISTORIC DRY PERIOD AVERAGES (May 1928 - Oct 1934)	2020D09B-CALFED-675			2020D09B-CALFED-735					
	TOTAL	CVP	SWP	TOTAL		CVP		SWP	
A. (i) Total Delta Exports	4062	1978	2083	4146	(84)	1807	(-171)	2339	(255)
(ii) Net Storage Used	1204	886	317	1248	(-43)	978	(-91)	269	(47)
(a) Existing North-of-Delta		886	317			978	(-91)	269	(47)
(b) New North-of-Delta			0					0	(0)
WATER SUPPLY IMPACT (i+ii)					41				
(iii) Add water from CP81 & CP20	30			31	(0)				
(iv) Other Storage Used	173	70	103	165	(8)	57	(13)	108	(-5)
(b) New In-Delta			0					0	(0)
(a) Existing South-of-Delta		70	103			57	(13)	108	(-5)
(b) New South-of-Delta			0					0	(0)
B. Total Delta Outflow	5113			5328	(215)				
II. 73-YEAR (1922-1994) AVERAGES (Oct 1921 - Sep 1994)									
A. Total Delta Exports	6096	2650	3446	6573	(476)	2733	(83)	3839	(392)
WATER SUPPLY IMPACT					476				
B. Add water	39			39	(0)				
C. EOM SEPT SACTO BASIN	6915	4922	1992	6529	(-386)	4725	(-197)	1803	(-188)
(i) Existing Sacto Basin		4922	1992			4725	(-197)	1803	(-188)
(ii) New Sacto Basin			0					0	(0)
D. E.O.M Sept. New Melones	1225			1225	(0)				
E. Total Delta Outflow	14426			14301	(-125)				

D-011901

TABLE 33

SUMMARY OF WATER SUPPLY IMPACT

All values in Thousand Acre-Feet / Year

I. HISTORIC DRY PERIOD AVERAGES (May 1928 - Oct 1934)	2020D09B-CALFED-675			2020D09B-CALFED-736					
	TOTAL	CVP	SWP	TOTAL		CVP		SWP	
A. (i) Total Delta Exports	4062	1978	2083	4839	(777)	1782	(-196)	3057	(974)
(ii) Net Storage Used	1204	886	317	1611	(-406)	993	(-107)	617	(-299)
(a) Existing North-of-Delta		886	317			993	(-107)	315	(2)
(b) New North-of-Delta			0					302	(-302)
WATER SUPPLY IMPACT (i+ii)					371				
(iii) Add water from CP81 & CP20	30			31	(0)				
(iv) Other Storage Used	173	70	103	489	(-315)	56	(14)	432	(-329)
(b) New In-Delta			0					0	(0)
(a) Existing South-of-Delta		70	103			56	(14)	110	(-6)
(b) New South-of-Delta			0					322	(-322)
B. Total Delta Outflow	5113			4981	(-131)				
II. 73-YEAR (1922-1994) AVERAGES (Oct 1921 - Sep 1994)									
A. Total Delta Exports	6096	2650	3446	7274	(1177)	2759	(108)	4515	(1068)
WATER SUPPLY IMPACT					1177				
B. Add water	39			38	(0)				
C. EOM SEPT SACTO BASIN	6915	4922	1992	8032	(1117)	4600	(-321)	3431	(1439)
(i) Existing Sacto Basin		4922	1992			4600	(-321)	2363	(370)
(ii) New Sacto Basin			0					1068	(-1068)
D. E.O.M Sept. New Melones	1225			1225	(0)				
E. Total Delta Outflow	14426			13485	(-940)				

D-011902

TABLE 35

SUMMARY OF WATER SUPPLY IMPACT

All values in Thousand Acre-Feet / Year

I. HISTORIC DRY PERIOD AVERAGES (May 1928 - Oct 1934)	1995D06A-DEFT-664			1995D06A-CAFEDDEFT1-689					
	TOTAL	CVP	SWP	TOTAL		CVP		SWP	
A. (i) Total Delta Exports	3737	1898	1838	3732	(-4)	1902	(3)	1830	(-8)
(ii) Net Storage Used	1222	878	343	1213	(8)	869	(9)	344	(0)
(a) Existing North-of-Delta		878	343			869	(9)	344	(0)
(b) New North-of-Delta			0					0	(0)
WATER SUPPLY IMPACT (i+ii)					4				
(iii) Add water from CP81 & CP20	131			131	(0)				
(iv) Other Storage Used	179	81	97	217	(-38)	80	(1)	137	(-39)
(b) New In-Delta			0					0	(0)
(a) Existing South-of-Delta		81	97			80	(1)	96	(0)
(b) New South-of-Delta			0					40	(-40)
B. Total Delta Outflow	5553			5551	(-1)				
II. 73-YEAR (1922-1994) AVERAGES (Oct 1921 - Sep 1994)									
A. Total Delta Exports	5440	2427	3013	5456	(15)	2445	(18)	3011	(-2)
WATER SUPPLY IMPACT					15				
B. Add water	112			112	(0)				
C. EOM SEPT SACTO BASIN	6899	4929	1969	6903	(3)	4933	(4)	1969	(0)
(i) Existing Sacto Basin		4929	1969			4933	(4)	1969	(0)
(ii) New Sacto Basin			0					0	(0)
D. E.O.M Sept. New Melones	1163			1159	(-3)				
E. Total Delta Outflow	15135			15104	(-30)				

