		Incidental Pumping and Generation to Water Releases (no shaping)							
Plant Mode		Incidental Pumping , MW					Incidental Generation, MW		
Plant Name		TC Canal	GCID Canal	TRR	Sac River	Sites	Sites	TRR	Sac River
Installed Capacity, MW		6.00	3.39	19.68	65.65	181.35	123.00	9.33	10.80
Installed Capacity, cfs		2250	3000	1890	2000	5900	5100	1500	1500
Month	# of Hours	All Hours					All Hours		
1	744	2.28	0.37	2.73	39.11	118.75	0.00	0.00	0.00
2	672	1.46	0.06	0.00	3.13	44.87	0.00	0.00	0.00
3	744	0.03	0.09	0.00	0.00	0.11	0.05	0.00	0.00
4	720	0.49	2.11	0.00	0.00	0.63	0.37	0.00	0.00
5	744	0.45	2.12	0.00	0.00	0.00	2.52	0.40	0.40
6	720	0.59	1.66	0.00	0.53	0.00	36.39	7.38	6.41
7	744	0.65	1.55	0.00	30.75	0.18	60.89	7.30	0.00
8	744	1.10	2.03	0.00	1.01	0.00	12.45	0.60	4.96
9	720	0.09	0.35	0.00	0.00	0.00	23.79	1.52	9.10
10	744	0.08	0.69	0.00	0.00	0.00	12.94	0.16	5.11
11	720	2.44	1.55	12.30	42.85	151.73	9.86	0.00	0.00
12	744	1.39	0.19	0.00	2.52	41.50	0.02	0.00	0.00
13	744	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00
14	672	0.00	0.06	0.00	0.00	0.00	9.91	0.00	0.00
15	744	0.01	0.09	0.00	0.00	0.09	2.12	0.00	0.00
16	720	0.08	1.87	0.00	0.00	0.81	26.21	0.00	0.00
17	744	0.83	2.25	0.32	0.33	1.53	1.43	0.05	0.00
18	720	0.66	2.70	0.00	8.05	0.00	0.71	1.26	0.07
19	744	1.31	2.35	0.00	0.00	0.00	3.19	1.21	3.96

CALSIM II Model Results = Monthly Pumping- Generating Operations 82-yr
Power Planning Study Results= Incidental and Optimized Operations, 30-yr Median Case Deliveries

Table 2- NODOS Project, Pumping and Generation Time Series, Incidental, Alt C

Plant Mode		Optimized Pumping					
Plant Name		Sites					
Installed Capacity, MW		181.35					
Installed Capacity, cfs		MaxQ=5900 cfs					
Month	# of Hours	On-Peak, MW	On-Peak, MWh	Off-Peak, MW	Off-Peak, MWh	On-Peak, cfs	Off-Peak, cfs
1	744	79.00	32924	169.89	55732	2305	5900
2	672	0.00	0	104.73	30207	0	5900
3	744	0.00	0	0.00	0	0	0
4	720	0.00	0	0.00	0	0	0
5	744	0.00	0	0.00	0	0	0
6	720	0.00	0	0.00	0	0	0
7	744	0.00	0	0.00	0	0	0
8	744	0.00	0	0.00	0	0	0
9	720	0.00	0	0.00	0	0	0
10	744	0.00	0	0.00	0	0	0
11	720	110.00	45589	168.00	63794	3336	5900
12	744	0.00	0	80.24	30910	0	5680
13	744	0.00	0	0.00	0	0	0
14	672	0.00	0	0.00	0	0	0
15	744	0.00	0	0.00	0	0	0
16	720	0.00	0	0.00	0	0	0
17	744	0.00	0	0.00	0	0	0
18	720	0.00	0	0.00	0	0	0
19	744	0.00	0	0.00	0	0	0
20	744	0.00					

CALSIM II Model Results = Monthly Pumping- Generating Operations 82-yr
Power Planning Study Results= Incidental and Optimized Operations, 30-yr Median Case Deliveries

Table 3- NODOS Project, Pumping and Generation T-Series, Optimized Pumping, Alt C

Plant Mode		Optimized Genration, MW				
Plant Name		Sites				
Installed Capacity, MW		123.00				
Installed Capacity, cfs		MaxQ=5100 cfs				
Month	# of Hours	On-Peak, MW	On-Peak, MWh	Off-Peak, MW	On-Peak, cfs	Off-Peak, cfs
1	744	0.00	0	0.00	0	0
2	672	0.00	0	0.00	0	0
3	744	0.00	0	0.00	0	0
4	720	0.00	0	0.00	0	0
5	744	26.47	9818	0.00	1141	0
6	720	114.95	39777	0.00	5100	0
7	744	0.00	0	0.00	0	0
8	744	30.10	9261	0.00	1366	0
9	720	107.43	28368	0.00	5009	0
10	744	37.38	8916	0.00	1771	0
11	720	0.00	0	0.00	0	0
12	744	0.00	0	0.00	0	0
13	744	0.00	0	0.00	0	0
14	672	0.00	0	0.00	0	0
15	744	0.00	0	0.00	0	0
16	720	0.00	0	0.00	0	0
17	744	0.00	0	0.00	0	0
18	720	11.70	3508	0.00	503	0
19	744	36.38	10349	0.00	1579	0
20	744	0.00				

CALSIM II Model Results = Monthly Pumping- Generating Operations 82-yr
Power Planning Study Results= Incidental and Optimized Operations, 30-yr Median Case Deliveries

Table 4- NODOS Project, Pumping and Generation T-Series, Optimized Generation, Alt C

Daily pumpback operations of the NODOS Project facilities are modeled in three components. The three components are pumpback operations incidental to its Diversion mode, incidental to its Release mode, and pure pumpback operations. For the purpose of this study, the pure Pumpback mode is limited to the months that the monthly average diversions into the NODOS Project are less than 200 cfs. For each month of the 30-year planning period, the available generation, and pumping capacities at Sites pumping-generating plant are estimated based on the available head (level of Storage) at Sites Reservoir (from the previous month's operations). Then a dispatch profile for the daily pumpback operations is generated based on market opportunities, pumping-generation cycle efficiency, available pumping-generating capacities, and available storage at Holthouse Reservoir. Through the use of a complex modeling scheme, Sites Reservoir pumping-generating plant is economically dispatched in the NP-15 CAISO market. Ultimately, the model is set up to utilize the NODOS Project pumpback potential based on plant's availability and market economics. The Median Case dispatch profile for the pumpback operations for Alternative C of the NODOS Project is depicted in Figure 9 and Figure 12.

Additional information needed to run the EPM model includes forward energy prices, volatility term structure, correlations (between different underlying energy markets), delivery hours, and

generation blocks. All necessary information are either generated through the EPM model's graphic user interface, or externally developed and input into the model.

Plant Mode		Pump Back Operations, MW								
Plant Name		With Pump cycle			With Gen Cycle			Pure Pump Back		
Installed Capacity, MW		123.00			123.00			123.00		
Installed Capacity, cfs		MaxQ=5100 cfs			MaxQ=5100 cfs			MaxQ=5100 cfs		
Month	# of Hours	On-Peak	On-Peak, MWh	PumpBack Q cfs	On-Peak	On-Peak, MWh	PumpBack Q cfs	On-Peak	On-Peak, MWh	PumpBack Q cfs
1	744	0.00	0	0	0.00	0	0	0.00	0	0
2	672	51.61	16049	2226	0.00	0	0	0.00	0	0
3	744	0.00	0	0	0.00	0	0	118.32	35905	5100
4	720	0.00	0	0	0.00	0	0	118.34	34870	5100
5	744	0.00	0	0	91.65	33991	3959	0.00	0	0
6	720	0.00	0	0	0.00	0	0	0.00	0	0
7	744	0.00	0	0	0.00	0	0	112.55	33216	5100
8	744	0.00	0	0	82.05	25251	3734	0.00	0	0
9	720	0.00	0	0	1.96	518	91	0.00	0	0
10	744	0.00	0	0	70.16	16733	3329	0.00	0	0
11	720	0.00	0	0	0.00	0	0	0.00	0	0
12	744	117.71	26633	5100	0.00	0	0	0.00	0	0
13	744	0.00	0	0	0.00	0	0	118.39	24019	5100
14	672	0.00	0	0	0.00	0	0	118.39	17722	5100
15	744	0.00	0	0	0.00	0	0	118.39	23223	5100
16	720	0.00	0	0	0.00	0	0	118.41	27197	5100
17	744	0.00	0	0	0.00	0	0	118.34	36952	5100
18	720	0.00	0	0	106.45	31919	4597	0.00	0	0
19	744	0.00	0	0	81.00	[illegible]	[illegible]	0.00	0	0

CALSIM II Model Results = Monthly Pumping- Generating Operations 82-yr
Power Planning Study Results= Incidental and Optimized Operations, 30-yr Median Case Deliveries

Table 5- NODOS Project, Pumping and Generation T-Series, Pumpback Operations, Alt C

6-Modeling Results

6.1- Power Portfolio Energy Value

A summary of the EPM modeling results (energy value and risk) for the three action alternatives (Alternatives A, B, and C) considered in this Study is shown in Table 6. The results in Table 6 are in $1,000 of Net Present Value (NPV), for the 30-years planning period, for each of the Project's cycles, and components. For the purposes of this Study, NPV is defined as the current market value of the net portfolio's cash flows in $1,000 of present value. The results are grouped based on the operational cycle of the Project facilities. The basic assumption is that pumping at all Project diversion points along the Sacramento River is incidental to water operations (flat operations). Also assumed, pumping and generating at Sites Reservoir pumping-generating plant can be optimized and may include a pumpback operations component. Optimizing operations is conditional to maintaining the NODOS Project water delivery objectives, at all times. During pumpback operations, power generation is mainly driven by plant's availability, and energy market price signals. As mentioned earlier, two operational scenarios are used to model each of the three action alternatives considered for the Project, one is labeled as "Incidental," and a second one is labeled as "Optimized." For the "Incidental" scenario, pumping and generating at the different NODOS Project facilities are driven by water diversions and releases (i.e. "Incidental," and no reshaping). For the "Optimized" scenario, pumping and generating at the Sites Reservoir pumping-generating plant are optimized to minimize pumping obligations (costs) and maximize energy generation revenues for the Project. The modeling results are presented for both the "Incidental" and the "Optimized" operational

scenarios in Table 6 to report the energy portfolio value, and describe the monetary value of optimizing the NODOS Project operations. Revenues from pumpback operations are presented separately to allow for better breakdown of costs and revenues from Project's water diversions and releases. In studying the modeling results, it is important to keep in mind that modeling of the Project operations is meant to monetize the energy costs and revenues, and not the water use benefits of the Project. Also it should be noted that pumping costs and generating revenues are impacted by water surface elevations at Sites Reservoir, resulting from the different configurations and System wide water operations for each of the three action alternatives for the NODOS Project (Alt A compared to Alt C). Another note, pumpback operations will net more revenues under alternatives with less water deliveries (Alt A compared to Alt C) because of the fact that NODOS Project assets would be less utilized, and more opportunity (percent of time) exist for pumpback operations.

Portfolio NPV Comparison- Modeled CALSIM Deliveries Scenarios						
Pumping-Generation Site	CALSIM Deliveries					
Planning Alternative	Alt A		Alt B		Alt C	
Operations Strategy	Incidental	Optimized	Incidental	Optimized	Incidental	Optimized
NODOS Pumping	Period Total, NPV ($1000)					
TC Canal Pumping	-6,085	-6,085	-7,511	-7,511	-5,786	-5,786
GCID Pumping	-10,083	-10,083	-11,519	-11,519	-9,964	-9,964
Sac River Pumping	-53,500	-53,500	N/A	N/A	-59,196	-59,196
TRR Pumping	-9,939	-9,939	-16,454	-16,454	-11,839	-11,839
Sites Pumping	-149,357	-137,397	-147,694	-133,100	-172,219	-157,841
Subtotal	-228,964	-217,004	-183,178	-168,584	-259,004	-244,626
	Preliminary Results					
NODOS Generation	Period Total, NPV ($1000)					
Sites Genereration	109,077	121,405	111,262	125,493	134,216	149,580
TRR Generation	19,651	20,400	6,839	7,146	20,385	21,243
Sac River Generation	49,873	49,873	N/A	N/A	50,197	50,197
Subtotal	178,601	191,678	118,101	132,639	204,798	221,020
NODOS PumpBack Operations	Period Total, NPV ($1000)					
PumpBack during Diversion cycle	N/A	7,031	N/A	13,999	N/A	7,444
PumpBack During Release Cycle	N/A	23,000	N/A	18,299	N/A	21,564
Pure PumpBack Operations Cycle	N/A	17,435	N/A	14,916	N/A	17,395
Subtotal		47,466		47,214		46,403
NODOS Project Portfolio Value	-50,363	22,140	-65,077	11,269	-54,206	22,797
NODOS Project Optimization Potential		72,503		76,346		77,003
NODOS Risk Metrics	Period Total, NPV ($1000)					
Value-at-Risk	1,863	2,336	1,523	2,425	1,644	2,504
Cash-Flow-at-Risk	94,976	96,161	112,192	117,079	107,668	113,228

Notes
Cash Flow reported pre-tax in PV($000).
Evaluation performed 06/17/2011
Report updated at 03:40:00 PM.
Sac River Generation is not optimized to minimize the impact of headloss at higher releases thru the plant

Table 6- NODOS Project, Summary Modeling Results, NPV ($1000)

For ALT A "Incidental" operations, the 30-year total pumping costs (for the Median Case of Project diversions) of the NODOS Project in NPV are $228,964,000, whereas the corresponding energy generation revenues incidental to Project releases in NPV are $178,601,000. For ALT A "Optimized" operations, the 30-year total pumping costs (for the Median Case of Project diversions) of the NODOS Project in NPV are $217,004,000, whereas the corresponding energy generation revenues from optimized Project releases in NPV are $191,678,000. For the "Optimized" operations, additional revenues in NPV of $47,466,000 would be realized from the pumpback operations (daily operations). Pumpback operations and revenues are a combination of pumpback operations superimposed on the generation and pumping cycles, and pure pumpback operations in months that the Project's average diversion is less than 200 cfs (i.e. Project assets are not in use). It should be noted that for the "Incidental" operations the assumption was that no pumpback operations will take place (project assets are tied up in flat operations).

For ALT B "Incidental" operations, the 30-year total pumping costs (for the Median Case of Project diversions) of the NODOS Project in NPV are $183,178,000, whereas the corresponding generation revenues incidental to Project releases in NPV are $118,101,000. For ALT B "Optimized" operations, the 30-year total pumping costs (for the Median Case of Project diversions) of the NODOS Project in NPV are $168,584,000, whereas the corresponding generation revenues from optimized Project releases in NPV are $132,639,000. For the "Optimized" operations, additional revenues in NPV of $47,214,000 would be realized from the pumpback operations (daily operations).

For ALT C "Incidental" operations, the 30-year total pumping costs (for the Median Case of Project diversions) of the NODOS Project in NPV are $259,004,000, whereas the corresponding generation revenues incidental to Project releases in NPV are $204,798,000. For ALT C "Optimized" operations, the 30-year total pumping costs (for the Median Case of Project diversions) of the NODOS Project in NPV are $244,626,000, whereas the corresponding generation revenues from optimized Project releases in NPV are $221,020,000. For the "Optimized" operations, additional revenues in NPV of $46,403,000 would be realized from the pumpback operations (daily operations).

For the 30-year planning period, optimizing the NODOS Project operations (as described in Section 4.3) resulted in additional revenues for the project in NPV totaling $72,503,000 for Alternative A, $76,343,000 for Alternative B, and $77,003,000 for Alternative C. For all three action alternatives considered for the NODOS Project, optimizing operations resulted in changing the net project cash flow from a negative to a positive cash flow which would significantly enhance the economics of the project. For the NODOS Project "Incidental" operations, the net total Project's Power Portfolio value (generation revenues minus pumping costs) (for the Median Case of Project Diversions) in NPV is $-50,363,000, $-65,077,000, and $-54,206,000 for Alternatives A, B, and C, respectively. Whereas, for the NODOS Project "Optimized" operations, the net Project's Power Portfolio value (generation revenues-pumping cost) (for the Median Case of Project Diversions) in NPV is $22,140,000, $11,269,000, and $22,797,000 for Alternatives A, B, and C, respectively.

Table 6 provides a summary breakdown of the contributions of each Project component, and in each of the Project's operational modes (pumping, generating, and pumpback cycles).

Table 7 and Table 8 are the NODOS Project Power Portfolio annual cash flow, in present value in $1,000s, for the Median Case of deliveries, for Alt C of the project (complete version of these tables for all three action alternatives are in Appendix B). The annual cash flows are reported, in present value, through the 30-year planning period of the Project. The cumulative value of the cash flows in present value for each Project component represents the NPV of that component. The sum of the NPV of all Project components is the net total value of the Project for that specific alternative and specific operational scenario.

Cash Flow Report for the NODOS Project, CALSIM 30-Yr Planning Period, Alt C (Incidental Operations) Deliveries Case

Pumping-Generation Site	NPV	Year Project in Service							
		1	2	3	4	5	6	7	8
NODOS Pumping	Period Total	Period Total, NPV ($1000)							
TC Canal Pumping	-5,788	-279	-128	-180	-80	-82	-411	-251	-238
GCID Pumping	-9,968	-306	-375	-347	-349	-231	-431	-355	-335
Sac River Pumping	-59,196	-3,040	-273	-1,227	-155	-370	-5,674	-2,940	-1,998
TRR Pumping	-11,839	-410	-204	-295	-28	-180	-1,057	-657	-159
Sites Pumping	-172,219	-9,319	-823	-4,546	-1,836	-1,298	-11,927	-9,489	-6,630
Subtotal	-259,010	-13,354	-1,803	-6,595	-2,448	-2,161	-19,500	-13,692	-9,360
NODOS Generation	Period Total	Period Total, NPV ($1000)							
Sites Geneneration	134,217	3,210	2,997	5,049	6,577	4,109	3,477	4,764	6,204
TRR Generation	20,385	723	438	981	765	1,128	807	1,246	963
Sac River Genenration	50,193	1,191	1,147	1,384	3,310	2,147	1,742	1,635	1,880
Subtotal	204,795	5,124	4,582	7,414	10,652	7,384	6,026	7,645	9,047
PumpBack Operations	Period Total	Period Total, NPV ($1000)							
PumpBack during Diversion cycle	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PumpBack During Release Cycle	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pure PumpBack Operations Cycle	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Subtotal	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NODOS Project Total	-54,215	-8,230	2,779	819	8,204	5,223	-13,474	-6,047	-313

30-year Planning Period

NPV, is the current market value of the Net Portfolio's Cash flows in $1000

Notes
Cash Flow reported pre-tax in PV($000).
Evaluation performed 07/07/2011
Report updated at 10:28:53 AM.

Table 7- NODOS Project, Modeling Results, Annual Cashflow, Incidental Ops, Alt C

Cash Flow Report for the NODOS Project, CALSIM 30-Yr Planning Period, Alt C (Optimized Operations) Deliveries Case

Pumping-Generation Site	NPV	Year Project in Service							
		1	2	3	4	5	6	7	8
NODOS Pumping	Period Total	Period Total, NPV ($1000)							
TC Canal Pumping	-5,788	-279	-128	-180	-80	-82	-411	-251	-238
GCID Pumping	-9,968	-306	-375	-347	-349	-231	-431	-355	-335
Sac River Pumping	-59,196	-3,040	-273	-1,227	-155	-370	-5,674	-2,940	-1,998
TRR Pumping	-11,839	-410	-204	-295	-28	-180	-1,057	-657	-159
Sites Pumping	-157,842	-8,578	-627	-3,872	-1,587	-1,105	-10,846	-8,646	-5,958
Subtotal	-244,633	-12,613	-1,607	-5,921	-2,199	-1,968	-18,419	-12,849	-8,688
NODOS Generation	Period Total	Period Total, NPV ($1000)							
Sites Geneneration	149,578	4,268	3,456	5,915	7,547	4,251	4,017	5,702	7,137
TRR Generation	21,249	781	480	1,032	799	1,151	843	1,307	1,015
Sac River Genenration	50,193	1,191	1,147	1,384	3,310	2,147	1,742	1,635	1,880
Subtotal	221,020	6,240	5,083	8,331	11,656	7,549	6,602	8,644	10,032
PumpBack Operations	Period Total	Period Total, NPV ($1000)							
PumpBack during Diversion cycle	7,445	213	470	623	96	49	214	239	0
PumpBack During Release Cycle	21,566	1,717	1,412	563	824	276	401	1,371	998
Pure PumpBack Operations Cycle	17,395	323	1,571	775	278	642	1,054	0	410
Subtotal	46,406	2,253	3,453	1,961	1,198	967	1,669	1,610	1,408
NODOS Project Total	22,793	-4,120	6,929	4,371	10,655	6,548	-10,148	-2,595	2,752

30-year Planning Period

NPV, is the current market value of the Net Portfolio's Cash flows in $1000

Notes
Cash Flow reported pre-tax in PV($000).
Evaluation performed 07/07/2011
Report updated at 10:28:53 AM.

Table 8- NODOS Project, Modeling Results, Annual Cashflow, Optimized Ops, Alt C

Figure 16 and Figure 17 graphically depicts the Alt C NODOS Project Power Portfolio cash flows in each delivery period for the 30-year horizon modeled in EPM, for the Median Case of deliveries, and for both "Incidental" and "Optimized" operations. The solid "diamond" markers represent the present value of the Portfolio's cash flow for a specific period. And the High and Low "error" bars correspond to the upper and lower percentiles of the cash flow distribution estimated using the Monte-Carlo simulation. The error bars correspond to the 95% and 5% confidence limits of the cash flow distribution for that specific period.

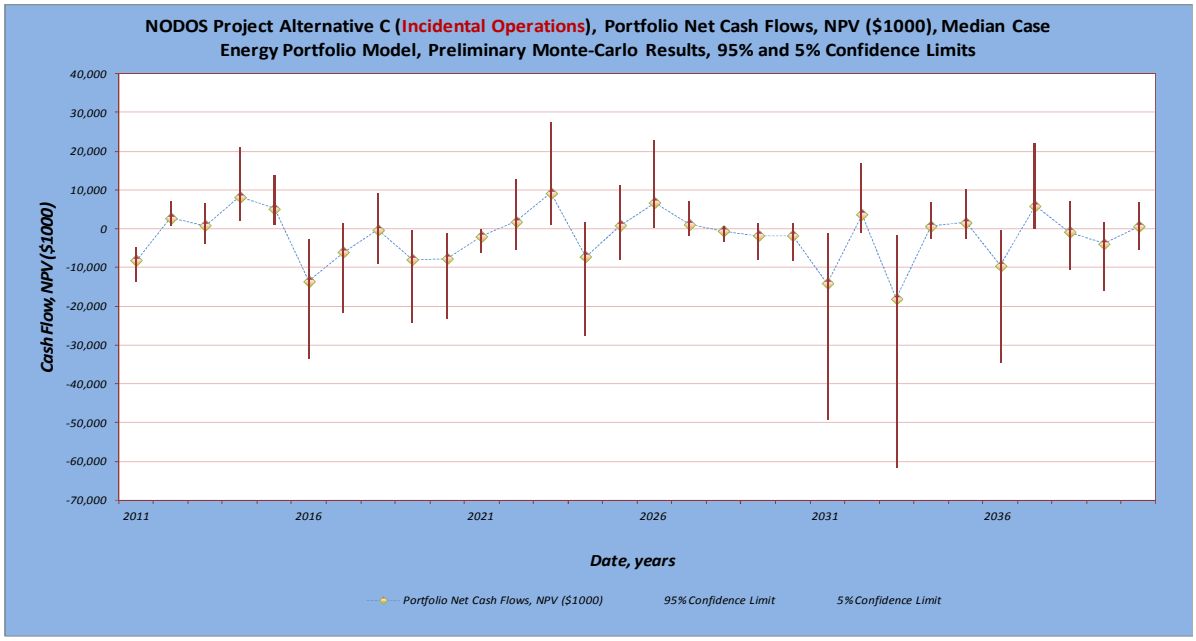

Figure 16- NODOS Project, Portfolio Cash Flow at Risk, Incidental Operations, Alt C

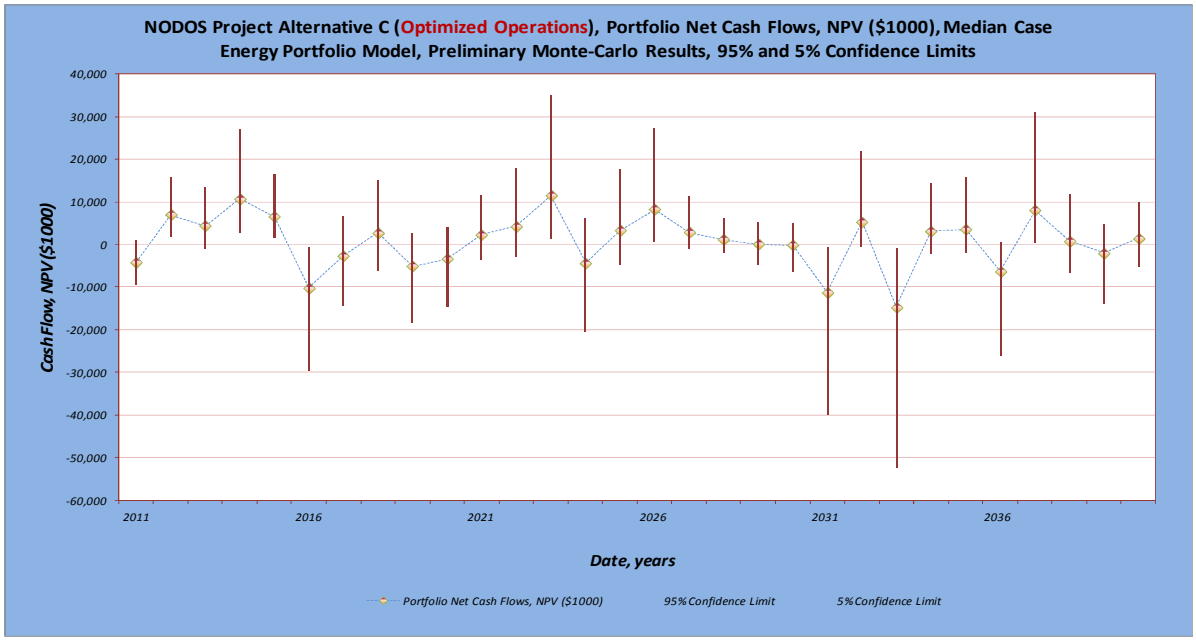

Figure 17- NODOS Project, Portfolio Cash Flow at Risk, Optimized Operations, Alt C

6.2- Power Portfolio Risk Metrics

EPM model results, also, include a description of the financial risk resulting from uncertainty and volatility of the underlying fuel and power markets, in which the NODOS Project will be participating. The EPM model produces risk metrics associated with a portfolio of assets that correspond to the exposure of an individual asset in a portfolio, or risk metrics that describe the collective risk associated with the portfolio, as a whole. The EPM model uses a Monte-Carlo based algorithm (random generation based) to generate a pre-assumed log-normal distribution of the expected cash flow of an asset. The generated distribution is based on the specific period's marginal volatility, time to delivery, and the analysis date. The number of draws for the Monte-Carlo approximation (2,000 draws are being used for this Study), the specified confidence level (95% is being used for this Study), the volatility and correlations of the underlying markets, and the holding period, (all are input parameters to EPM) are the basis for the Monte-Carlo generated distribution of the cash flow of an asset. Financial risk associated with an asset or a portfolio of assets could be measured from the Monte-Carlo generated distribution.

Two commonly used risk metrics in describing the financial risk associated with a portfolio are the Value-at-Risk, and Cash-Flow-at-Risk. Value-at-Risk is a measure of the potential for loss on a Portfolio of assets or an asset value, within a specified holding period. Value-at-Risk is a commonly used risk metric to describe the risk associated with the value of a portfolio of assets within a short period of time (days). A second risk metric is a Cash-Flow-at-Risk, and is defined as the maximum loss that could be realized over a specified holding period at a specified confidence level. Other risk metrics, such as Price Exposure, could also be reported, as partial output of the EPM risk report. Price Exposure measures an asset exposure to a specific price risk, and reports how many dollars of the value of that asset is at stake.

For Alt C of the NODOS Project, the Power Portfolio cumulative probability distribution is depicted in Figure 18, for both the "Incidental" and "Optimized" operations. The Monte-Carlo simulation provides the cumulative probability distribution of the NODOS Project Power Portfolio's cash flows around its mean value. On Figure 18, the Cash-Flow-at-Risk could be measured from the difference in NPV of Portfolio cash flows between the 50% and the 0% probabilities, for the pre-specified confidence level (95% in this case). Cash-Flow-at-Risk for a specific period could also be generated. The annual Cash-flow-at-Risk is graphically depicted on Figure 16 and Figure 17, as the difference between the "Diamond" markers and the lower end of the error bar, for that specific period. Value-at-Risk and Cash-Flow-at-Risk of the NODOS Project are summarized, for the three action alternatives, in Table 6.

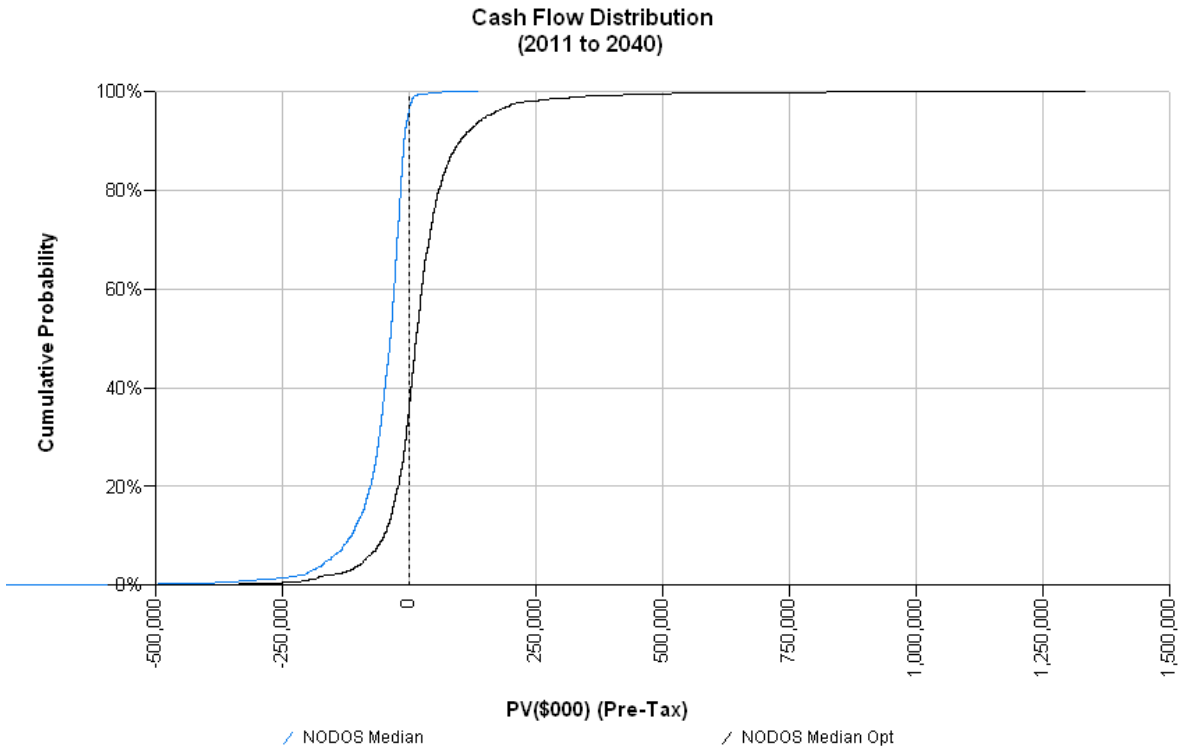

Figure 18- NODOS Project, Cumulative Cash Flow Distribution Comparison

7- NODOS Project Capacity and Ancillary Services

7.1- Capacity Value Analysis

CAISO is charged, under both California law and by the Federal Energy Regulatory Commission (FERC), with the responsibility of maintaining and operating a reliable grid system (transmission system) – a system that is under their operational control. System reliability is a very complex subject, as it is inextricably intertwined with market economics-a subject that is beyond the scope of this Study. Nevertheless, a crucial element of reliable grid operations, and relevant to the NODOS Project operations, is Resource Adequacy (RA). CAISO through their FERC approved Tariff, along with RA requirements by adopted State CPUC mandates, are intended to establish a process that ensures that capacity procured for RA purposes is available when and where it is needed. For the NODOS Project, RA obligations are a pseudo financial obligation in pumping/diversion cycle (Self-Provided), and a revenue opportunity in generation/release cycle.

There are several ways through which capacity value of a power asset can be harnessed. One way is the consideration of RA capacity value utilization. The state of California has embraced an RA mandate/regime (AB380) in order to make power resources available when and where they are needed, and to promote investment in new resources and maintenance of existing facilities. The California Public Utilities Commission (CPUC) governs the RA program for entities under its jurisdiction and the CAISO monitors the RA program implementation by utilities, including publicly owned utilities and government agencies. Currently, RA capacity is being traded bilaterally through a solicitation and bidding process and the price of capacity negotiation is opaque. However, the CAISO Tariff requires the CAISO to procure capacity as a

backstop, should a load serving entity fail to meet its RA obligation showings, and for within the month exceptional dispatch requirements. The RA obligation showings take place in an annual showing, as well as monthly showings. The FERC has authorized the CAISO to charge or pay the default RA capacity procurement price of $67.5/KW-year (pending FERC approval). In terms of capacity rate determination needed to estimate RA revenues and/or obligations, three options can be considered:

1) Bilateral trade capacity value: It is not transparent and the rate at which the capacity is procured is unknown. It could be lower in some months and higher during summer months (seasonal trend).
2) Default Capacity Procurement Mechanism (CPM) procurement rate: The FERC approved CAISO tariff rate of $67.5/KW-year (pending FERC approval) is the backstop procurement rate. It is constant for all the months, and represents an implied cap on RA value in the CAISO market. This default rate is subject to change in future stakeholder processes at the CAISO and subsequent FERC approval. Also, there is little chance that an asset can realize this level of capacity payment because of the narrow CAISO capacity market at the CPM rate.
3) Based on escalated 2009 CEC costs of generation technologies: Capacity value would be the revenue stream from selling capacity needed to make an economic/feasible investment in a simple cycle generation unit. Modeling a 100 MW simple cycle generation unit, using the escalated 2009 CEC costs of generation technologies, revealed a capacity revenue requirement of $25.40/KW-year.

It is assumed that the NODOS Project will offer capacity in the CAISO market to participants that need to secure capacity resource to meet their RA obligations. For a generation asset, there are two different levels of participation (local RA, and system RA) in CAISO's capacity market, based on the relative location of that specific asset to pre-identified local congested areas within the CAISO managed grid. The NODOS Project facilities and their potential interconnection location to the CAISO grid do not currently fall in one of the congested local areas, where the generation assets can sell local RA products. Moreover, current CAISO market has sufficient system RA, with very little monetary value for assets to capture from capacity offerings. However, system RA needs, system configuration, and assets geographical distribution are changing all the time. There may be some future opportunities for the NODOS Project to participate in the RA market, as the CAISO market evolves to integrate the 33% Renewables target in 2020. Monetizing potential revenues for the NODOS Project from participation in the Capacity market is a difficult task. The uncertainty in projecting where and when RA products are needed will render any estimate worthless, at this time. So, a range of values is offered to describe potential revenues for the NODOS Project form RA offerings, and was based on a $2/ KW-year (from recent market offerings) to $25.40/KW-year (as described in #3 above).

The NODOS Project RA obligations, resulting from its pumping load, are met through the "Self-Provided" provisions of current CAISO Tariff, providing that it meets CAISO participating load requirements. In reality, the NODOS Project would meet its RA obligations in the pumping mode through a load dropping scheme, and would satisfy CAISO's RA requirements. For Alt C Pumping mode, the monetary value of meeting RA obligations, which can be described as avoided cost, has a range in NPV of $1,666,000 to $20,944,000 for the "Incidental" operations and $827,000 to $10,338,000 for the "Optimized" operations, for the Median Case deliveries and the 30-year planning period. The significant difference in the RA obligations between the

"Incidental" and the "Optimized" operations is the result of avoiding pumping during the Super Peak hours (which determines an asset's RA obligations in CAISO) in the "Optimized" pumping mode.

For the NODOS Project generation mode, the corresponding potential Capacity revenues are estimated at a NPV of $946,080 to $11,826,000 for the "Incidental" operations, and $2,572,000 to $32,149,000 for the "Optimized" operations. Optimizing the NODOS Project operations would result in a significant increase in generation assets utilization during the Super Peak hours (and enhance its RA offerings potential). The Pumpback mode for the NODOS project would be in sync with CAISO's Capacity market optimal values (Super Peak generation hours) and least obligations (Off- Peak load). The pumpback operations can add to the NODOS Project RA potential revenues in NPV between $3,040,000 and $38,000,000. It should be noted that estimates for Capacity revenues are projections that are highly dependent (and uncertain) on whether the CAISO market will evolve with the need to secure RA resources (to integrate Renewables) from assets similar to the NODOS Project or not.

7.2- Ancillary Services Potential

The CAISO procures Ancillary Services (AS) to ensure that it has adequate reserve generation capacity to maintain the electric system reliability and system frequency, by matching generation and load at all times under both normal and abnormal operating conditions. In their restructured electricity market (Post MRTU), CAISO obtains AS services through a competitive bidding process. On a daily basis, CAISO procures four primary AS services (regulation, spinning reserves, non-spinning reserves, and replacement reserves), in day-ahead and in hour-ahead markets. The two additional AS that CAISO procures are black-start and voltage support services, which are procured on a long term basis. The four primary AS are procured on separate basis, in a competitive open market environment, designed as being an integral component of the energy market. The Primary AS markets are defined by CAISO, as follow:

1-Regulation: Generation that is on-line, and synchronized with the CAISO controlled grid so that the energy can be increased or decreased instantly through automatic generation control (AGC), directly by the CAISO monitoring system. Regulation is used to maintain continuous balancing of resources and loads within the CAISO controlled grid, as well as maintains frequency during normal operating conditions.

2-Spinning Reserve: Generation that already on-line, or "spinning," with additional capacity that is capable of ramping over a specified range within 10 minutes and running for at least two hours.

3-Non-Spinning Reserve: Generation that is available but not on-line, that is capable of being synchronized and ramping to a specified level within 10 minutes, and capable of producing dispatched energy for at least two hours.

4-Replacement Reserves: Generation that is capable of starting up if not already operating, synchronized with CAISO controlled grid and ramping to a specified load within one hour, and running for at least two hours.