TABLE 36

SUMMARY OF WATER SUPPLY IMPACT

All values in Thousand Acre-Feet / Year

I. HISTORIC DRY PERIOD AVERAGES (May 1928 - Oct 1934)	1995D06A-BASE2-549NEW TOTAL	CVP	SWP	1995D06A-CALFEDDEFT2-690 TOTAL		CVP		SWP	
A. (i) Total Delta Exports	4148	2030	2117	3970	(-178)	1932	(-98)	2037	(-79)
(ii) Net Storage Used	1189	860	328	1202	(-12)	872	(-11)	330	(-1)
(a) Existing North-of-Delta		860	328			872	(-11)	330	(-1)
(b) New North-of-Delta			0					0	(0)
WATER SUPPLY IMPACT (i+ii)					-190				
(iii) Add water from CP81 & CP20	47			47	(0)				
(iv) Other Storage Used	175	71	103	198	(-23)	93	(-21)	105	(-1)
(b) New In-Delta			0					0	(0)
(a) Existing South-of-Delta		71	103			93	(-21)	105	(-1)
(b) New South-of-Delta			0					0	(0)
B. Total Delta Outflow	5041			5230	(188)				
II. 73-YEAR (1922-1994) AVERAGES (Oct 1921 - Sep 1994)									
A. Total Delta Exports	5774	2669	3104	5501	(-273)	2465	(-204)	3035	(-68)
WATER SUPPLY IMPACT					-273				
B. Add water	57			57	(0)				
C. EOM SEPT SACTO BASIN	7132	5018	2114	7278	(145)	5097	(78)	2181	(67)
(i) Existing Sacto Basin		5018	2114			5097	(78)	2181	(67)
(ii) New Sacto Basin			0					0	(0)
D. E.O.M Sept. New Melones	1217			1217	(0)				
E. Total Delta Outflow	14796			15057	(261)				

TABLE 37

SUMMARY OF WATER SUPPLY IMPACT

All values in Thousand Acre-Feet / Year

I. HISTORIC DRY PERIOD AVERAGES (May 1928 - Oct 1934)	1995D06A-BASE2-549NEW TOTAL	CVP	SWP	1995D06A-CALFEDDEFT3-691 TOTAL		CVP		SWP	
A. (i) Total Delta Exports	4148	2030	2117	3935	(-213)	1999	(-31)	1935	(-181)
(ii) Net Storage Used	1189	860	328	1207	(-18)	864	(-3)	343	(-15)
(a) Existing North-of-Delta		860	328			864	(-3)	343	(-15)
(b) New North-of-Delta			0					0	(0)
WATER SUPPLY IMPACT (i+ii)					------ -231				
(iii) Add water from CP81 & CP20	47			47	(0)				
(iv) Other Storage Used	175	71	103	198	(-23)	91	(-19)	107	(-3)
(b) New In-Delta			0					0	(0)
(a) Existing South-of-Delta		71	103			91	(-19)	107	(-3)
(b) New South-of-Delta			0					0	(0)
B. Total Delta Outflow	5041			5272	(230)				
II. 73-YEAR (1922-1994) AVERAGES (Oct 1921 - Sep 1994)									
A. Total Delta Exports	5774	2669	3104	5644	(-129)	2611	(-58)	3033	(-71)
WATER SUPPLY IMPACT					------ -129				
B. Add water	57			57	(0)				
C. EOM SEPT SACTO BASIN	7132	5018	2114	7114	(-18)	5017	(-1)	2096	(-17)
(i) Existing Sacto Basin		5018	2114			5017	(-1)	2096	(-17)
(ii) New Sacto Basin			0					0	(0)
D. E.O.M Sept. New Melones	1217			1218	(0)				
E. Total Delta Outflow	14796			14922	(126)				

TABLE 38

SUMMARY OF WATER SUPPLY IMPACT

All values in Thousand Acre-Feet / Year

I. HISTORIC DRY PERIOD AVERAGES (May 1928 - Oct 1934)	1995D06A-BASE2-549NEW TOTAL	CVP	SWP	1995D06A-CALFERDDEFT4-692 TOTAL		CVP		SWP	
A. (i) Total Delta Exports	4148	2030	2117	4226(	78)	2068(	37)	2158(	40)
(ii) Net Storage Used	1189	860	328	1209(	-20)	880(	-20)	328(	0)
(a) Existing North-of-Delta		860	328			880(	-20)	328(	0)
(b) New North-of-Delta			0					0(	0)
WATER SUPPLY IMPACT (i+ii)					58				
(iii) Add water from CP81 & CP20	47			130(	-82)				
(iv) Other Storage Used	175	71	103	116(	58)	28(	43)	88(	15)
(b) New In-Delta			0					0(	0)
(a) Existing South-of-Delta		71	103			28(	43)	88(	15)
(b) New South-of-Delta			0					0(	0)
B. Total Delta Outflow	5041			5056(	14)				
II. 73-YEAR (1922-1994) AVERAGES (Oct 1921 - Sep 1994)									
A. Total Delta Exports	5774	2669	3104	5659(	-115)	2590(	-79)	3069(	-35)
WATER SUPPLY IMPACT					-115				
B. Add water	57			112(	-54)				
C. EOM SEPT SACTO BASIN	7132	5018	2114	7192(	59)	5058(	39)	2134(	20)
(i) Existing Sacto Basin		5018	2114			5058(	39)	2134(	20)
(ii) New Sacto Basin			0					0(	0)
D. E.O.M Sept. New Melones	1217			1155(	-62)				
E. Total Delta Outflow	14796			14918(	121)				

D-011906

		Programs						Storage						Conveyance												
														South Delta				North Delta				Isolated Facilities				
		Water Quality	Water Use Efficiency	Ecosystem Restoration	Levee System Integrity	Water Transfers	Watershed Coordination	surface storage on Sac R. tributaries (in MAF)	surface storage on San Joaquin R. (in TAF)	groundwater storage in Sac Valley (in TAF)	groundwater storage in San Joaquin Valley (in TAF)	surface storage off-aqueduct (in MAF)	in-Delta storage (in TAF)	Tracy/CCF intertie and new fish facility	new CCF intake structure	operable Old R. barrier (or equivalent)	flow & stage control measures installed (or equivalent)	channel enlargement along Old R.	screened intake at Hood	North Delta Channel Modifications	Mokelumne River Floodway (East)	Mokelumne R. Floodway (West) and Tyler Island Aquatic Habitat	East Delta Habitat	3 isolated conveyance channels	5,000 cfs open channel from Hood to CCF	15,000 cfs open channel/pipeline from Hood to CCF
Existing Through Delta Channels	Alt 1 A	X	X	X	X	X	X																			
	B	X	X	X	X	X	X									X		X	X							
	C	X	X	X	X	X	X	3		250	500	1		X	X	X	X	X								
Modified Through Delta	Alt 2 A	X	X	X	X	X	X									X	X	X	X	X	X	X				
	B	X	X	X	X	X	X	3	500	250	500	2		X	X	X	X	X	X	X						
	D	X	X	X	X	X	X					2		X	X	X		X	X		X		X			
	E	X	X	X	X	X	X	3	500	250	500	2		X	X	X		X				X	X			
Dual System	Alt 3 A	X	X	X	X	X	X							X	X	X	X	X	X	X					X	
	B	X	X	X	X	X	X	3	500	250	500	2	200	X	X	X	X	X	X	X					X	
	E	X	X	X	X	X	X	3	500	250	500	2	200	X	X	X			X	X						X
	H	X	X	X	X	X	X	3	500	250	500	2		X	X	X		X	X			X	X		X	
	I	X	X	X	X	X	X	3	500	250	500	2	100	X	X				X	X				X		X