The two remaining AS (voltage support and black-start) are procured primarily through the Reliability Must Run (RMR) contracts. CAISO is responsible for conducting a competitive market of the four primary AS on behalf of the market participants.

For the NODOS Project pumping/generating facilities, if interconnected to CAISO grid, AS would be a significant operations and costs/revenues concern. For the NODOS Project to participate in the CAISO AS market, the CAISO Tariff requires a participating generator to undergo a certification process- the process details are beyond the scope of this Study. CAISO Tariff states that a participating generator is a generator or other seller of energy or AS through a Scheduling Coordinator over the CAISO grid from a generating unit with a rated capacity of one MW or greater, or from a generating unit providing AS and/or Imbalance Energy through an aggregation arrangement approved by the CAISO- a criteria that the NODOS Project will clearly meet. The CAISO accepts market bids for energy and AS only from Scheduling Coordinators on behalf of the participating generator.

A preliminary assessment for AS opportunities for the NODOS Project is conducted using the Median Case CALSIM II deliveries, for the 30-year planning period. Although the opportunity exists for the Project's facilities to participate in providing AS in the CAISO day- ahead and hour- ahead markets, the current analysis focuses on the day-ahead market opportunities. More thorough analysis will be conducted in the next phase of the study as the NODOS Project evolves into an advanced stage, and more granular details are developed through improved modeling efforts (daily, and hourly time steps) for project operations. In general, participation in the AS market is an opportunity to translate inherent operational flexibilities, and excess capacities into revenue opportunities. For the NODOS Project, the ultimate priority is to maintain the intended seasonal water cycle diversions/deliveries that the Project was designed to capture. Therefore, revenue opportunities from participation in the AS market will have to be designed as an incidental activity to satisfying the intended project's operations. More operational scenarios will be considered in the next phase of the Study, where operations would be optimized to capture the most revenues the market offers for both energy and Ancillary Services, coincidently.

The restructured CAISO market (post MRTU) is still evolving, and price signals have not necessarily matured, to reflect long term market trends for AS prices. Moreover, CAISO's renewable integration initiative and market redesign will have great impact on AS needs and prices. New CAISO AS products (such as fast ramping) may provide an exceptional opportunity for hydro installation, such as the NODOS Project, to capture and participate in. For the current Study, the best available approach to value the NODOS Project potential revenues from AS markets, is to use recent historical AS clearing prices for the CAISO market as a reference- available on CAISO's OASIS web site.

For the pumping cycle, the NODOS Project will have the opportunity, as a participating load (meeting CAISO Tariff definition), to sell Non Spin AS (as described in #3 above) into the CAISO market. However, the AS participation will be limited to the Sites Reservoir pumping plant, so that water diversions from the Sacramento River could be maintained, at all times. The assumption is that when the pump load at Sites Reservoir pumping plant gets dropped by CAISO, water diversions from the Sacramento River could be stored in Holthouse Reservoir for the period of time CAISO needs the service- currently, a two hours maximum period for a Non Spin AS. Stored water at Holthouse Reservoir could then be pumped into Sites Reservoir at a later time within the same day. Current CALSIM II runs indicate that in months with potentially

highest water diversions from the Sacramento River, it is possible to use excess pumping capacity at Sites Reservoir to accommodate the Non Spin AS participation. More detailed analysis is needed for the pumping cycle in the next phase of the Study to develop AS participation strategies. Figure 19 depicts the Non Spin AS potential in MWh, for Sites Reservoir pumping plant, for Alternative C.

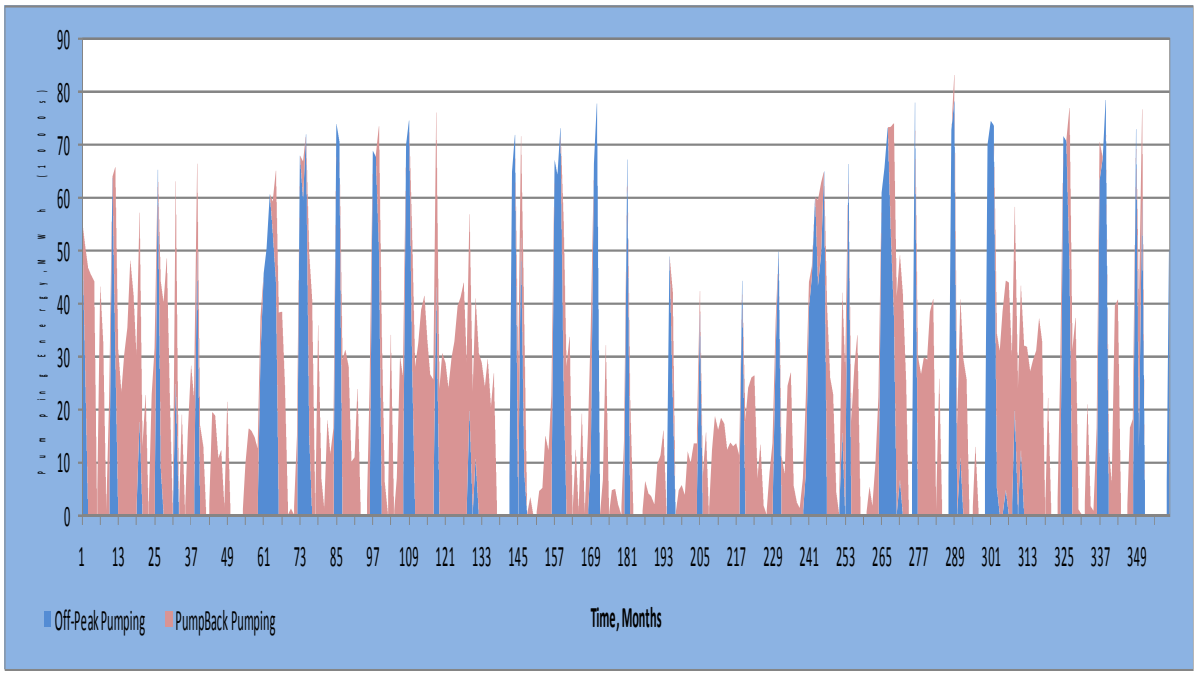

Figure 19- Ancillary Service Potential, Sites Reservoir Pumping Cycle, Median Case

For the generation cycle, the NODOS Project will have the opportunity to sell Regulation Down AS (as described in #1 above) in the CAISO market. The NODOS Project water Release mode was optimized (in this Study) to capture the most value for its incidental generation, that the market offers. Hence, water releases from Sites Reservoir are designed to occur in the On-Peak (or Super Peak) hours. Accordingly, the Project generation facilities are assumed to sell Regulation Down AS, mostly in the On-Peak (and Super Peak) hours and to a lesser extent in the Off-Peak hours. The assumption is that Regulation Down AS for the NODOS Project, if called upon, represents a temporary delay in water releases, and could be rectified within few hours. Also, it is assumed that the NODOS Project facilities will be equipped with Automatic Generation Control (AGC) system and that the generation units would be of the type that could quickly be ramped down to satisfy CAISO requirements for this type of AS support. Participating in the Regulation Down AS market may result in foregoing some of the On-Peak generation revenues. More detailed analysis will be conducted in the next phase of the Study to estimate the value of lost opportunity resulting from shifting generation needed by AS dispatch. The AS participation impact on the NODOS Project revenues need to be done in the context of the frequency at which CAISO calls upon this type of AS support. Figure 20 depicts the Regulation Down AS potential for the NODOS Project generation facilities in MWh, for Alternative C.

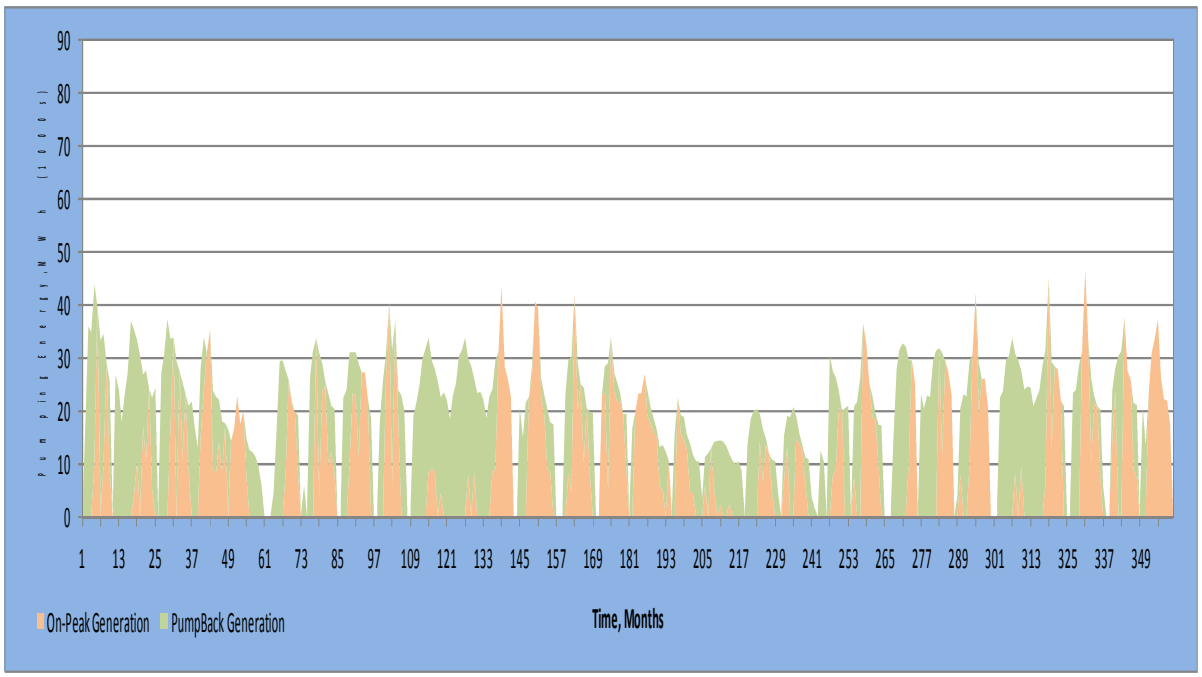

Figure 20- Ancillary Service Potential, NODOS Project Generation Cycle, Median Case

The average values for the Off-Peak Non-Spin, and On-Peak Regulation Down are calculated using published clearing prices for the CAISO AS markets. For the NODOS Project, the total AS revenues from Non Spin (the pump mode) for the 30-year planning period in NPV is $4,925,000. The corresponding total AS revenues from Regulation Down (in the generation mode) for the Project in NPV is $9,198,000. The total AS revenues from the pumpback operations in NPV is $11,595,000. The NODOS Project total potential AS revenues in NPV is $25,718,000 for the 30-year planning period. It should be noted that the aforementioned AS revenues are only a measure of potential revenues based on current market trends- granted that the CAISO market will evolve overtime to accommodate load growth, renewable integration, regulatory changes, etc.

7.3- Renewable Integration

The California Renewable Energy Resources Act (CRERA), signed by California Governor Brown on April 12th, 2011, significantly increased the State's renewable portfolio standard (RPS) targets from 20% to 33% by 2020. CRERA also expanded the compliance obligations to include virtually all retail sales of electricity in California. In September 2010, CAISO undertook a multi phase stakeholder process (Renewable Integration Market and Product Review Initiative (RIMPR)), aimed at identifying changes to the energy market structure and at introducing new market products to reliably mitigate the impact of Renewable generation (Intermittent generation) as it penetrates the market. Recently the CAISO has refocused its RIMPR from an expansive market design changes to a more incremental phased approach. CAISO is focused on developing a high level roadmap addressing short, medium, and long term market enhancement to meet renewable integration needs.

Other game changers in the power sector are energy storage technologies- among which and a very promising technology is pump-storage hydroelectric facilities. The conventional role for energy storage facilities is storing Off-Peak energy for use during the On-Peak periods or to provide Ancillary services. New role for energy storage includes making intermittent renewable energy facilities into dispatchable resources and enhancing grid reliability and power quality. Other forces driving the need for energy storage technologies are climate change policies, smart grid initiatives, and the desire to improve utilization of generation and transmission capacities.

For the NODOS Project, there is great potential for the project's generation and pumping assets to participate in providing renewable integration services as the market needs evolve. Hydropower assets have a unique feature that is not available from other energy storage technologies- fast ramping that can simultaneously provides both high capacity and energy. Although, the NODOS Project potential in renewable energy integration is certain, it is difficult to monetize that potential at this time because of the absence of a clear tradable market for these services. CAISO RIMPR may introduce new market products that the NODOS Project can provide, yet sustain its primary water storage and delivery objectives.

The inherent nature of excess capacity for hydropower installations resulting from hydrology swings, provide the opportunity to participate in providing energy storage services and the need to better utilize the excess capacity of project's assets (to enhance project economics). The NODOS Project multi-purpose objectives will further enhance its chances in competing in the market as an energy storage asset (as project costs are socialized among multiple objectives) relative to more costly technologies. The limiting factors for the NODOS Project participation are the inherent priorities of meeting the water delivery obligations over market driven power operations of the project's assets.

8- Recommendations and Next Steps

The current phase of the Power Planning Study of the NODOS Project is meant to provide a feasibility level assessment of the designed Project components, and operational scenarios, from a power planning perspective. Three action alternatives, each with different configuration and components capacities are considered and analyzed. Power planning perspective is important in capturing the impacts of the energy market economies and regulatory mandates and will be consequential to the costs and revenues- for the NODOS Project to be adopted and built. Although, the NODOS Project is envisioned to provide off-stream storage needed to support the State Water Project and the Central Valley Project operations and functions, its Power Portfolio is a major component in determining the Project's ultimate viability. More work is needed to improve on the findings of the current phase of the study,

- Use anticipated CALSIM II modeling results (reflecting latest B.O.) for the daily operations to refine the optimization of the NODOS Project operations.
- Use available market information (i.e. LMP prices and trends) to optimize the NODOS Project operations. Update the AS duration curves to reflect CAISO locational markets, and potential future markets resulting from the need to integrate Renewables.
- Integrate CAISO's RIMPR changes to the energy market in optimizing and valuing the NODOS Project Power Portfolio.

- Explore and propose modifications to the physical and operational attributes of the power generation complex in light of the modeling results. Consider the change in designed capacities needed to correspond to the optimized operations, and needed Project flexibilities.
- Identify operational scenarios and design modifications that could be modeled to optimize Project's operations and to enhance its value.
- Consider scenarios reflecting climate change impacts on the NODOS Project operations, design needs, and ultimate viability.
- Propose a sensitivity analysis process that would describe the impact of adjusting design parameters, operational and financial uncertainty, on the Project's value.
- Look into trends in technologies and setups that represent current practice in designing hydropower Projects. Many recently designed pump-storage facilities are using separate pumping and generating facilities to increase efficiency and add operational flexibility.
- Consider a 50-year planning period that is more consistent with the life cycle of hydropower Project components.

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Appendix A- Transmission Interconnection Roadmap

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Transmission Interconnection Process

PARO's Transmission Planning Branch Prepared a description of the normal process that DWR has taken when exploring transmission interconnection options for new or existing facilities. The discussion below should serve as a roadmap for the transmission interconnection process for the NODOS Project.

Preliminary Details

Before the Power and Risk Office (PARO) can initiate its actions for obtaining physical interconnection and transmission service for DWR facilities, the following need to be ascertained:

1. Estimated peak capacity needs (MWs) at facilities' start-up and during construction
2. Planned load growth for future enlargements at said facilities
3. Probable location of "Point of Interconnection" to high-voltage system
4. Identification of all potential transmission providers

Transmission Provider Studies

All of the major transmission service providers in California require that they conduct various engineering studies which evaluate the impact of a proposed facility on the overall high-voltage system. These studies, usually known as "System Impact Studies (SIS)," are of value to DWR for two reasons. First, the reports resulting from these studies can be utilized in any EIR/EIS documentation for discussion of transmission impacts (i.e., line routing and substations). Second, the studies, a necessary first level of review required by any of the potential transmission service providers, give a good indication of which provider represents the preferred option. However, it must be noted that any cost estimates provided at the SIS stage are considered preliminary and non-binding.

Once DWR has reviewed the various SIS reports and validated their findings, DWR must initiate the second stage of the transmission planning studies (typically called a Facility Study). These studies build upon the SIS and identify specific hardware that will be needed to implement the transmission service interconnection. Typically, one can assume that the Facility Study will provide accurate cost estimates that could be used in determining the economics of the project.

Transmission Service Request

Once the results of the various studies (i.e., SIS and Facility Study) are compiled, DWR can now determine which provider it will seek an interconnection with, and subsequent transmission service. Typically, DWR will need to arrange for an interconnection service agreement and a transmission service agreement.

Route & Construction

Once DWR completes the transmission interconnection agreements, actual construction-related activities begin. These activities include: ordering & receiving equipment, land acquisition and permitting, and actual construction.

It is important to note that there must be adequate lead time for all of the activities described above before the new DWR facility is expected to be on-line. To illustrate this, Table A-1 represents a typical timeline.

TABLE A-1 – A TYPICAL TIMELINE FOR NEW TRANSMISSION INTERCONNECTION

Phase	Action	PARO's Role	Duration
Preliminary Details			
	Assessing Project Needs (e.g., location and loads)	Support DWR's project team where necessary	(unknown, but for purposes of this timeline, completion of Preliminary Details is T_0)
Transmission Provider Studies			
	Coordination with Transmission Providers	Prepare necessary letters and documentation. Facilitate groundwork discussions between DWR and Providers	2 months
	Formal Studies (System Impact Studies & Facility Studies)	Prepare necessary documentation. Negotiate study agreements. Facilitate payments for studies. Monitor process. Assist DOE-Electrical Engineering in reviewing results. Submit recommendations to Management for which transmission option is preferable.	Up to 2 years
Transmission Service Requests			
	Formal Request to Preferred Transmission Provider	Prepare necessary documentation for request. Negotiate transmission interconnection agreement. Negotiate transmission service agreement. Facilitate upfront payments as required by agreements.	1 year
Construction Phase			
	DWR to order required hardware for its side of interconnection and for Provider to order hardware for their side.	Assist DWR project team and DOE-Electrical Engineering as necessary	3 years
	Install DWR's hardware & Provider installs on their side of interconnection, per agreements	Assist DWR project team and DOE-Electrical Engineering as necessary	2 years
On-line Date **** Assuming no major obstacles to Timeline ****			8 years after Preliminary project Details complete

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Appendix B- NODOS Project Power Operations, Modeling Results

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Cash Flow Report for the NODOS Project, CALSIM 30-Year Planning Period, Alt A (Incidental Operations) Deliveries Cas

Pumping-Generation Site	NPV	Year Project in Service							
		1	2	3	4	5	6	7	8
NODOS Pumping	**Period Total**	**Period Total, NPV ($1000)**							
TC Canal Pumping	-6,080	-285	-115	-276	-321	-105	-180	-152	-188
GCID Pumping	-10,085	-319	-268	-383	-433	-357	-350	-387	-341
Sac River Pumping	-53,500	-2,821	-2,867	-1,926	-1,689	-667	-1,109	-2,531	-1,383
TRR Pumping	-9,937	-530	-85	-204	-1,254	-190	-81	-552	-597
Sites Pumping	-149,355	-8,238	-3,209	-5,500	-10,489	-848	-4,019	-4,825	-5,680
Subtotal	-228,957	-12,193	-6,544	-8,289	-14,186	-2,167	-5,739	-8,447	-8,189
NODOS Generation	**Period Total**	**Period Total, NPV ($1000)**							
Sites Geneneration	109,079	3,825	3,961	4,215	4,083	3,420	5,604	2,330	7,173
TRR Generation	19,649	528	1,333	510	969	544	777	761	1,223
Sac River Genenration	49,875	2,395	2,591	2,465	1,448	1,662	2,706	1,821	3,621
Subtotal	178,603	6,748	7,885	7,190	6,500	5,626	9,087	4,912	12,017
PumpBack Operations	**Period Total**	**Period Total, NPV ($1000)**							
PumpBack during Diversion cycle	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PumpBack During Release Cycle	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pure PumpBack Operations Cycle	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Subtotal	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NODOS Project Total	-50,354	-5,445	1,341	-1,099	-7,686	3,459	3,348	-3,535	3,828

Notes

Cash Flow reported pre-tax in PV($000).
Evaluation performed 07/07/2011
Report updated at 10:28:53 AM.