TABLE 39
CALFED PROGRAM ALTERNATIVES

D-011907

D-011907

FIGURE 1
FREQUENCY OF TOTAL ANNUAL COMBINED (SWP+CVP) DELIVERIES
EFFECT OF CVPIA (B) (2) AFRP DELTA ACTIONS

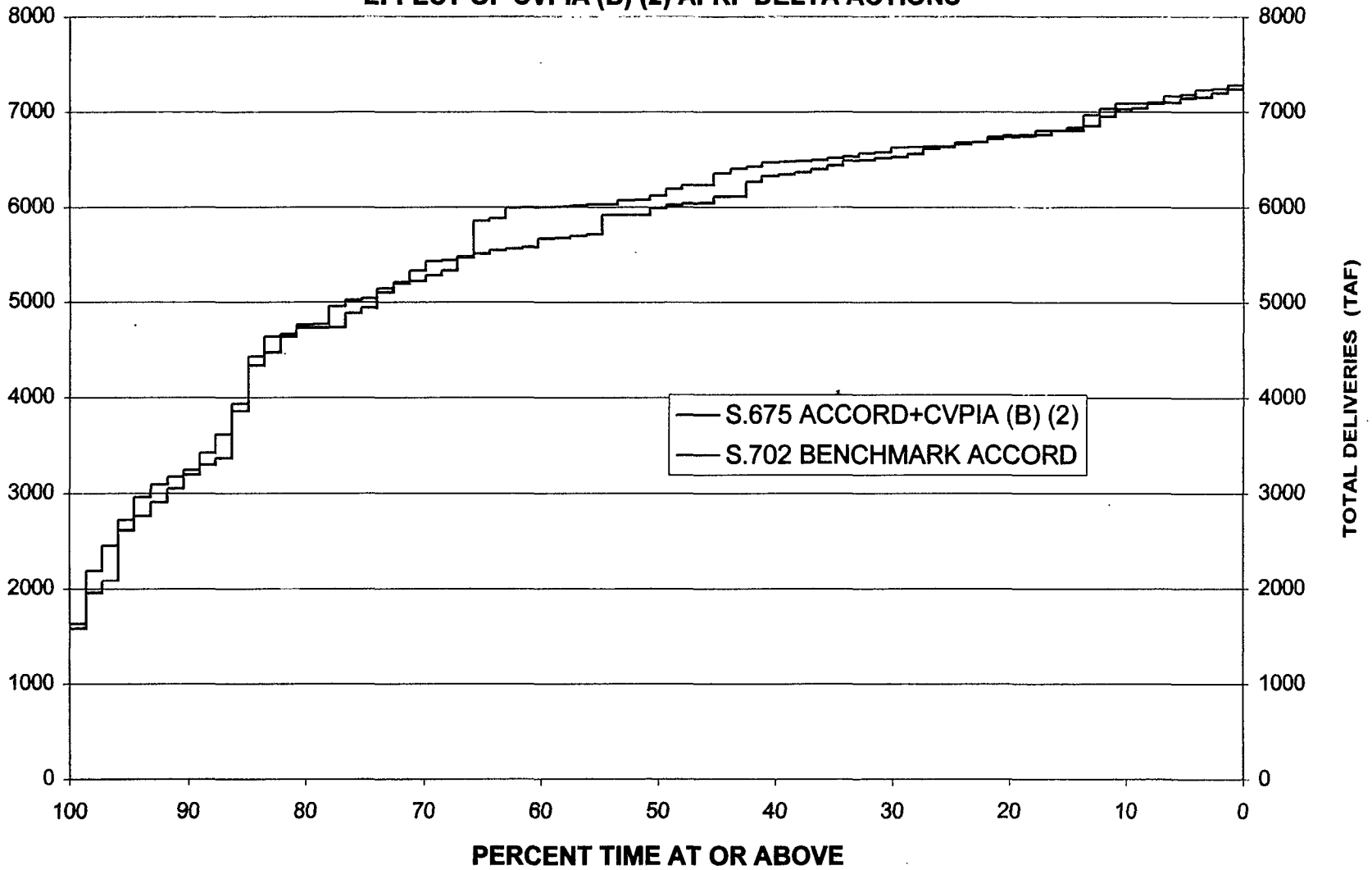

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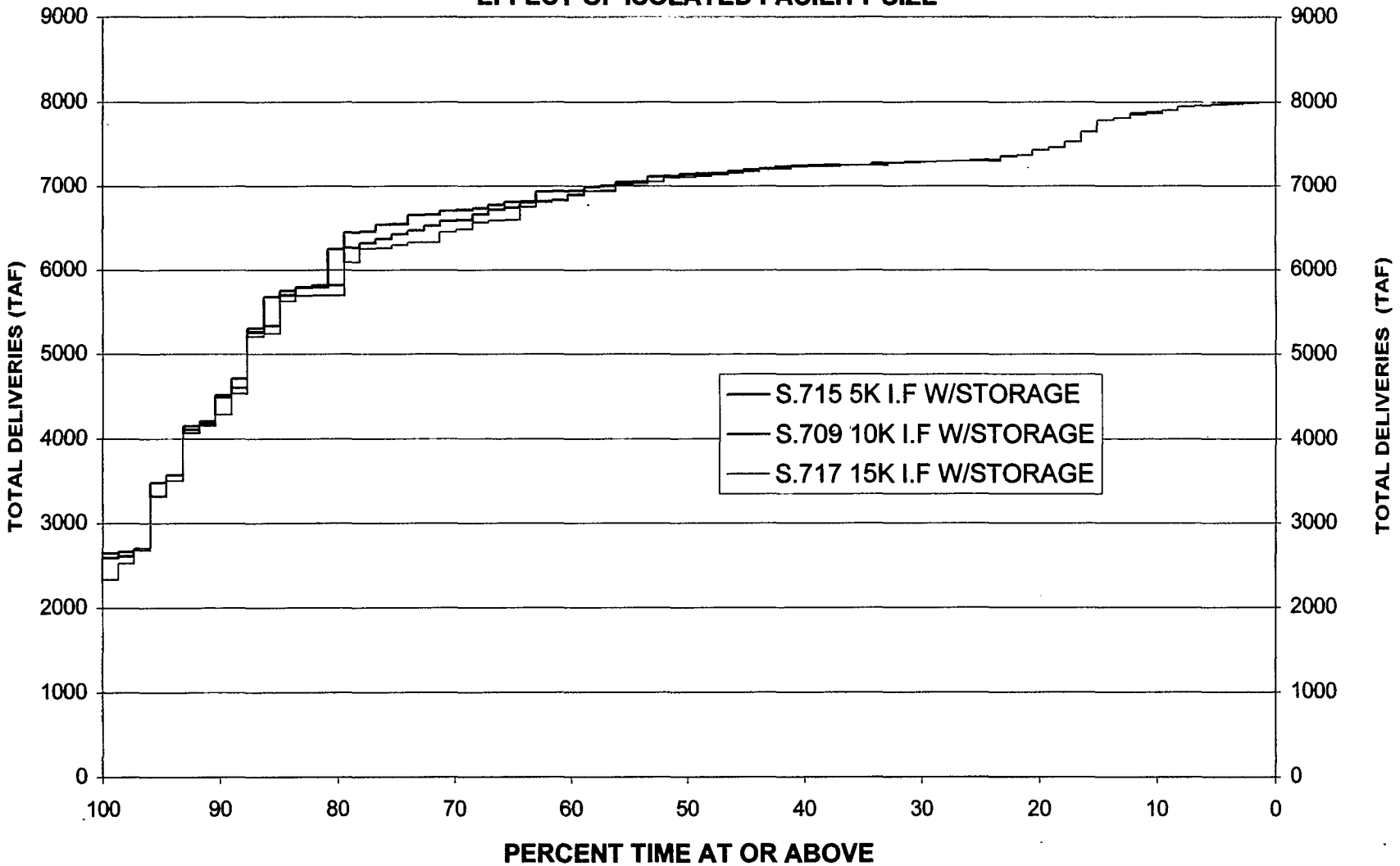
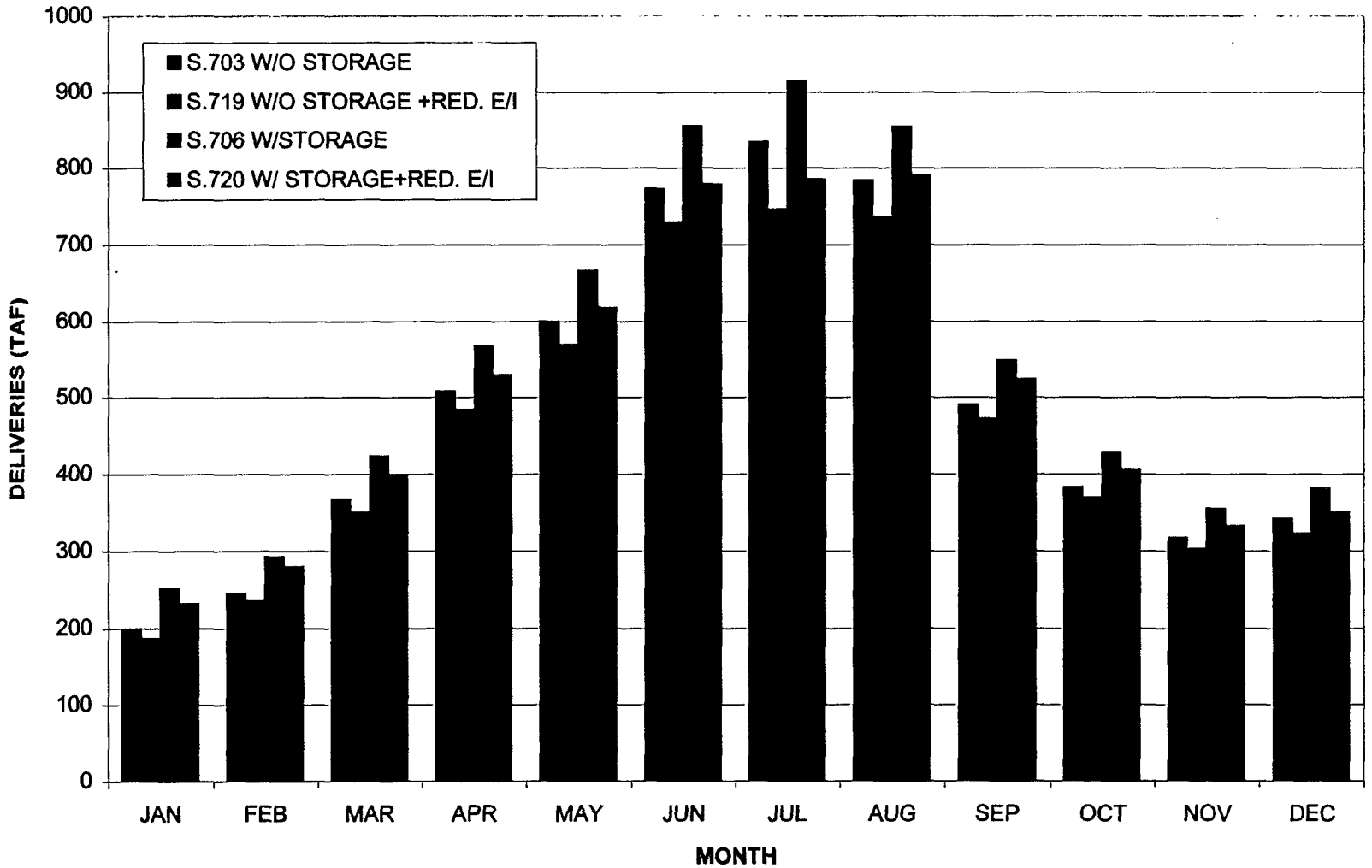
FIGURE 2
FREQUENCY OF TOTAL ANNUAL COMBINED (SWP+CVP) DELIVERIES
EFFECT OF ISOLATED FACILITY SIZE