Table B1- NODOS Project, Power Portfolio-Annual Cash Flow, "Incidental", Alt A

Cash Flow Report for the NODOS Project, CALSIM 30-Year Planning Period, Alt A (Incidental Operations) Deliveries Case (Cont.)

9	10	11	12	13	14	15	16	17	18	19
-303	-262	-123	-413	-214	-249	-180	-352	-197	-276	-232
-463	-329	-364	-391	-340	-343	-299	-446	-360	-382	-357
-2,682	-1,584	-999	-2,887	-2,268	-2,768	-1,223	-3,367	-1,146	-1,509	-816
-880	-154	-83	-477	-187	-191	-92	-572	-391	-297	-341
-8,511	-4,654	-2,829	-10,341	-4,830	-6,085	-4,499	-9,575	-4,863	-6,585	-5,663
-12,839	**-6,983**	**-4,398**	**-14,509**	**-7,839**	**-9,636**	**-6,293**	**-14,312**	**-6,957**	**-9,049**	**-7,409**
3,016	4,255	5,263	5,063	4,476	3,517	4,900	4,016	5,829	4,217	3,911
448	793	757	673	1,071	679	1,019	326	708	539	618
1,478	2,033	2,996	2,191	1,879	1,508	1,645	2,011	2,255	1,494	1,424
4,942	**7,081**	**9,016**	**7,927**	**7,426**	**5,704**	**7,564**	**6,353**	**8,792**	**6,250**	**5,953**
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
-7,897	**98**	**4,618**	**-6,582**	**-413**	**-3,932**	**1,271**	**-7,959**	**1,835**	**-2,799**	**-1,456**

Table B1- NODOS Project, Power Portfolio-Annual Cash Flow, "Incidental", Alt A (Cont.)

Cash Flow Report for the NODOS Project, CALSIM 30-Year Planning Period, Alt A (Incidental Operations) Deliveries Case (Cont.)

20	21	22	23	24	25	26	27	28	29	30
-248	-118	-158	-71	-61	-266	-159	-168	-240	-83	-85
-342	-356	-313	-306	-182	-332	-242	-252	-272	-300	-276
-2,973	-261	-1,142	-558	-1,338	-3,348	-2,035	-1,064	-3,502	-529	-508
-401	-197	-255	-13	-145	-735	-137	-121	-350	-259	-166
-6,740	-679	-3,443	-1,224	-1,016	-7,681	-4,392	-3,731	-7,159	-1,220	-827
-10,704	**-1,611**	**-5,311**	**-2,172**	**-2,742**	**-12,362**	**-6,965**	**-5,336**	**-11,523**	**-2,391**	**-1,862**
2,877	2,299	3,610	3,646	1,110	3,319	2,661	3,755	1,689	570	469
661	313	672	524	839	502	703	565	449	60	85
997	930	951	2,158	599	1,345	875	1,120	836	265	176
4,535	**3,542**	**5,233**	**6,328**	**2,548**	**5,166**	**4,239**	**5,440**	**2,974**	**895**	**730**
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
-6,169	**1,931**	**-78**	**4,156**	**-194**	**-7,196**	**-2,726**	**104**	**-8,549**	**-1,496**	**-1,132**

Table B1- NODOS Project, Power Portfolio-Annual Cash Flow, "Incidental", Alt A (Cont.)

Cash Flow Report for the NODOS Project, CALSIM 30-Year Planning Period, Alt A (Optimized Operations) Deliveries Case

Pumping-Generation Site	NPV	Year Project in Service							
		1	2	3	4	5	6	7	8
NODOS Pumping	**Period Total**	**Period Total, NPV ($1000)**							
TC Canal Pumping	-6,080	-285	-115	-276	-321	-105	-180	-152	-188
GCID Pumping	-10,085	-319	-268	-383	-433	-357	-350	-387	-341
Sac River Pumping	-53,500	-2,821	-2,867	-1,926	-1,689	-667	-1,109	-2,531	-1,383
TRR Pumping	-9,937	-530	-85	-204	-1,254	-190	-81	-552	-597
Sites Pumping	-137,398	-7,693	-2,879	-4,892	-9,329	-678	-3,718	-4,443	-5,301
Subtotal	**-217,000**	**-11,648**	**-6,214**	**-7,681**	**-13,026**	**-1,997**	**-5,438**	**-8,065**	**-7,810**
NODOS Generation	**Period Total**	**Period Total, NPV ($1000)**							
Sites Genereration	121,405	4,764	4,397	4,861	4,493	3,786	6,027	2,731	7,921
TRR Generation	20,396	580	1,377	546	982	605	803	769	1,237
Sac River Genenration	49,875	2,395	2,591	2,465	1,448	1,662	2,706	1,821	3,621
Subtotal	**191,676**	**7,739**	**8,365**	**7,872**	**6,923**	**6,053**	**9,536**	**5,321**	**12,779**
PumpBack Operations	**Period Total**	**Period Total, NPV ($1000)**							
PumpBack during Diversion cycle	7,031	101	0	0	366	384	152	0	368
PumpBack During Release Cycle	22,998	1,176	984	578	617	557	926	1,150	204
Pure PumpBack Operations Cycle	17,435	152	1,083	1,100	274	1,359	117	876	0
Subtotal	**47,464**	1,429	2,067	1,678	1,257	2,300	1,195	2,026	572
NODOS Project Total	**22,140**	**-2,480**	**4,218**	**1,869**	**-4,846**	**6,356**	**5,293**	**-718**	**5,541**

Notes

Cash Flow reported pre-tax in PV($000).

Evaluation performed 07/07/2011

Report updated at 10:28:53 AM.

Table B2- NODOS Project, Power Portfolio-Annual Cash Flow, "Optimized", Alt A

Cash Flow Report for the NODOS Project, CALSIM 30-Year Planning Period, Alt A (Optimized Operations) Deliveries Case (Cont.)

9	10	11	12	13	14	15	16	17	18	19
-303	-262	-123	-413	-214	-249	-180	-352	-197	-276	-232
-463	-329	-364	-391	-340	-343	-299	-446	-360	-382	-357
-2,682	-1,584	-999	-2,887	-2,268	-2,768	-1,223	-3,367	-1,146	-1,509	-816
-880	-154	-83	-477	-187	-191	-92	-572	-391	-297	-341
-7,979	-4,007	-2,701	-9,343	-4,431	-5,506	-4,200	-8,921	-4,680	-6,060	-5,222
-12,307	**-6,336**	**-4,270**	**-13,511**	**-7,440**	**-9,057**	**-5,994**	**-13,658**	**-6,774**	**-8,524**	**-6,968**
3,294	4,652	5,941	5,441	4,921	4,065	5,416	4,667	6,450	4,763	4,030
466	825	788	672	1,094	728	1,060	354	735	528	638
1,478	2,033	2,996	2,191	1,879	1,508	1,645	2,011	2,255	1,494	1,424
5,238	**7,510**	**9,725**	**8,304**	**7,894**	**6,301**	**8,121**	**7,032**	**9,440**	**6,785**	**6,092**
171	380	121	722	93	181	120	186	166	554	299
837	906	590	662	1,020	846	691	751	371	839	821
497	623	264	0	512	874	518	452	481	178	547
1,505	1,909	975	1,384	1,625	1,901	1,329	1,389	1,018	1,571	1,667
-5,564	**3,083**	**6,430**	**-3,823**	**2,079**	**-855**	**3,456**	**-5,237**	**3,684**	**-168**	**791**

Table B2- NODOS Project, Power Portfolio-Annual Cash Flow, "Optimized", Alt A (Cont.)

Cash Flow Report for the NODOS Project, CALSIM 30-Year Planning Period, Alt A (Optimized Operations) Deliveries Case (Cont.)

20	21	22	23	24	25	26	27	28	29	30
-248	-118	-158	-71	-61	-266	-159	-168	-240	-83	-85
-342	-356	-313	-306	-182	-332	-242	-252	-272	-300	-276
-2,973	-261	-1,142	-558	-1,338	-3,348	-2,035	-1,064	-3,502	-529	-508
-401	-197	-255	-13	-145	-735	-137	-121	-350	-259	-166
-6,354	-543	-3,073	-1,125	-986	-7,247	-4,139	-3,517	-6,784	-1,018	-629
-10,318	**-1,475**	**-4,941**	**-2,073**	**-2,712**	**-11,928**	**-6,712**	**-5,122**	**-11,148**	**-2,189**	**-1,664**
3,189	2,557	4,147	4,121	1,007	3,544	2,859	4,275	1,911	661	514
695	345	714	540	865	525	731	593	466	52	83
997	930	951	2,158	599	1,345	875	1,120	836	265	176
4,881	**3,832**	**5,812**	**6,819**	**2,471**	**5,414**	**4,465**	**5,988**	**3,213**	**978**	**773**
170	397	471	142	58	148	212	83	149	384	453
1,090	1,066	705	908	328	861	1,031	673	639	609	562
476	957	335	287	964	233	291	293	746	1,474	1,472
1,736	2,420	1,511	1,337	1,350	1,242	1,534	1,049	1,534	2,467	2,487
-3,701	**4,777**	**2,382**	**6,083**	**1,109**	**-5,272**	**-713**	**1,915**	**-6,401**	**1,256**	**1,596**

Table B2- NODOS Project, Power Portfolio-Annual Cash Flow, "Optimized", Alt A (Cont.)

Cash Flow Report for the NODOS Project, CALSIM 30-Year Planning Period, Alt B (Incidental Operations)Deliveries Case

Pumping-Generation Site	NPV	Year Project in Service							
		1	2	3	4	5	6	7	8
NODOS Pumping	Period Total	Period Total, NPV ($1000)							
TC Canal Pumping	-7,508	-118	-154	-156	-89	-223	-179	-231	-186
GCID Pumping	-11,520	-346	-356	-341	-302	-306	-288	-429	-436
Sac River Pumping	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TRR Pumping	-16,451	-69	-576	-357	-71	-45	-158	-763	-443
Sites Pumping	-147,695	-1,167	-4,894	-1,321	-1,747	-1,645	-2,469	-4,482	-4,074
Subtotal	-183,174	-1,700	-5,980	-2,175	-2,209	-2,219	-3,094	-5,905	-5,139
NODOS Generation	Period Total	Period Total, NPV ($1000)							
Sites Geneneration	111,264	4,644	5,875	117	2,159	696	2,165	3,841	1,508
TRR Generation	6,840	1	824	0	0	43	0	429	3
Sac River Genenration	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Subtotal	118,104	4,645	6,699	117	2,159	739	2,165	4,270	1,511
PumpBack Operations	Period Total	Period Total, NPV ($1000)							
PumpBack during Diversion cycle	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PumpBack During Release Cycle	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pure PumpBack Operations Cycle	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Subtotal	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NODOS Project Total	-65,070	2,945	719	-2,058	-50	-1,480	-929	-1,635	-3,628

Notes

Cash Flow reported pre-tax in PV($000).
Evaluation performed 07/07/2011
Report updated at 10:28:53 AM.

Table B3- NODOS Project, Power Portfolio-Annual Cash Flow, "Incidental", Alt B

Cash Flow Report for the NODOS Project, CALSIM 30-Year Planning Period, Alt B (Incidental Operations)Deliveries Case (Cont.)

9	10	11	12	13	14	15	16	17	18	19
-342	-367	-117	-438	-538	-395	-230	-164	-271	-197	-227
-524	-478	-436	-529	-541	-386	-305	-412	-405	-406	-413
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
-1,067	-977	0	-1,260	-1,841	-696	-164	-194	-503	-141	-316
-6,558	-8,746	0	-7,909	-13,152	-8,759	-4,990	-3,798	-3,854	-3,220	-3,142
-8,491	**-10,568**	**-553**	**-10,136**	**-16,072**	**-10,236**	**-5,689**	**-4,568**	**-5,033**	**-3,964**	**-4,098**
1,152	5,084	6,489	3,551	4,164	5,899	8,109	4,598	3,151	3,845	3,936
5	282	42	5	261	716	1,033	10	382	8	5
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,157	**5,366**	**6,531**	**3,556**	**4,425**	**6,615**	**9,142**	**4,608**	**3,533**	**3,853**	**3,941**
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
-7,334	**-5,202**	**5,978**	**-6,580**	**-11,647**	**-3,621**	**3,453**	**40**	**-1,500**	**-111**	**-157**

Table B3- NODOS Project, Power Portfolio-Annual Cash Flow, "Incidental", Alt B (Cont.)

Cash Flow Report for the NODOS Project, CALSIM 30-Year Planning Period, Alt B (Incidental Operations)Deliveries Case (Cont.)

20	21	22	23	24	25	26	27	28	29	30
-295	-207	-270	-347	-413	-167	-291	-120	-258	-304	-214
-410	-400	-391	-403	-436	-313	-301	-312	-334	-330	-251
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
-766	-295	-732	-723	-1,216	-333	-742	-64	-692	-956	-291
-6,095	-2,066	-6,661	-6,706	-10,470	-2,796	-7,128	-1,787	-6,679	-7,579	-3,801
-7,566	**-2,968**	**-8,054**	**-8,179**	**-12,535**	**-3,609**	**-8,462**	**-2,283**	**-7,963**	**-9,169**	**-4,557**
1,179	3,161	3,444	5,318	2,858	4,657	5,028	3,151	3,864	4,200	3,421
6	10	392	95	167	403	558	7	295	485	373
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,185	**3,171**	**3,836**	**5,413**	**3,025**	**5,060**	**5,586**	**3,158**	**4,159**	**4,685**	**3,794**
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
-6,381	**203**	**-4,218**	**-2,766**	**-9,510**	**1,451**	**-2,876**	**875**	**-3,804**	**-4,484**	**-763**

Table B3- NODOS Project, Power Portfolio-Annual Cash Flow, "Incidental", Alt B (Cont.)

Cash Flow Report for the NODOS Project, CALSIM 30-Year Planning Period, Alt B (Optimized Operations) Deliveries Case

Pumping-Generation Site	NPV	Year Project in Service							
		1	2	3	4	5	6	7	8
NODOS Pumping	**Period Total**	**Period Total, NPV ($1000)**							
TC Canal Pumping	**-7,508**	-118	-154	-156	-89	-223	-179	-231	-186
GCID Pumping	**-11,520**	-346	-356	-341	-302	-306	-288	-429	-436
Sac River Pumping	**0**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TRR Pumping	**-16,451**	-69	-576	-357	-71	-45	-158	-763	-443
Sites Pumping	**-133,104**	-947	-4,203	-1,078	-1,537	-1,439	-2,190	-3,949	-3,520
Subtotal	**-168,583**	**-1,480**	**-5,289**	**-1,932**	**-1,999**	**-2,013**	**-2,815**	**-5,372**	**-4,585**
NODOS Generation	**Period Total**	**Period Total, NPV ($1000)**							
Sites Genereration	**125,490**	5,854	6,830	0	2,625	843	2,526	4,442	1,700
TRR Generation	**7,145**	0	841	0	0	56	0	441	0
Sac River Genenration	**N/A**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Subtotal	**132,635**	**5,854**	**7,671**	**0**	**2,625**	**899**	**2,526**	**4,883**	**1,700**
PumpBack Operations	**Period Total**	**Period Total, NPV ($1000)**							
PumpBack during Diversion cycle	**13,999**	20	286	49	174	175	326	457	756
PumpBack During Release Cycle	**18,298**	1,192	546	0	672	270	376	284	666
Pure PumpBack Operations Cycle	**14,916**	362	0	1,663	435	1,072	540	83	663
Subtotal	**47,213**	1,574	832	1,712	1,281	1,517	1,242	824	2,085
NODOS Project Total	**11,265**	**5,948**	**3,214**	**-220**	**1,907**	**403**	**953**	**335**	**-800**

Notes

Cash Flow reported pre-tax in PV($000).
Evaluation performed 07/07/2011
Report updated at 10:28:53 AM.

Table B4- NODOS Project, Power Portfolio-Annual Cash Flow, "Optimized", Alt B

Cash Flow Report for the NODOS Project, CALSIM 30-Year Planning Period, Alt B (Optimized Operations) Deliveries Case (Cont.)

9	10	11	12	13	14	15	16	17	18	19
-342	-367	-117	-438	-538	-395	-230	-164	-271	-197	-227
-524	-478	-436	-529	-541	-386	-305	-412	-405	-406	-413
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
-1,067	-977	0	-1,260	-1,841	-696	-164	-194	-503	-141	-316
-5,845	-7,775	0	-7,060	-11,879	-7,992	-4,511	-3,456	-3,406	-2,878	-2,904
-7,778	**-9,597**	**-553**	**-9,287**	**-14,799**	**-9,469**	**-5,210**	**-4,226**	**-4,585**	**-3,622**	**-3,860**
1,371	5,729	7,600	4,158	4,633	6,715	8,526	5,363	3,397	4,436	4,491
0	311	39	0	270	774	1,062	1	403	0	0
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,371	**6,040**	**7,639**	**4,158**	**4,903**	**7,489**	**9,588**	**5,364**	**3,800**	**4,436**	**4,491**
244	772	0	335	967	549	587	510	141	352	199
1,105	931	270	678	760	717	282	864	664	1,126	563
841	180	494	189	0	581	733	354	1,206	290	479
2,190	1,883	764	1,202	1,727	1,847	1,602	1,728	2,011	1,768	1,241
-4,217	**-1,674**	**7,850**	**-3,927**	**-8,169**	**-133**	**5,980**	**2,866**	**1,226**	**2,582**	**1,872**

Table B4- NODOS Project, Power Portfolio-Annual Cash Flow, "Optimized", Alt B (Cont.)

Cash Flow Report for the NODOS Project, CALSIM 30-Year Planning Period, Alt B (Optimized Operations) Deliveries Case (Cont.)

20	21	22	23	24	25	26	27	28	29	30
-295	-207	-270	-347	-413	-167	-291	-120	-258	-304	-214
-410	-400	-391	-403	-436	-313	-301	-312	-334	-330	-251
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
-766	-295	-732	-723	-1,216	-333	-742	-64	-692	-956	-291
-5,415	-1,854	-6,117	-6,206	-9,717	-2,434	-6,617	-1,663	-6,112	-6,957	-3,443
-6,886	**-2,756**	**-7,510**	**-7,679**	**-11,782**	**-3,247**	**-7,951**	**-2,159**	**-7,396**	**-8,547**	**-4,199**
1,372	3,690	3,635	5,951	3,120	5,035	5,321	3,539	4,283	4,557	3,748
0	1	413	100	179	427	599	0	330	498	400
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1,372	**3,691**	**4,048**	**6,051**	**3,299**	**5,462**	**5,920**	**3,539**	**4,613**	**5,055**	**4,148**
685	267	420	767	1,251	1,066	415	323	694	540	672
1,015	832	534	381	502	328	376	894	519	399	552
512	783	656	0	371	344	437	548	345	174	581
2,212	1,882	1,610	1,148	2,124	1,738	1,228	1,765	1,558	1,113	1,805
-3,302	**2,817**	**-1,852**	**-480**	**-6,359**	**3,953**	**-803**	**3,145**	**-1,225**	**-2,379**	**1,754**

Table B4- NODOS Project, Power Portfolio-Annual Cash Flow, "Optimized", Alt B (Cont.)