D—011909

D-011909

FIGURE 3
MONTHLY DISTRIBUTION OF AVERAGE COMBIINED (SWP+CVP) DELIVERIES
EFFECT OF E/I RATIO REDUCTION



D—011910

D-011910

FIGURE 4

DWR PLANNING SIMULATION MODEL NETWORK REPRESENTATION

NORTH OF DELTA

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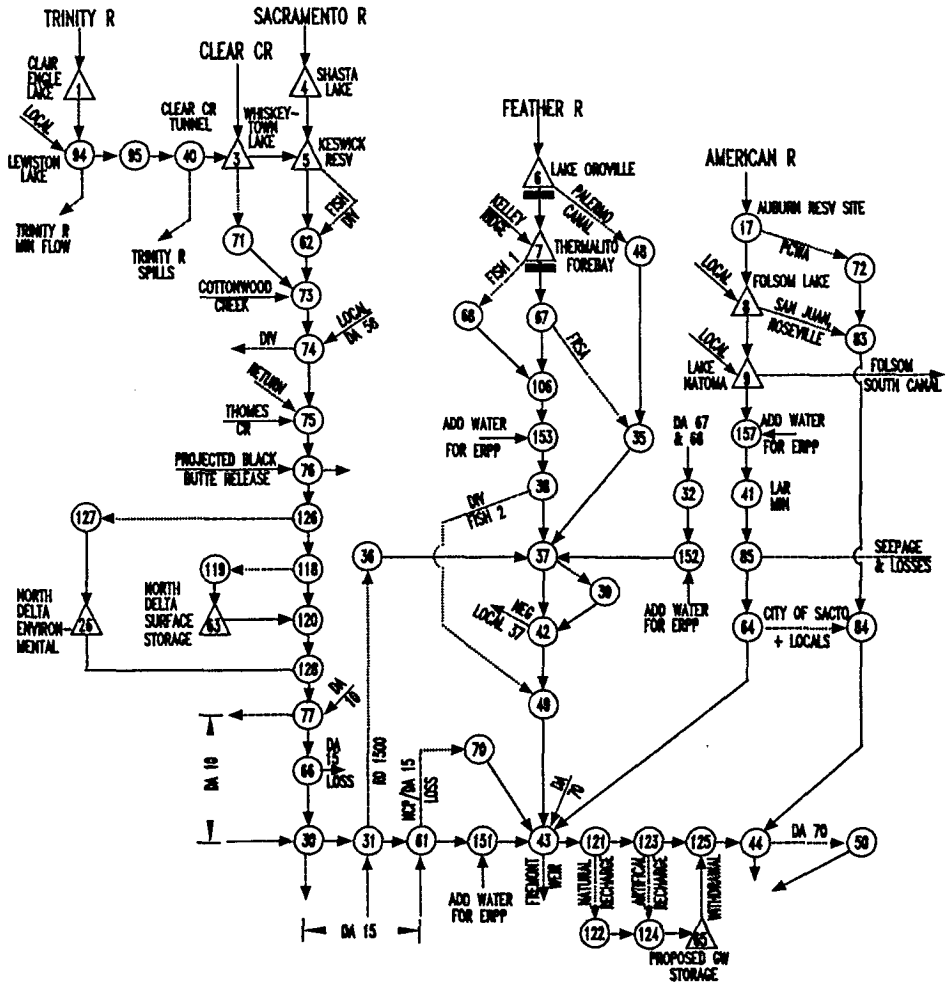

D-011911

FIGURE 5

DWR PLANNING SIMULATION MODEL NETWORK REPRESENTATION

DELTA

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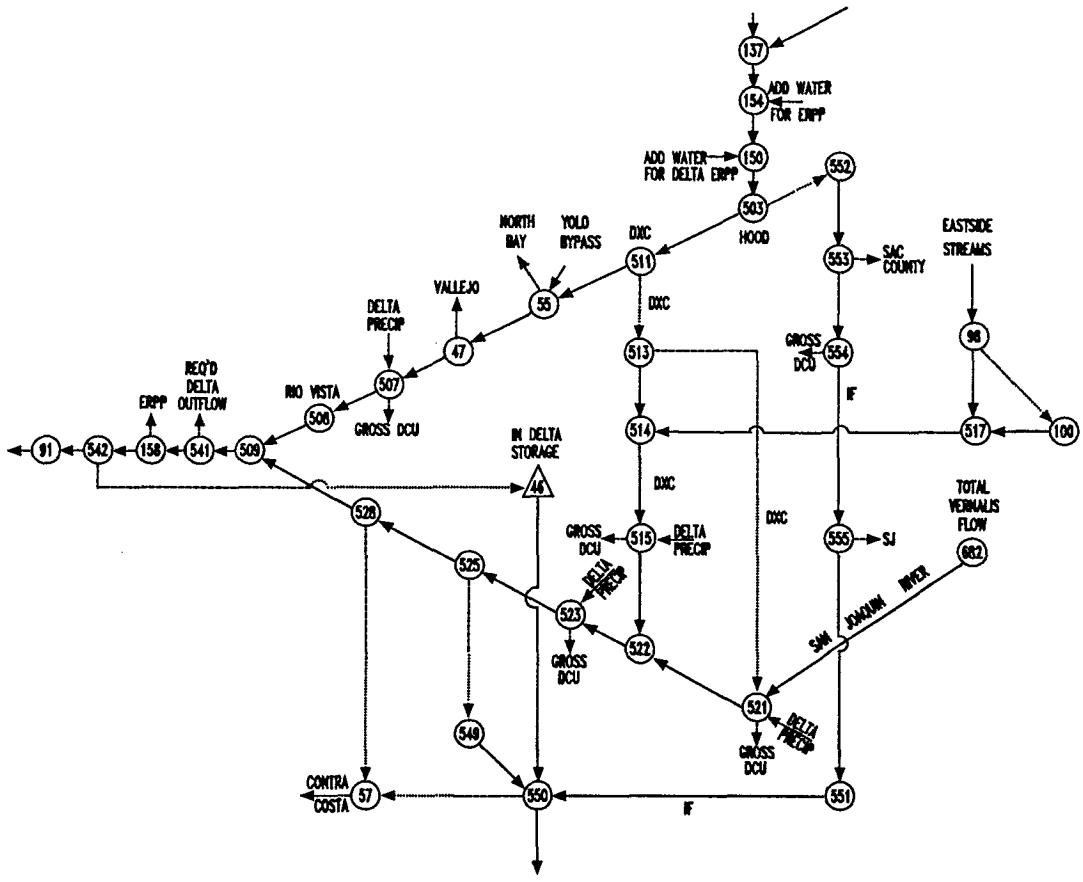