Cash Flow Report for the NODOS Project, CALSIM 30-Year Planning Period, Alt C (Incidental Operations) Deliveries Case

Pumping-Generation Site	NPV	Year Project in Service							
		1	2	3	4	5	6	7	8
NODOS Pumping	Period Total	Period Total, NPV ($1000)							
TC Canal Pumping	-5,788	-279	-128	-180	-80	-82	-411	-251	-238
GCID Pumping	-9,968	-306	-375	-347	-349	-231	-431	-355	-335
Sac River Pumping	-59,196	-3,040	-273	-1,227	-155	-370	-5,674	-2,940	-1,998
TRR Pumping	-11,839	-410	-204	-295	-28	-180	-1,057	-657	-159
Sites Pumping	-172,219	-9,319	-823	-4,546	-1,836	-1,298	-11,927	-9,489	-6,630
Subtotal	-259,010	-13,354	-1,803	-6,595	-2,448	-2,161	-19,500	-13,692	-9,360
NODOS Generation	Period Total	Period Total, NPV ($1000)							
Sites Geneneration	134,217	3,210	2,997	5,049	6,577	4,109	3,477	4,764	6,204
TRR Generation	20,385	723	438	981	765	1,128	807	1,246	963
Sac River Genenration	50,193	1,191	1,147	1,384	3,310	2,147	1,742	1,635	1,880
Subtotal	204,795	5,124	4,582	7,414	10,652	7,384	6,026	7,645	9,047
PumpBack Operations	Period Total	Period Total, NPV ($1000)							
PumpBack during Diversion cycle	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PumpBack During Release Cycle	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pure PumpBack Operations Cycle	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Subtotal	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NODOS Project Total	-54,215	-8,230	2,779	819	8,204	5,223	-13,474	-6,047	-313

Notes

Cash Flow reported pre-tax in PV($000).
Evaluation performed 07/07/2011
Report updated at 10:28:53 AM.

Table B5- NODOS Project, Power Portfolio-Annual Cash Flow, "Incidental", Alt C

Cash Flow Report for the NODOS Project, CALSIM 30-Year Planning Period, Alt C (Incidental Operations) Deliveries Case (Cont.)

9	10	11	12	13	14	15	16	17	18	19
-312	-268	-126	-207	-166	-264	-164	-71	-120	-71	-93
-344	-450	-416	-385	-345	-409	-407	-343	-432	-342	-252
-3,942	-1,761	-795	-1,225	-192	-3,931	-2,180	-1,088	-812	-1,161	-2,917
-534	-484	-291	-654	-91	-860	-516	-54	-536	-13	-460
-11,595	-7,078	-1,585	-6,587	-2,531	-11,282	-7,146	-2,959	-3,105	-1,604	-2,584
-16,727	**-10,041**	**-3,213**	**-9,058**	**-3,325**	**-16,746**	**-10,413**	**-4,515**	**-5,005**	**-3,191**	**-6,306**
5,826	1,414	806	7,843	8,524	6,353	7,552	6,942	3,492	1,109	2,006
1,135	114	166	1,136	764	906	534	719	246	525	956
1,788	725	300	1,965	3,199	2,232	3,166	3,548	2,462	955	1,542
8,749	**2,253**	**1,272**	**10,944**	**12,487**	**9,491**	**11,252**	**11,209**	**6,200**	**2,589**	**4,504**
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
-7,978	**-7,788**	**-1,941**	**1,886**	**9,162**	**-7,255**	**839**	**6,694**	**1,195**	**-602**	**-1,802**

Table B5- NODOS Project, Power Portfolio-Annual Cash Flow, "Incidental", Alt C (Cont.)

Cash Flow Report for the NODOS Project, CALSIM 30-Year Planning Period, Alt C (Incidental Operations) Deliveries Case (Cont.)

20	21	22	23	24	25	26	27	28	29	30
-153	-413	-149	-386	-145	-186	-195	-79	-212	-164	-195
-252	-419	-182	-460	-289	-278	-321	-251	-219	-232	-211
-2,317	-4,387	-1,716	-4,178	-1,078	-1,082	-2,570	-174	-1,728	-2,664	-1,621
-419	-899	-96	-1,227	-307	-145	-359	-11	-123	-425	-345
-3,603	-11,419	-2,922	-14,986	-3,397	-5,246	-7,031	-153	-6,238	-7,077	-6,223
-6,744	**-17,537**	**-5,065**	**-21,237**	**-5,216**	**-6,937**	**-10,476**	**-668**	**-8,520**	**-10,562**	**-8,595**
2,521	2,095	5,820	2,373	4,445	6,343	675	4,916	5,690	4,591	6,494
818	324	951	136	536	552	107	439	643	729	898
1,589	1,028	1,961	763	963	1,712	187	1,242	1,315	1,416	1,699
4,928	**3,447**	**8,732**	**3,272**	**5,944**	**8,607**	**969**	**6,597**	**7,648**	**6,736**	**9,091**
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
-1,816	**-14,090**	**3,667**	**-17,965**	**728**	**1,670**	**-9,507**	**5,929**	**-872**	**-3,826**	**496**

Table B5- NODOS Project, Power Portfolio-Annual Cash Flow, "Incidental", Alt C (Cont.)

Cash Flow Report for the NODOS Project, CALSIM 30-Year Planning Period, Alt C (Optimized Operations) Deliveries Case

Pumping-Generation Site	NPV	Year Project in Service							
		1	2	3	4	5	6	7	8
NODOS Pumping	**Period Total**	**Period Total, NPV ($1000)**							
TC Canal Pumping	**-5,788**	-279	-128	-180	-80	-82	-411	-251	-238
GCID Pumping	**-9,968**	-306	-375	-347	-349	-231	-431	-355	-335
Sac River Pumping	**-59,196**	-3,040	-273	-1,227	-155	-370	-5,674	-2,940	-1,998
TRR Pumping	**-11,839**	-410	-204	-295	-28	-180	-1,057	-657	-159
Sites Pumping	**-157,842**	-8,578	-627	-3,872	-1,587	-1,105	-10,846	-8,646	-5,958
Subtotal	**-244,633**	**-12,613**	**-1,607**	**-5,921**	**-2,199**	**-1,968**	**-18,419**	**-12,849**	**-8,688**
NODOS Generation	**Period Total**	**Period Total, NPV ($1000)**							
Sites Geneneration	**149,578**	4,268	3,456	5,915	7,547	4,251	4,017	5,702	7,137
TRR Generation	**21,249**	781	480	1,032	799	1,151	843	1,307	1,015
Sac River Genenration	**50,193**	1,191	1,147	1,384	3,310	2,147	1,742	1,635	1,880
Subtotal	**221,020**	**6,240**	**5,083**	**8,331**	**11,656**	**7,549**	**6,602**	**8,644**	**10,032**
PumpBack Operations	**Period Total**	**Period Total, NPV ($1000)**							
PumpBack during Diversion cycle	**7,445**	213	470	623	96	49	214	239	0
PumpBack During Release Cycle	**21,566**	1,717	1,412	563	824	276	401	1,371	998
Pure PumpBack Operations Cycle	**17,395**	323	1,571	775	278	642	1,054	0	410
Subtotal	**46,406**	2,253	3,453	1,961	1,198	967	1,669	1,610	1,408
NODOS Project Total	**22,793**	**-4,120**	**6,929**	**4,371**	**10,655**	**6,548**	**-10,148**	**-2,595**	**2,752**

Notes

Cash Flow reported pre-tax in PV($000).
Evaluation performed 07/07/2011
Report updated at 10:28:53 AM.

Table B6- NODOS Project, Power Portfolio-Annual Cash Flow, "Optimized", Alt C (Cont.)

Cash Flow Report for the NODOS Project, CALSIM 30-Year Planning Period, Alt C (Optimized Operations) Deliveries Case (Cont.)

9	10	11	12	13	14	15	16	17	18	19
-312	-268	-126	-207	-166	-264	-164	-71	-120	-71	-93
-344	-450	-416	-385	-345	-409	-407	-343	-432	-342	-252
-3,942	-1,761	-795	-1,225	-192	-3,931	-2,180	-1,088	-812	-1,161	-2,917
-534	-484	-291	-654	-91	-860	-516	-54	-536	-13	-460
-10,672	-6,153	-1,130	-6,082	-2,220	-10,507	-6,726	-2,694	-2,811	-1,345	-2,474
-15,804	**-9,116**	**-2,758**	**-8,553**	**-3,014**	**-15,971**	**-9,993**	**-4,250**	**-4,711**	**-2,932**	**-6,196**
6,177	1,648	894	8,639	9,115	7,129	8,656	7,731	3,916	1,161	2,323
1,176	124	173	1,185	795	946	556	716	248	528	974
1,788	725	300	1,965	3,199	2,232	3,166	3,548	2,462	955	1,542
9,141	**2,497**	**1,367**	**11,789**	**13,109**	**10,307**	**12,378**	**11,995**	**6,626**	**2,644**	**4,839**
160	473	681	0	333	208	186	0	131	32	0
1,140	1,322	740	383	594	1,073	655	487	619	606	645
221	1,453	2,318	598	394	0	0	0	190	803	738
1,521	3,248	3,739	981	1,321	1,281	841	487	940	1,441	1,383
-5,142	**-3,371**	**2,348**	**4,217**	**11,416**	**-4,383**	**3,226**	**8,232**	**2,855**	**1,153**	**26**

Table B6- NODOS Project, Power Portfolio-Annual Cash Flow, "Optimized", Alt C (Cont.)

Cash Flow Report for the NODOS Project, CALSIM 30-Year Planning Period, Alt C (Optimized Operations) Deliveries Case (Cont.)

20	21	22	23	24	25	26	27	28	29	30
-153	-413	-149	-386	-145	-186	-195	-79	-212	-164	-195
-252	-419	-182	-460	-289	-278	-321	-251	-219	-232	-211
-2,317	-4,387	-1,716	-4,178	-1,078	-1,082	-2,570	-174	-1,728	-2,664	-1,621
-419	-899	-96	-1,227	-307	-145	-359	-11	-123	-425	-345
-3,457	-10,359	-2,867	-13,926	-3,286	-4,787	-6,582	0	-5,916	-6,730	-5,899
-6,598	**-16,477**	**-5,010**	**-20,177**	**-5,105**	**-6,478**	**-10,027**	**-515**	**-8,198**	**-10,215**	**-8,271**
2,884	2,361	6,410	2,476	5,053	6,876	724	5,207	6,100	5,010	6,795
846	343	977	142	575	587	116	470	671	766	927
1,589	1,028	1,961	763	963	1,712	187	1,242	1,315	1,416	1,699
5,319	**3,732**	**9,348**	**3,381**	**6,591**	**9,175**	**1,027**	**6,919**	**8,086**	**7,192**	**9,421**
127	440	0	1,007	0	213	1,080	0	174	47	249
521	552	502	253	633	417	659	663	538	1,002	0
483	559	496	853	1,007	166	921	973	169	0	0
1,131	1,551	998	2,113	1,640	796	2,660	1,636	881	1,049	249
-148	**-11,194**	**5,336**	**-14,683**	**3,126**	**3,493**	**-6,340**	**8,040**	**769**	**-1,974**	**1,399**

Table B6- NODOS Project, Power Portfolio-Annual Cash Flow, "Optimized", Alt C (Cont.)