D-011912

FIGURE 6

DWR PLANNING SIMULATION MODEL NETWORK REPRESENTATION

SAN JOAQUIN BASIN

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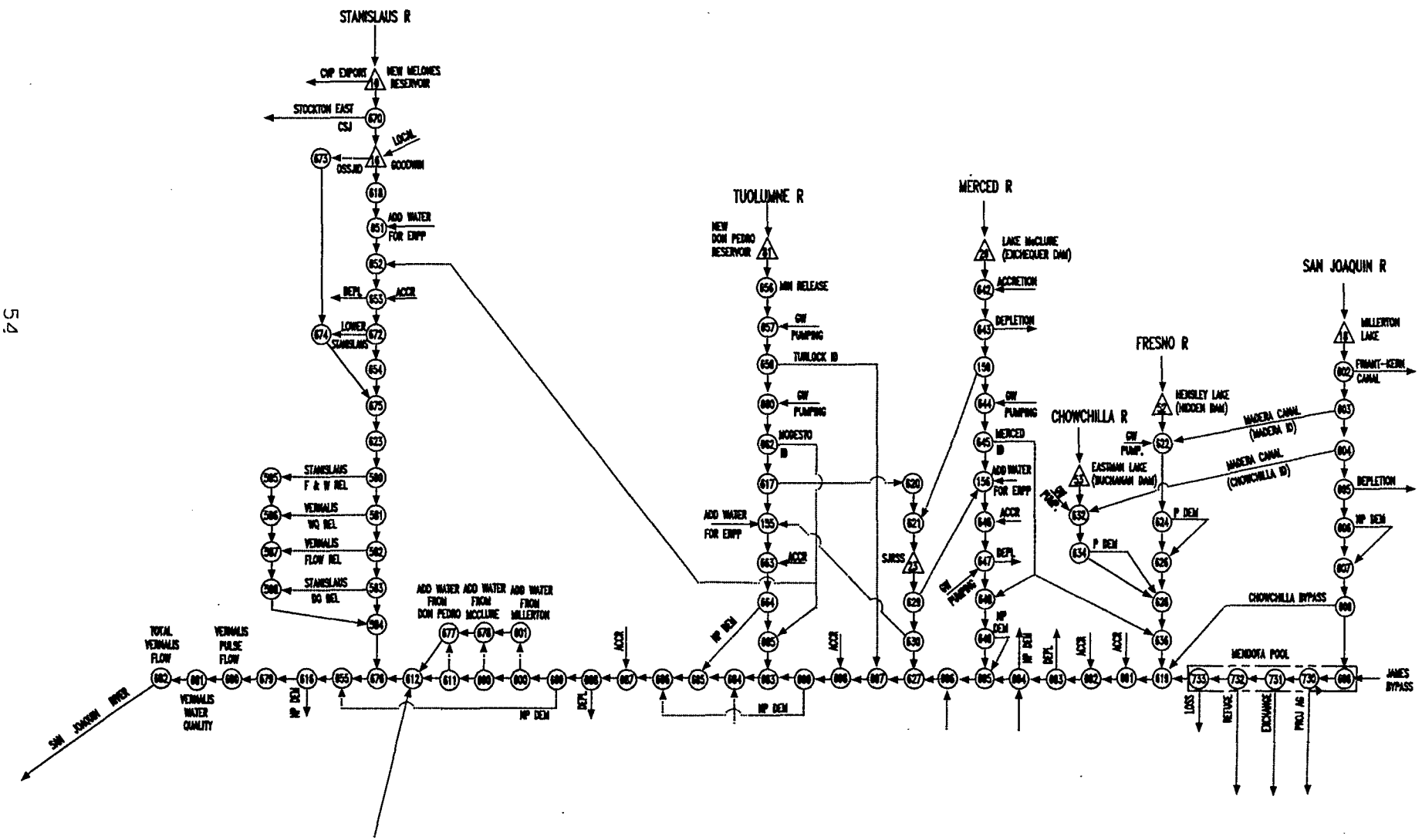