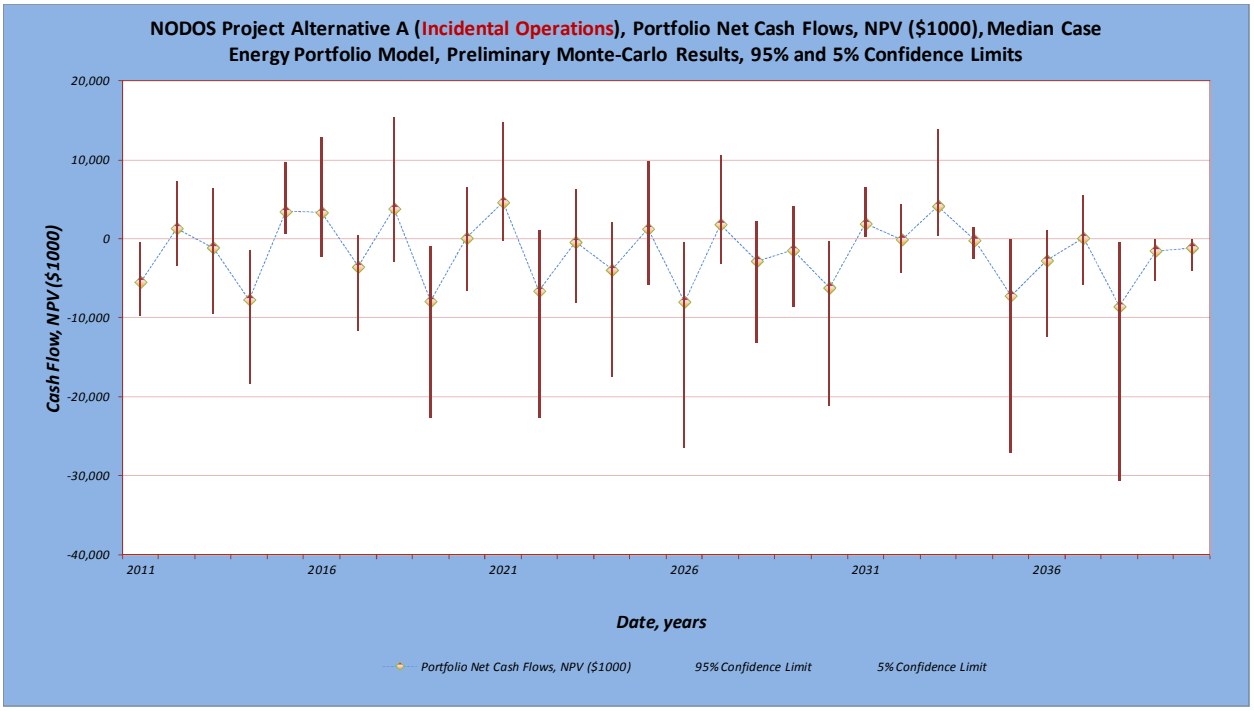

Figure B1- NODOS Project, Power Portfolio-Annual Cash Flow, "Incidental", Alt A

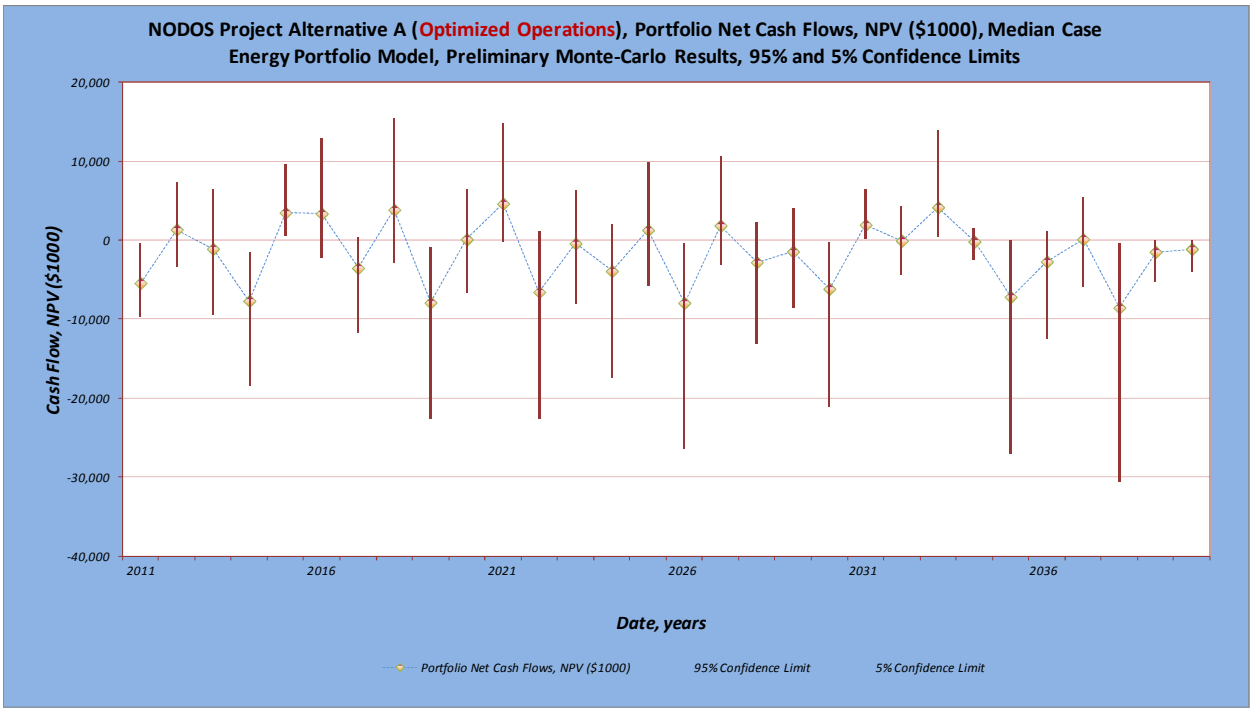

Figure B2- NODOS Project, Power Portfolio-Annual Cash Flow, "Optimized", Alt A

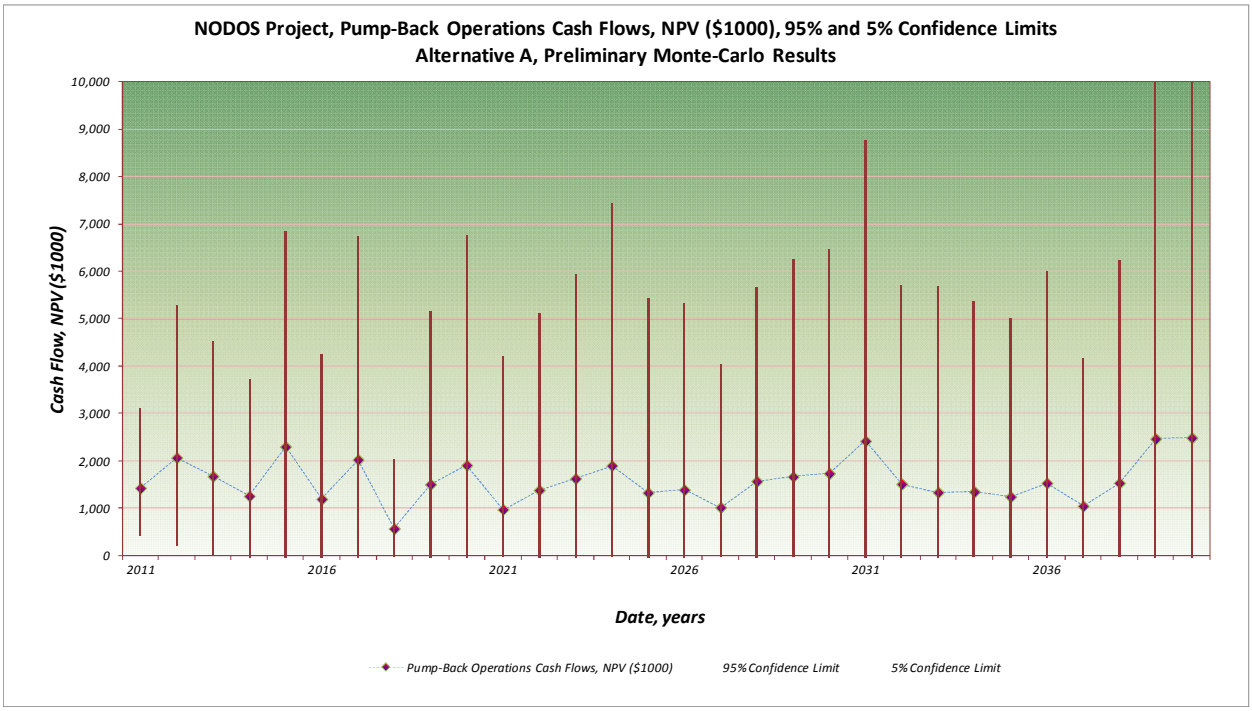

Figure B3- NODOS Project, Power Portfolio-Annual Cash Flow, "Pumpback", Alt A

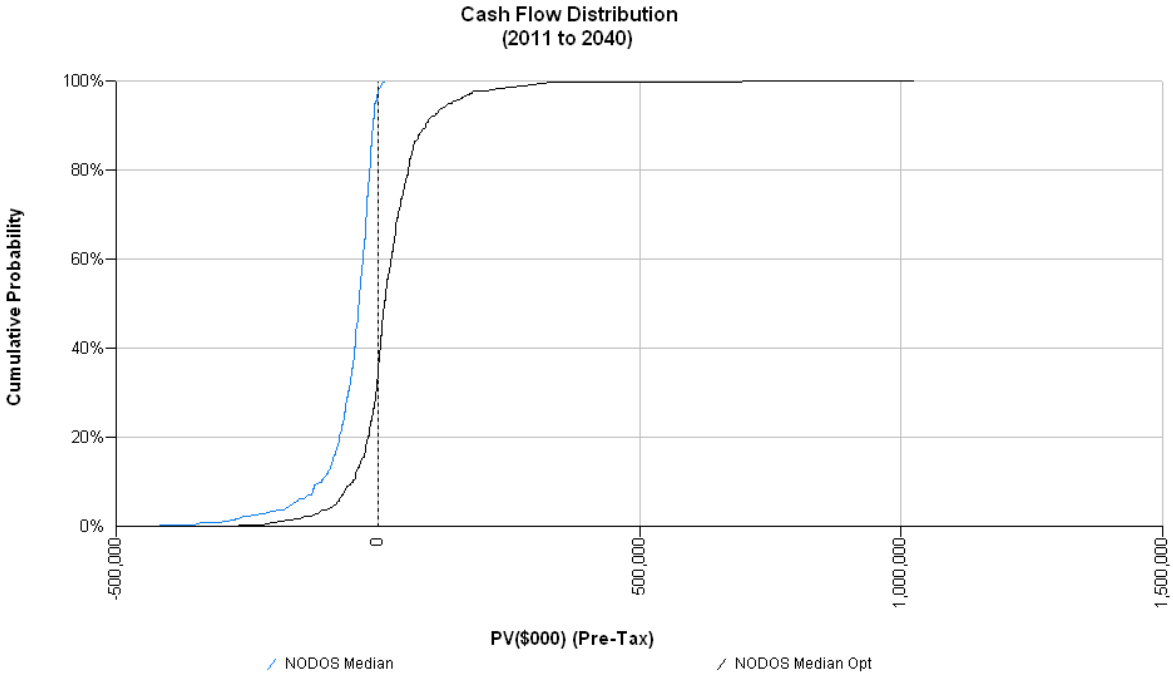

Figure B4- NODOS Project, Power Portfolio Cumulative Probability Distribution, Alt A

"Incidental" vs. "Optimized"

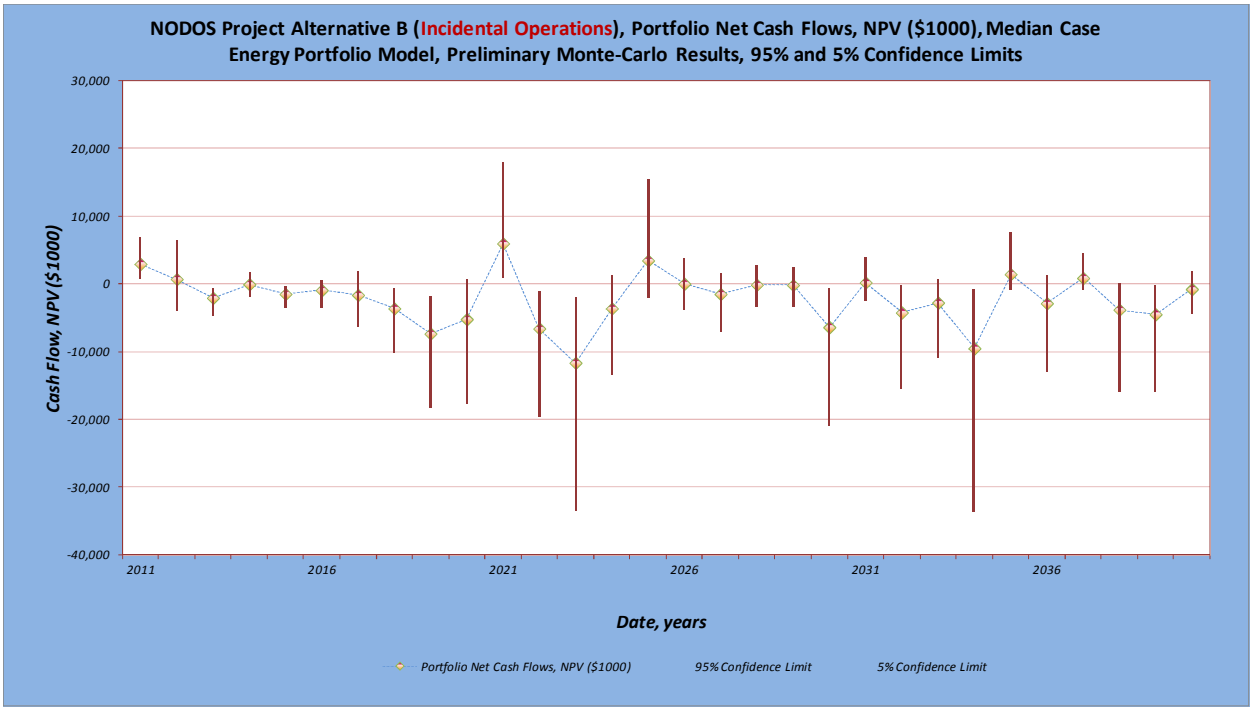

Figure B5- NODOS Project, Power Portfolio-Annual Cash Flow, "Incidental", Alt B

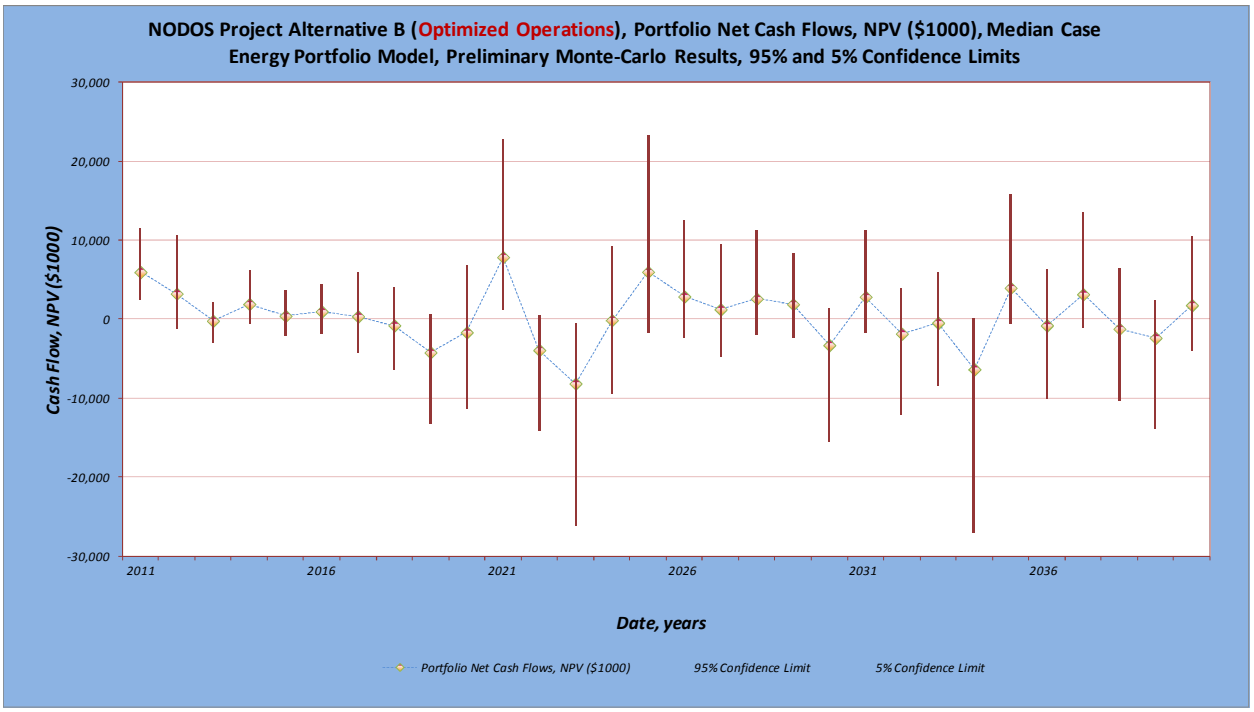

Figure B6- NODOS Project, Power Portfolio-Annual Cash Flow, "Optimized", Alt B

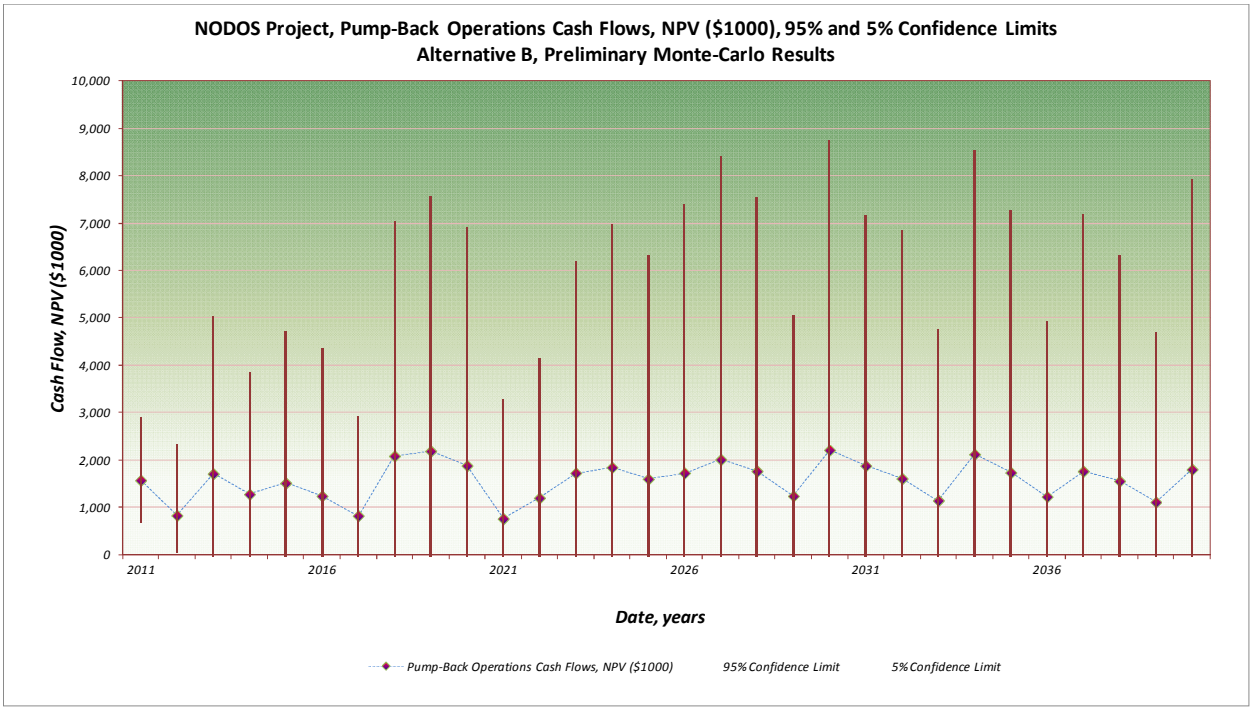

Figure B7- NODOS Project, Power Portfolio-Annual Cash Flow, "Pumpback", Alt B

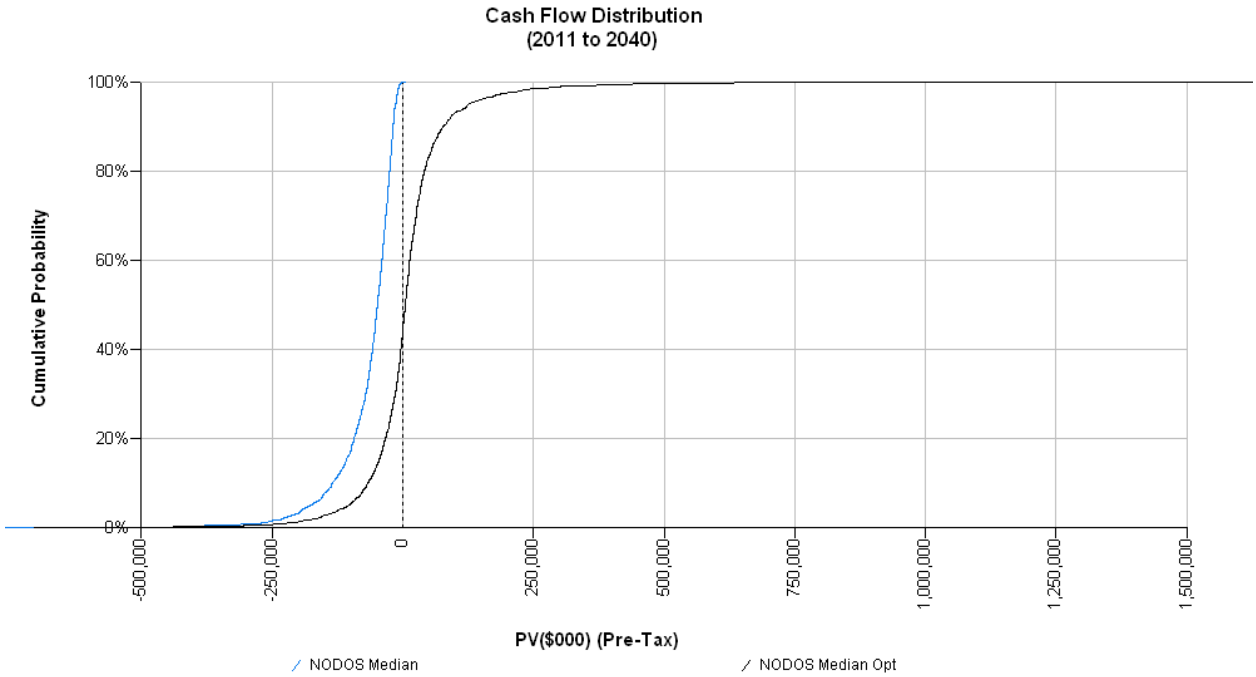

Figure B8- NODOS Project, Power Portfolio Cumulative Probability Distribution, Alt B

"Incidental" vs. "Optimized"

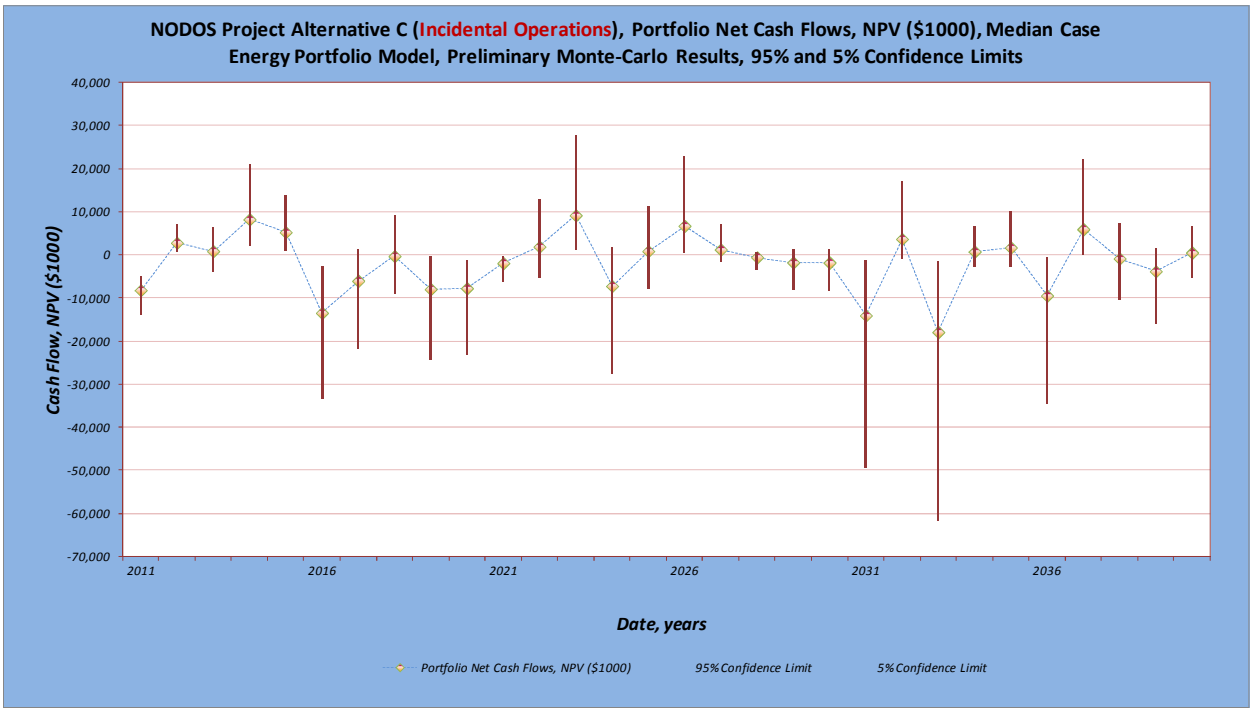

Figure B9- NODOS Project, Power Portfolio-Annual Cash Flow, "Incidental", Alt B

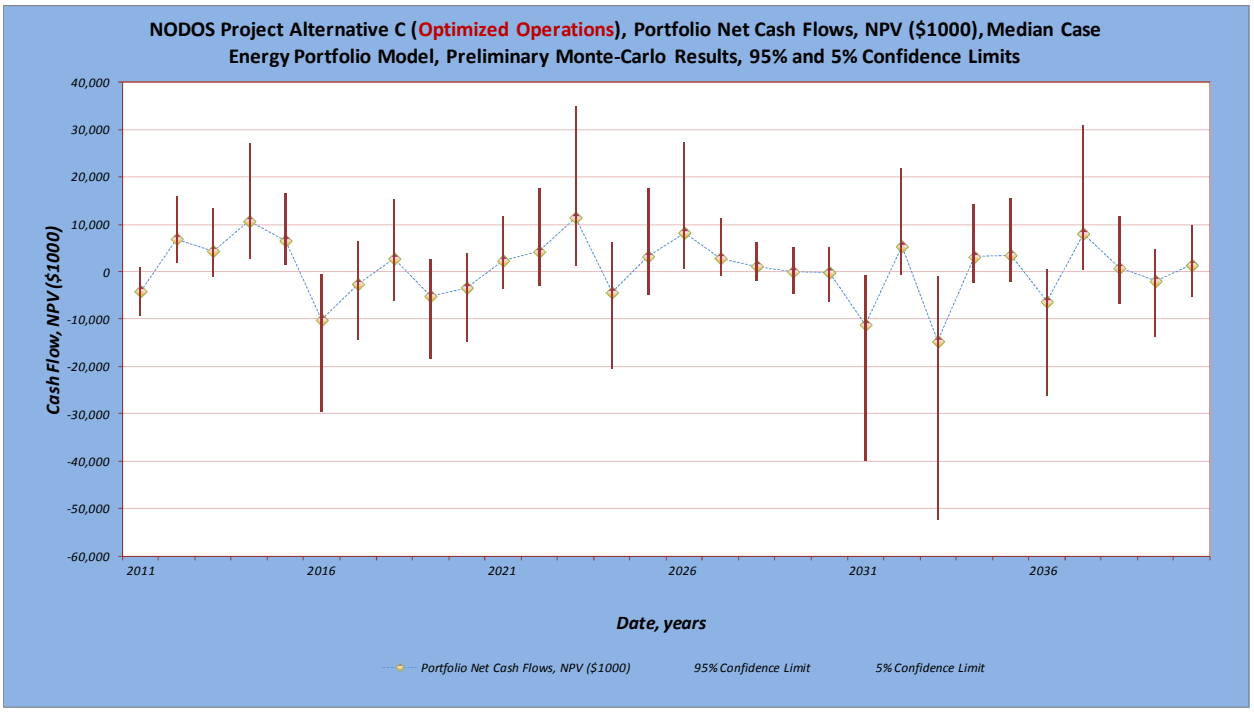

Figure B10- NODOS Project, Power Portfolio-Annual Cash Flow, "Optimized", Alt C

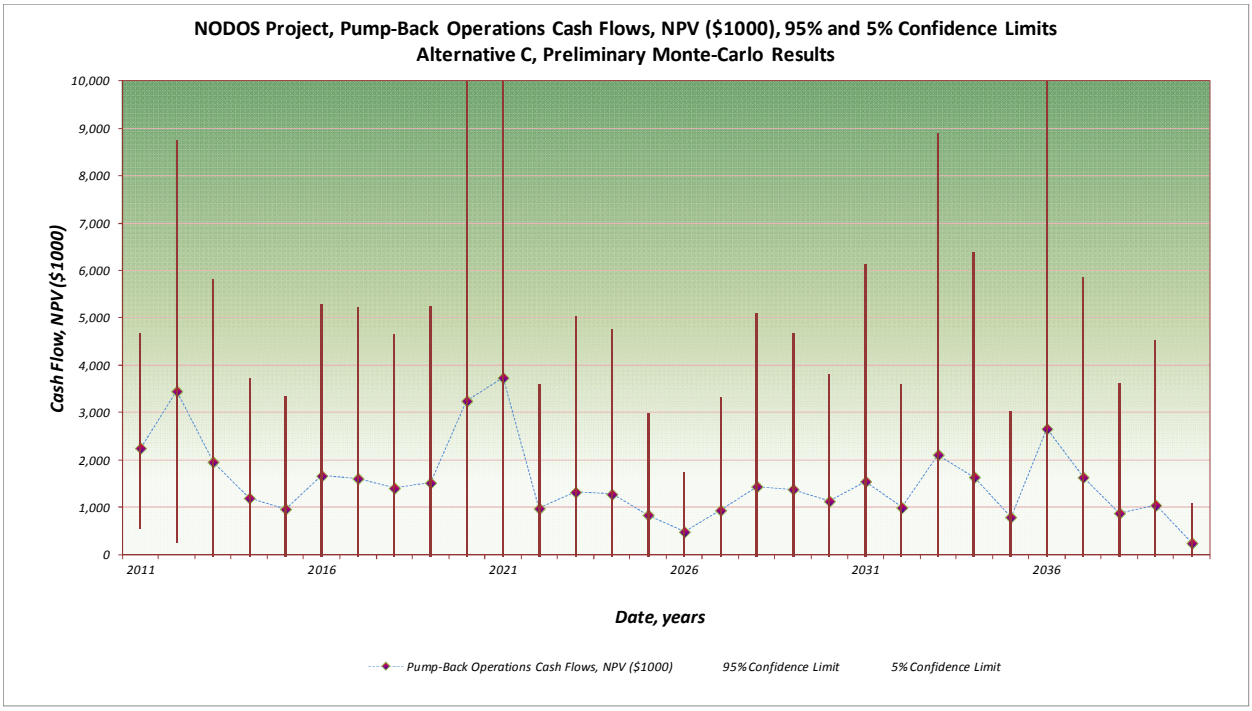

Figure B11- NODOS Project, Power Portfolio-Annual Cash Flow, "Pumpback", Alt C

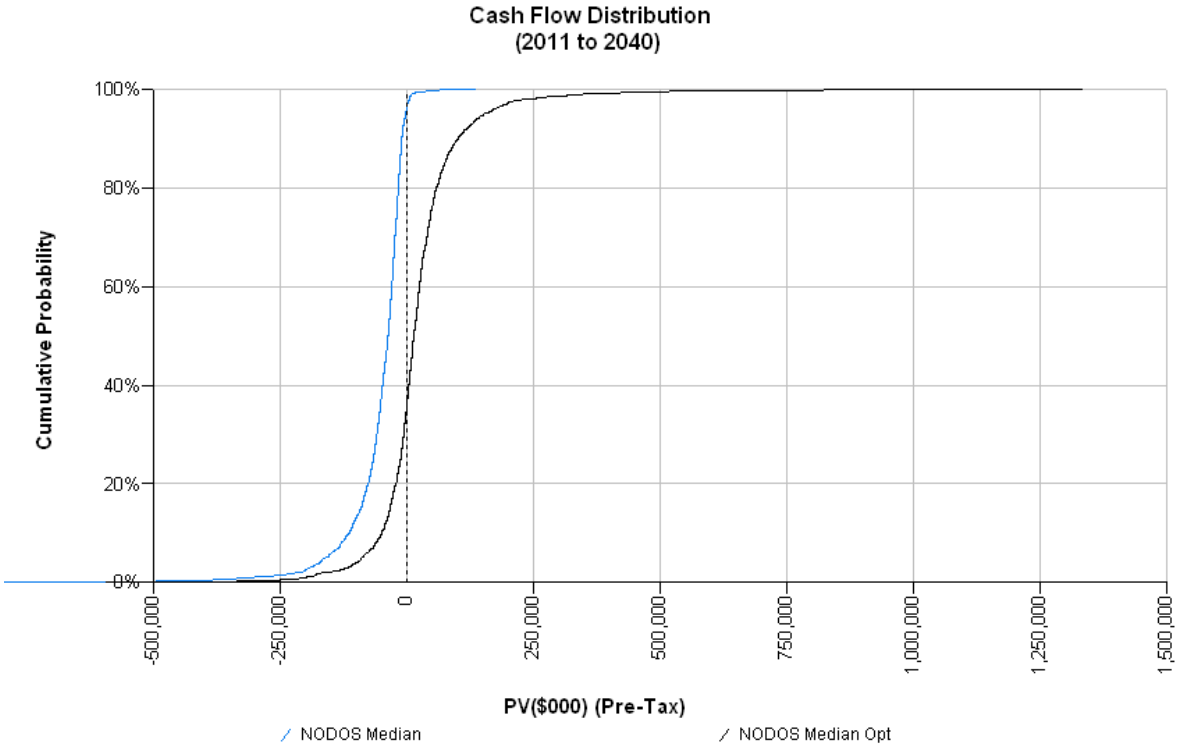

Figure B12- NODOS Project, Power Portfolio Cumulative Probability Distribution, Alt C

"Incidental" vs. "Optimized"

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Appendix C- NODOS Project Power Operations

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NODOS Project- Alternative C -CALSIM Model Run-Median Deliveries, 30-year Planning Period (Cont.)

		Incidental Pumping and Generation to Water Releases (no shaping)							
		Incidental Pumping , MW					Incidental Generation, MW		
		TC Canal	GCID Canal	TRR	Sac River	Sites	Sites	TRR	Sac River
Plant Capacity, MW		6.00	3.39	19.68	65.65	181.35	123.00	9.33	10.80
Plant Capacity, cfs		2250	3000	1890	2000	5900	5100	1500	1500
Month	# of Hours	All Hours					All Hours		
1	744	2.28	0.37	2.73	39.11	118.75	0.00	0.00	0.00
2	672	1.46	0.06	0.00	3.13	44.87	0.00	0.00	0.00
3	744	0.03	0.09	0.00	0.00	0.11	0.05	0.00	0.00
4	720	0.49	2.11	0.00	0.00	0.63	0.37	0.00	0.00
5	744	0.45	2.12	0.00	0.00	0.00	2.52	0.40	0.40
6	720	0.59	1.66	0.00	0.53	0.00	36.39	7.38	6.41
7	744	0.65	1.55	0.00	30.75	0.18	60.89	7.30	0.00
8	744	1.10	2.03	0.00	1.01	0.00	12.45	0.60	4.96
9	720	0.09	0.35	0.00	0.00	0.00	23.79	1.52	9.10
10	744	0.08	0.69	0.00	0.00	0.00	12.94	0.16	5.11
11	720	2.44	1.55	12.30	42.85	151.73	9.86	0.00	0.00
12	744	1.39	0.19	0.00	2.52	41.50	0.02	0.00	0.00
13	744	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00
14	672	0.00	0.06	0.00	0.00	0.00	9.91	0.00	0.00
15	744	0.01	0.09	0.00	0.00	0.09	2.12	0.00	0.00
16	720	0.08	1.87	0.00	0.00	0.81	26.21	0.00	0.00
17	744	0.83	2.25	0.32	0.33	1.53	1.43	0.05	0.00
18	720	0.66	2.70	0.00	8.05	0.00	0.71	1.26	0.07
19	744	1.31	2.35	0.00	0.00	0.00	3.19	1.21	3.96
20	744	1.20	2.81	6.01	2.17	23.49	49.02	0.00	0.31
21	720	0.11	0.39	0.00	0.00	0.00	21.02	1.70	5.27
22	744	0.10	0.41	0.00	0.00	0.00	13.78	2.46	2.36
23	720	0.01	0.30	0.00	0.00	0.00	6.01	1.54	9.11
24	744	0.00	0.08	0.00	0.00	0.00	0.32	0.71	2.00
25	744	0.00	0.13	0.00	2.41	5.12	0.00	0.04	0.00
26	696	2.00	0.49	3.95	29.40	108.94	0.00	0.00	0.00
27	744	0.24	0.10	0.00	2.52	11.82	0.12	0.00	0.00
28	720	0.09	1.95	0.00	0.00	0.86	0.32	0.00	0.00
29	744	0.99	2.20	0.00	0.41	0.88	0.16	0.31	0.00
30	720	0.63	1.93	0.00	7.86	0.00	1.48	5.96	0.00
31	744	0.65	1.53	0.00	0.16	0.00	24.09	7.18	2.93
32	744	1.58	2.76	5.85	2.52	33.19	12.00	0.08	1.01
33	720	0.11	0.37	0.00	0.00	0.00	34.96	1.71	9.09
34	744	0.01	0.39	0.00	0.00	0.00	34.33	2.41	2.74
35	720	0.00	0.31	0.00	0.00	0.00	28.76	1.59	9.11
36	744	0.00	0.15	0.00	0.00	0.00	6.54	1.06	3.97
37	744	0.00	0.13	0.00	0.00	0.00	0.36	0.06	0.20
38	672	0.08	0.09	0.00	0.00	0.02	0.00	0.00	0.00
39	744	2.31	0.37	1.01	5.64	66.64	0.00	0.00	0.56
40	720	0.08	2.46	0.00	0.00	0.00	0.29	0.00	8.07
41	744	0.10	2.26	0.00	0.00	0.00	0.00	0.51	9.07
42	720	0.05	1.65	0.00	0.00	0.00	14.39	7.29	8.00
43	744	0.06	1.39	0.00	0.00	0.00	58.89	7.39	9.10
44	744	0.09	1.89	0.00	0.00	0.00	35.51	0.43	5.36
45	720	0.04	0.58	0.00	0.00	0.00	9.79	0.05	5.68
46	744	0.07	0.76	0.00	0.00	0.00	0.00	0.07	8.31
47	720	0.01	0.52	0.00	0.00	0.00	8.93	0.05	6.11
48	744	0.00	0.27	0.00	0.00	0.00	0.00	0.05	9.06
49	744	0.00	0.08	0.00	0.00	0.00	0.00	0.00	1.42
50	672	0.01	0.08	0.00	0.00	0.00	0.00	0.02	9.10
51	744	0.04	0.11	0.00	0.00	0.00	0.03	0.39	9.00
52	720	0.02	1.12	0.00	0.00	0.00	0.12	7.07	9.05
53	744	0.01	0.73	0.00	0.00	0.00	0.21	5.26	7.61
54	720	0.03	1.14	0.00	0.00	0.00	1.12	7.40	9.11
55	744	0.29	1.36	0.00	0.00	0.00	11.20	4.49	2.76
56	744	0.43	1.30	0.00	2.31	2.02	0.54	0.26	0.00
57	720	0.12	0.35	0.00	0.00	0.05	24.83	0.00	0.00
58	744	0.07	0.56	0.00	0.00	0.02	36.54	0.00	0.00
59	720	0.01	0.32	0.00	0.00	0.01	30.75	0.00	0.00
60	744	1.62	0.75	5.83	9.62	39.96	10.00	0.00	0.00

Table C1- NODOS Project, Power Operations, "Incidental", Alt C

NODOS Project- Alternative C -CALSIM Model Run-Median Deliveries, 30-year Planning Period (Cont.)

		Incidental Pumping and Generation to Water Releases (no shaping)							
		Incidental Pumping , MW					Incidental Generation, MW		
		TC Canal	GCID Canal	TRR	Sac River	Sites	Sites	TRR	Sac River
Plant Capacity, MW		6.00	3.39	19.68	65.65	181.35	123.00	9.33	10.80
Plant Capacity, cfs		2250	3000	1890	2000	5900	5100	1500	1500
Month	# of Hours	All Hours					All Hours		
61	744	2.05	0.30	2.27	32.51	66.47	0.00	0.00	0.00
62	672	2.44	0.47	3.95	44.01	94.21	0.37	0.00	0.00
63	744	2.44	1.76	18.06	44.01	139.51	8.38	0.00	0.00
64	720	2.15	2.67	8.65	0.00	73.77	1.27	0.00	0.00
65	744	2.58	2.86	6.00	1.33	59.19	12.80	0.00	0.00
66	720	0.66	1.67	0.00	34.96	0.29	57.85	7.32	0.00
67	744	0.70	1.55	0.00	36.59	0.26	55.69	7.30	0.00
68	744	1.18	2.01	0.00	0.97	0.00	24.53	0.61	4.70
69	720	0.11	0.35	0.00	0.00	0.00	9.42	1.41	9.07
70	744	0.26	0.76	0.00	0.00	0.00	8.08	0.14	9.11
71	720	0.02	0.46	0.00	0.00	0.00	7.69	0.05	9.08
72	744	0.00	0.27	0.00	0.00	0.00	0.49	0.05	5.07
73	744	2.28	0.24	1.85	36.37	101.85	0.00	0.00	0.00
74	696	1.83	0.31	2.24	21.80	84.98	0.00	0.00	0.00
75	744	2.43	1.44	13.64	13.93	128.23	0.00	0.00	0.00
76	720	0.05	2.77	6.11	0.00	20.69	24.83	0.00	0.00
77	744	0.46	2.14	0.00	0.00	0.31	1.31	0.40	0.36
78	720	0.39	1.66	0.00	0.46	0.00	0.69	7.38	5.82
79	744	0.42	1.50	0.00	24.05	0.02	1.49	7.55	0.00
80	744	0.70	1.29	0.00	0.70	0.00	24.47	5.07	6.56
81	720	0.06	0.34	0.00	0.00	0.00	16.73	1.84	9.07
82	744	0.04	0.41	0.00	0.00	0.00	8.43	2.36	2.42
83	720	0.00	0.25	0.00	0.00	0.00	0.54	1.21	5.86
84	744	0.00	0.15	0.00	0.00	0.00	0.00	0.09	4.70
85	744	2.28	0.27	1.81	38.52	110.89	0.00	0.00	0.15
86	672	2.44	0.47	3.81	27.81	118.63	0.00	0.00	0.00
87	744	0.01	0.10	0.00	0.00	0.08	0.00	0.00	0.00
88	720	0.06	2.00	0.00	0.00	0.65	22.95	0.02	0.00
89	744	0.20	1.89	0.00	0.14	0.00	18.21	0.69	0.00
90	720	0.50	1.62	0.00	2.37	0.00	51.29	7.19	0.18
91	744	1.24	1.78	0.00	0.00	0.00	53.56	5.96	4.41
92	744	1.00	2.03	0.00	0.00	0.00	33.01	0.44	5.38
93	720	0.09	0.36	0.00	0.00	0.00	22.72	1.72	9.08
94	744	0.07	0.43	0.00	0.00	0.00	20.96	2.56	9.00
95	720	0.02	0.33	0.00	0.00	0.00	18.60	1.56	9.10
96	744	0.00	0.18	0.00	0.00	0.00	0.13	0.09	0.83
97	744	2.12	0.37	2.73	33.66	102.75	0.00	0.00	0.00
98	672	2.26	0.49	3.95	38.61	120.06	0.00	0.00	0.00
99	744	2.13	0.28	1.83	3.05	66.87	0.00	0.05	0.00
100	720	0.17	1.77	0.00	1.92	0.31	0.81	0.67	0.44
101	744	0.52	2.02	0.00	0.00	0.00	8.85	0.51	9.10
102	720	0.48	1.57	0.00	0.00	0.00	11.56	7.32	9.07
103	744	0.50	1.48	0.00	25.43	0.00	50.55	7.64	0.05
104	744	0.38	1.00	0.00	0.00	0.00	10.53	5.80	9.11
105	720	0.15	0.54	0.00	0.00	0.00	7.69	0.44	8.86
106	744	0.07	0.69	0.00	0.00	0.01	0.47	0.00	0.69
107	720	0.01	0.32	0.00	0.00	0.01	0.02	0.00	0.00
108	744	1.74	1.16	9.45	24.98	104.10	0.00	0.00	0.00
109	744	2.36	0.37	2.73	41.51	122.79	0.00	0.00	0.00
110	672	1.27	0.06	0.00	3.30	40.30	0.00	0.00	0.00
111	744	0.01	0.07	0.00	0.00	0.06	0.01	0.00	0.00
112	720	0.07	1.41	0.00	0.00	0.49	0.15	0.00	0.00
113	744	0.74	2.28	0.82	0.45	3.38	0.25	0.00	0.00
114	720	0.62	2.78	0.00	8.31	3.58	5.01	0.00	0.00
115	744	1.54	2.79	0.00	0.17	0.00	61.68	0.03	4.53
116	744	1.22	2.07	0.00	0.00	0.00	13.23	0.12	4.81
117	720	0.09	0.38	0.00	0.00	0.00	24.86	1.27	2.75
118	744	0.58	2.08	12.35	2.48	57.67	10.14	0.00	0.19
119	720	0.00	0.24	0.00	0.00	0.00	9.07	0.86	1.32
120	744	0.00	0.20	0.00	1.78	3.96	0.08	0.06	0.04

Table C1- NODOS Project, Power Operations, "Incidental", Alt C (Cont.)