D-011913

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FIGURE 7

DWR PLANNING SIMULATION MODEL NETWORK REPRESENTATION

AQUEDUCT AND DMC

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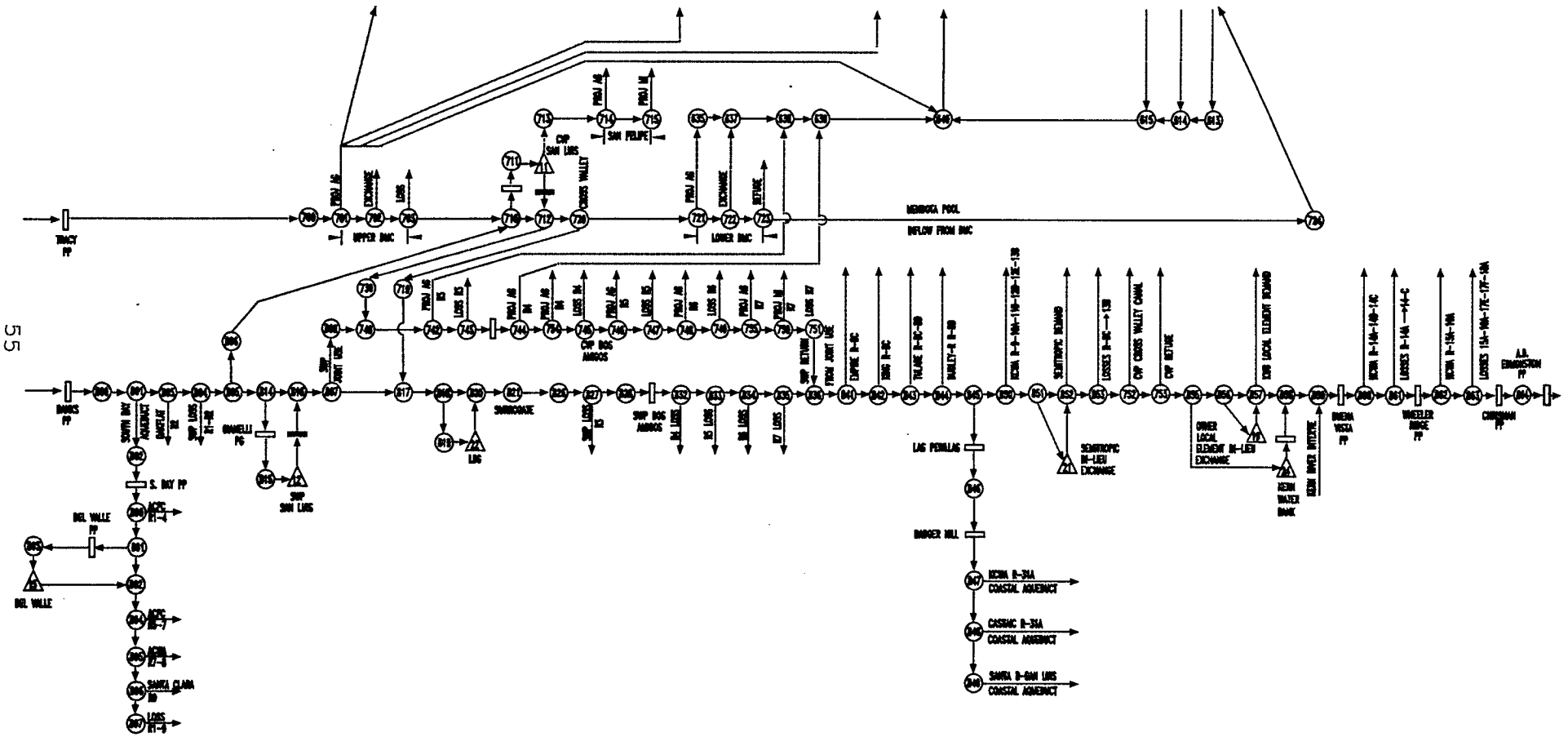

D-011914

FIGURE 8

DWR PLANNING SIMULATION MODEL NETWORK REPRESENTATION

AQUEDUCT EAST AND WEST BRANCH

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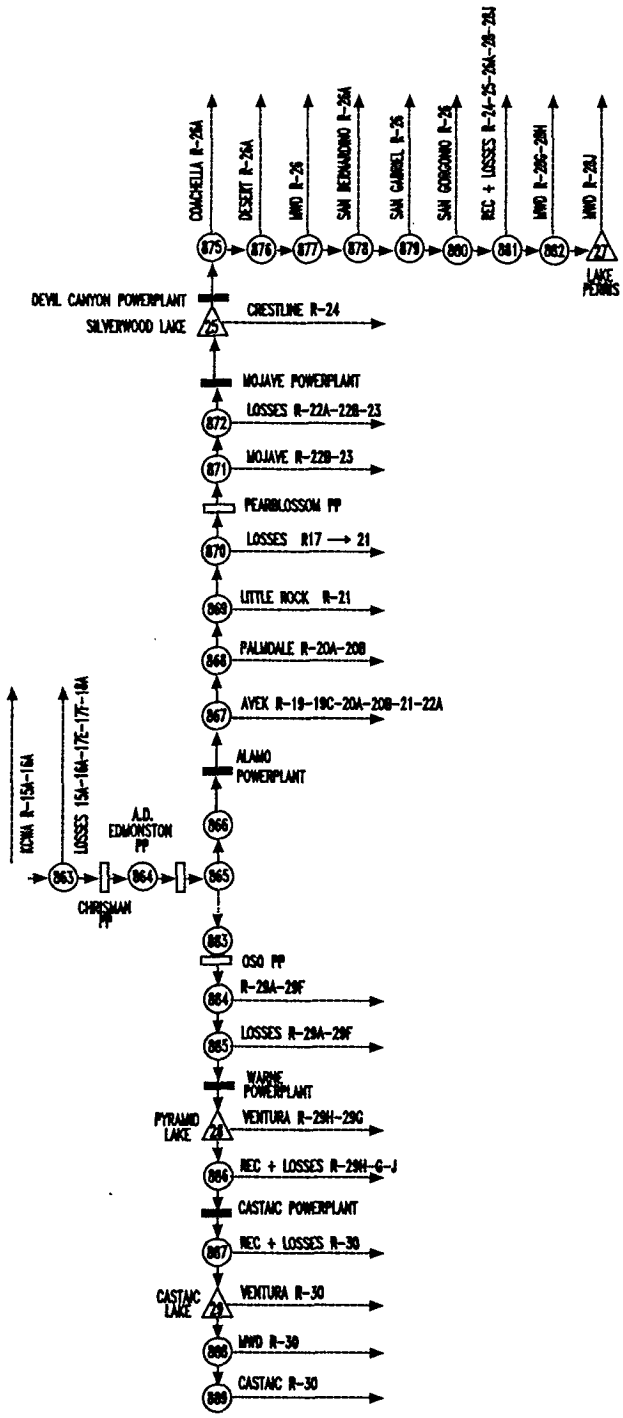

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