NODOS Project- Alternative C -CALSIM Model Run-Median Deliveries, 30-year Planning Period (Cont.)

		Incidental Pumping and Generation to Water Releases (no shaping)							
		Incidental Pumping , MW					Incidental Generation, MW		
		TC Canal	GCID Canal	TRR	Sac River	Sites	Sites	TRR	Sac River
Plant Capacity, MW		6.00	3.39	19.68	65.65	181.35	123.00	9.33	10.80
Plant Capacity, cfs		2250	3000	1890	2000	5900	5100	1500	1500
Month	# of Hours	All Hours					All Hours		
121	744	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00
122	696	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00
123	744	0.02	0.05	0.00	0.00	0.08	1.70	0.00	0.00
124	720	0.05	1.31	0.00	0.00	0.40	26.04	0.00	0.00
125	744	0.63	2.06	0.00	0.51	0.64	26.32	0.00	0.00
126	720	0.63	2.85	0.00	8.60	0.40	20.96	0.02	0.00
127	744	0.73	2.79	0.00	12.94	5.98	47.01	0.00	0.06
128	744	1.17	2.05	0.00	0.00	0.00	23.16	0.03	4.06
129	720	0.28	1.61	9.01	0.00	27.36	16.57	0.10	0.35
130	744	0.19	0.45	0.00	0.00	0.00	7.31	2.36	1.31
131	720	0.39	0.26	0.00	2.52	14.65	0.36	0.20	0.03
132	744	0.00	0.08	0.00	0.00	0.00	0.00	0.61	0.00
133	744	0.00	0.13	0.00	0.00	0.00	0.00	0.03	0.00
134	672	0.00	0.06	0.00	0.00	0.02	0.00	0.00	0.00
135	744	0.05	0.13	0.00	0.00	0.19	0.00	0.06	0.00
136	720	0.09	2.34	0.00	0.00	0.00	0.00	1.17	0.00
137	744	0.34	2.21	0.00	0.00	0.00	0.58	0.48	0.07
138	720	0.52	1.64	0.00	0.00	0.00	10.08	7.38	2.08
139	744	0.58	1.39	0.00	0.00	0.00	58.38	7.39	9.08
140	744	0.91	1.65	0.00	0.00	0.00	3.47	2.28	9.00
141	720	0.08	0.33	0.00	0.00	0.00	32.00	1.71	9.02
142	744	0.03	0.42	0.00	0.00	0.00	26.50	2.29	9.01
143	720	2.03	1.32	9.80	29.23	111.92	25.39	0.00	0.00
144	744	2.05	1.40	11.39	11.23	102.39	0.00	0.00	0.00
145	744	0.03	0.12	0.00	1.54	4.07	0.00	0.00	0.00
146	672	2.44	0.39	3.37	2.80	77.77	0.00	0.00	0.00
147	744	0.21	0.10	0.00	2.52	10.65	0.04	0.00	0.83
148	720	0.19	2.17	0.00	0.00	0.00	0.90	0.00	9.10
149	744	0.74	2.22	0.00	0.00	0.00	12.56	0.32	9.00
150	720	0.44	1.55	0.00	0.00	0.00	48.11	7.45	9.00
151	744	0.47	1.40	0.00	0.00	0.00	6.27	7.33	9.00
152	744	0.79	2.00	0.00	0.00	0.00	45.16	0.50	9.00
153	720	0.28	0.55	0.00	0.00	0.00	18.63	0.05	9.08
154	744	0.16	0.74	0.00	0.00	0.00	10.04	0.07	6.03
155	720	0.01	0.27	0.00	0.00	0.00	7.02	0.05	6.04
156	744	0.00	0.21	0.00	0.00	0.00	0.40	0.00	0.33
157	744	2.28	0.29	2.40	38.48	98.32	0.00	0.00	0.00
158	672	2.09	0.49	3.95	33.70	101.78	0.00	0.00	0.00
159	744	2.43	1.79	17.87	44.01	164.58	0.02	0.00	0.00
160	720	0.40	2.76	7.08	0.00	35.14	0.10	0.01	0.00
161	744	0.10	1.89	0.00	0.97	0.00	0.12	1.31	0.00
162	720	0.37	1.64	0.00	22.33	0.00	1.07	7.42	0.13
163	744	0.42	1.40	0.00	0.00	0.00	19.12	7.39	9.06
164	744	0.69	2.01	0.00	0.00	0.00	11.44	0.52	8.71
165	720	0.05	0.36	0.00	0.00	0.00	27.67	1.37	9.10
166	744	0.17	0.76	0.00	0.00	0.00	13.82	0.16	5.68
167	720	0.02	0.54	0.00	0.00	0.00	28.63	0.11	9.11
168	744	0.00	0.14	0.00	0.00	0.00	9.69	0.90	4.06
169	744	0.40	0.07	0.00	2.48	12.99	0.00	0.06	0.18
170	696	2.18	0.49	3.95	34.58	107.91	0.00	0.00	0.00
171	744	2.21	1.59	15.14	28.93	142.42	0.07	0.00	0.00
172	720	0.18	2.17	0.00	0.00	0.00	0.84	0.00	9.10
173	744	0.24	2.21	0.00	0.32	0.00	10.58	0.47	9.11
174	720	0.14	1.69	0.00	15.48	0.00	36.58	7.12	0.00
175	744	0.14	1.91	0.00	0.10	0.00	57.37	4.22	9.10
176	744	0.25	2.03	0.00	0.00	0.00	29.93	0.19	9.00
177	720	0.12	0.62	0.00	0.00	0.00	14.59	0.00	9.00
178	744	0.09	0.74	0.00	0.00	0.00	1.20	0.00	9.00
179	720	0.01	0.41	0.00	0.00	0.00	5.18	0.00	9.08
180	744	0.00	0.16	0.00	0.00	0.00	0.27	0.00	5.83

Table C1- NODOS Project, Power Operations, "Incidental", Alt C (Cont.)

NODOS Project- Alternative C -CALSIM Model Run-Median Deliveries, 30-year Planning Period (Cont.)

		Incidental Pumping and Generation to Water Releases (no shaping)							
		Incidental Pumping , MW					Incidental Generation, MW		
		TC Canal	GCID Canal	TRR	Sac River	Sites	Sites	TRR	Sac River
Plant Capacity, MW		6.00	3.39	19.68	65.65	181.35	123.00	9.33	10.80
Plant Capacity, cfs		2250	3000	1890	2000	5900	5100	1500	1500
Month	# of Hours	All Hours					All Hours		
181	744	2.20	0.27	1.81	36.03	96.72	0.00	0.00	0.06
182	672	0.09	0.06	0.00	0.62	3.12	0.00	0.00	0.97
183	744	0.01	0.10	0.00	0.00	0.00	0.06	0.30	9.11
184	720	0.00	1.25	0.00	0.00	0.00	0.31	5.66	8.43
185	744	0.00	1.12	0.00	0.00	0.00	0.46	5.64	7.74
186	720	0.03	1.86	0.00	0.00	0.00	6.87	5.94	9.06
187	744	0.00	2.74	0.00	0.00	0.00	24.34	0.31	9.00
188	744	0.00	2.09	0.00	0.00	0.00	26.02	0.00	9.00
189	720	0.00	0.61	0.00	0.00	0.00	34.04	0.00	9.00
190	744	0.06	0.77	0.00	0.00	0.00	11.53	0.00	9.08
191	720	0.01	0.43	0.00	0.00	0.00	27.28	0.00	5.60
192	744	0.00	0.21	0.00	0.00	0.00	0.00	0.00	4.77
193	744	0.00	0.13	0.00	0.00	0.00	0.00	0.00	1.15
194	672	0.00	0.08	0.00	0.00	0.00	0.00	0.00	9.07
195	744	2.04	1.49	14.25	29.72	84.73	0.08	0.00	0.00
196	720	0.92	2.74	5.74	0.00	30.93	0.82	0.29	0.86
197	744	0.11	1.36	0.00	0.00	0.00	11.40	5.66	9.10
198	720	0.37	2.80	0.00	0.00	0.00	34.49	0.38	9.00
199	744	0.38	2.71	0.00	0.00	0.00	57.44	0.00	9.00
200	744	0.30	1.98	0.00	0.00	0.00	27.13	0.00	9.06
201	720	0.11	0.38	0.00	0.00	0.00	25.02	0.00	5.53
202	744	0.07	0.71	0.00	0.00	0.00	23.24	0.00	5.30
203	720	0.01	0.51	0.00	0.00	0.00	12.76	0.00	0.37
204	744	0.00	0.30	0.00	0.00	0.00	0.60	0.00	0.00
205	744	2.38	0.09	0.46	20.31	50.80	0.00	0.00	0.04
206	672	0.00	0.06	0.00	0.00	0.00	0.00	0.00	6.09
207	744	0.01	0.10	0.00	0.00	0.00	0.60	0.30	0.85
208	720	0.00	1.64	0.00	0.00	0.00	9.95	5.43	7.25
209	744	0.00	1.57	0.00	0.00	0.00	0.00	0.78	4.43
210	720	0.00	1.70	0.00	17.20	0.00	3.11	7.05	0.03
211	744	0.00	2.73	0.00	0.19	0.00	45.31	0.40	2.29
212	744	0.00	1.94	0.00	2.26	2.32	20.78	0.00	0.02
213	720	0.00	0.59	0.00	2.56	2.67	31.82	0.00	0.20
214	744	0.06	0.77	0.00	0.00	0.00	2.29	0.00	3.03
215	720	0.02	0.53	0.00	0.00	0.00	26.26	0.00	0.20
216	744	0.00	0.27	0.00	0.00	0.00	0.00	0.00	0.00
217	744	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00
218	696	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00
219	744	2.43	1.72	17.28	44.01	96.17	0.19	0.00	0.00
220	720	0.08	0.87	0.00	10.30	0.99	0.32	4.75	0.00
221	744	0.05	0.98	0.00	13.69	0.03	3.44	5.57	0.00
222	720	0.06	1.27	0.00	22.13	0.02	55.63	7.41	0.00
223	744	0.09	1.19	0.00	19.13	0.01	54.45	6.89	0.00
224	744	0.50	1.37	0.00	0.31	0.00	11.73	0.43	9.09
225	720	0.08	0.45	0.00	0.00	0.00	8.66	0.00	5.98
226	744	0.08	0.56	0.00	0.00	0.00	0.70	0.00	9.08
227	720	0.02	0.38	0.00	0.00	0.00	3.98	0.00	9.06
228	744	0.00	0.16	0.00	0.00	0.00	0.13	0.00	5.42
229	744	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.34
230	672	1.68	0.40	3.25	20.69	45.79	0.01	0.00	0.00
231	744	2.28	1.33	13.03	20.89	84.23	0.05	0.32	0.00
232	720	0.04	0.95	0.00	1.92	0.00	0.72	4.84	0.18
233	744	0.12	1.42	0.00	0.44	0.00	10.76	2.65	7.32
234	720	0.09	1.21	0.00	19.18	0.01	43.30	6.99	0.00
235	744	0.13	1.18	0.00	21.16	0.00	2.84	6.97	0.00
236	744	0.58	1.40	0.00	0.00	0.00	10.17	0.29	9.11
237	720	0.12	0.45	0.00	0.00	0.00	33.12	0.00	9.00
238	744	0.06	0.52	0.00	0.00	0.00	10.00	0.00	9.05
239	720	0.02	0.38	0.00	0.00	0.00	0.00	0.00	6.81
240	744	0.69	0.12	0.00	2.52	10.43	0.00	0.00	0.47

Table C1- NODOS Project, Power Operations, "Incidental", Alt C (Cont.)

NODOS Project- Alternative C -CALSIM Model Run-Median Deliveries, 30-year Planning Period (Cont.)

		Incidental Pumping and Generation to Water Releases (no shaping)							
		Incidental Pumping , MW					Incidental Generation, MW		
		TC Canal	GCID Canal	TRR	Sac River	Sites	Sites	TRR	Sac River
Plant Capacity, MW		6.00	3.39	19.68	65.65	181.35	123.00	9.33	10.80
Plant Capacity, cfs		2250	3000	1890	2000	5900	5100	1500	1500
Month	# of Hours	All Hours					All Hours		
241	744	1.81	0.25	1.81	26.74	52.44	0.00	0.00	0.00
242	672	1.92	0.35	2.80	29.25	66.46	0.00	0.00	0.00
243	744	2.05	1.53	14.45	32.51	106.44	0.06	0.00	0.00
244	720	2.28	2.80	6.38	0.00	59.97	0.95	0.00	0.00
245	744	2.58	2.87	9.43	0.00	66.00	0.43	0.00	0.00
246	720	2.56	2.80	2.00	44.01	93.44	4.15	0.37	0.00
247	744	0.68	1.60	0.00	32.69	0.14	11.56	7.01	0.00
248	744	1.12	2.03	0.00	0.19	0.00	0.20	0.43	4.06
249	720	0.34	0.63	0.00	0.00	0.00	20.20	0.05	5.40
250	744	0.17	0.74	0.00	0.00	0.00	12.75	0.07	9.11
251	720	0.02	0.44	0.00	0.00	0.00	30.24	0.05	9.10
252	744	0.83	0.24	0.00	2.52	20.73	5.62	0.00	0.90
253	744	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00
254	672	2.44	0.49	3.95	42.65	119.89	0.00	0.00	0.00
255	744	0.03	0.06	0.00	0.00	0.00	0.07	0.33	3.98
256	720	0.06	1.08	0.00	17.08	0.10	1.34	6.18	0.04
257	744	0.20	0.79	0.00	12.36	0.21	1.34	5.03	0.17
258	720	0.37	1.22	0.00	0.00	0.00	18.91	7.47	9.10
259	744	1.08	1.14	0.00	0.00	0.00	39.28	6.38	9.00
260	744	1.06	0.98	0.00	0.00	0.00	1.13	2.81	9.00
261	720	0.33	0.42	0.00	0.00	0.00	33.79	0.16	9.08
262	744	0.13	0.54	0.00	0.00	0.00	11.90	0.00	9.06
263	720	0.01	0.22	0.00	0.00	0.00	28.11	0.00	7.09
264	744	0.00	0.14	0.00	0.00	0.00	0.31	0.00	0.45
265	744	2.43	0.35	2.73	44.01	99.98	0.00	0.00	0.00
266	696	2.44	0.47	3.95	44.01	112.93	0.02	0.00	0.00
267	744	2.20	1.61	15.84	36.81	143.24	0.00	0.00	0.00
268	720	2.27	2.78	6.95	0.00	74.96	18.05	0.00	0.00
269	744	1.36	2.87	9.14	0.42	50.75	26.97	0.00	0.00
270	720	0.57	2.80	0.00	7.66	0.47	33.72	0.00	0.00
271	744	0.71	2.79	0.00	14.90	8.70	2.39	0.00	0.00
272	744	1.20	2.25	1.24	0.59	4.76	8.10	0.00	0.25
273	720	0.37	0.61	0.00	0.00	0.00	9.73	0.18	5.24
274	744	0.10	0.47	0.00	0.00	0.00	19.11	2.42	9.06
275	720	0.03	0.33	0.00	0.00	0.00	15.15	1.64	9.09
276	744	2.05	1.31	11.27	19.16	120.51	19.86	0.00	0.00
277	744	0.00	0.07	0.00	0.00	0.00	0.76	0.00	0.00
278	672	0.00	0.06	0.00	0.00	0.00	0.80	0.00	0.00
279	744	0.02	0.09	0.00	0.00	0.08	12.16	0.00	0.00
280	720	0.37	1.79	0.00	0.00	0.21	29.75	0.00	0.00
281	744	0.45	1.67	0.00	0.36	0.54	5.83	0.01	0.00
282	720	0.63	2.77	0.00	9.40	0.53	0.31	0.79	0.00
283	744	0.82	1.60	0.00	0.33	0.00	0.02	7.09	1.23
284	744	1.21	1.67	0.00	0.00	0.00	0.08	2.73	2.30
285	720	0.10	0.33	0.00	0.00	0.00	0.08	1.85	9.08
286	744	0.02	0.40	0.00	0.00	0.00	0.01	2.44	9.00
287	720	0.01	0.27	0.00	0.00	0.00	0.01	1.34	9.09
288	744	2.20	1.39	12.30	34.39	134.95	0.00	0.00	0.00
289	744	2.44	0.37	2.73	18.72	104.81	0.00	0.00	0.20
290	672	0.00	0.06	0.00	0.00	0.00	0.00	0.00	4.76
291	744	0.41	0.17	0.00	2.41	14.36	0.00	0.00	0.12
292	720	0.37	2.60	0.00	0.00	0.41	0.00	0.02	0.00
293	744	0.35	2.01	0.00	0.00	0.00	0.49	0.52	0.34
294	720	0.41	2.14	0.00	0.00	0.00	6.26	4.46	6.54
295	744	0.48	1.42	0.00	0.00	0.00	59.33	7.20	9.09
296	744	0.75	1.83	0.00	0.00	0.00	12.49	0.92	8.47
297	720	0.07	0.35	0.00	0.00	0.00	10.00	1.60	9.04
298	744	0.05	0.43	0.00	0.00	0.00	13.76	2.50	9.00
299	720	0.01	0.20	0.00	0.00	0.00	24.50	0.94	9.10
300	744	2.43	0.57	3.27	23.77	97.81	9.17	0.00	0.00

Table C1- NODOS Project, Power Operations, "Incidental", Alt C (Cont.)

NODOS Project- Alternative C -CALSIM Model Run-Median Deliveries, 30-year Planning Period (Cont.)

		Incidental Pumping and Generation to Water Releases (no shaping)							
		Incidental Pumping , MW					Incidental Generation, MW		
		TC Canal	GCID Canal	TRR	Sac River	Sites	Sites	TRR	Sac River
Plant Capacity, MW		6.00	3.39	19.68	65.65	181.35	123.00	9.33	10.80
Plant Capacity, cfs		2250	3000	1890	2000	5900	5100	1500	1500
Month	# of Hours	All Hours					All Hours		
301	744	2.35	0.37	2.67	41.51	116.77	0.00	0.00	0.00
302	672	2.44	0.49	3.95	44.01	132.32	0.00	0.00	0.00
303	744	0.05	0.09	0.00	2.52	6.79	0.05	0.00	0.00
304	720	0.04	1.63	0.00	0.00	0.43	0.07	0.00	0.00
305	744	0.12	1.23	0.00	0.44	0.57	3.25	0.00	0.00
306	720	0.56	2.81	0.00	11.35	6.40	56.59	0.00	0.00
307	744	0.74	2.80	0.00	9.88	0.02	4.18	0.00	0.00
308	744	1.23	2.09	0.00	0.00	0.00	19.96	0.03	4.24
309	720	0.34	1.63	9.01	0.00	27.49	17.67	0.15	0.41
310	744	0.05	0.44	0.00	0.00	0.00	9.66	2.32	1.30
311	720	0.46	0.40	0.00	2.59	16.87	9.01	0.19	0.06
312	744	0.00	0.15	0.00	0.00	0.00	0.35	0.94	0.00
313	744	0.00	0.08	0.00	0.00	0.00	0.00	0.05	0.00
314	696	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00
315	744	0.01	0.09	0.00	0.00	0.12	0.07	0.00	0.00
316	720	0.17	1.98	0.55	0.00	2.44	0.83	0.00	0.00
317	744	0.80	2.20	0.00	0.45	0.58	10.90	0.08	0.00
318	720	0.56	2.51	0.00	5.94	0.00	27.20	1.64	0.22
319	744	0.66	1.45	0.00	0.00	0.00	25.47	7.07	9.10
320	744	1.10	1.90	0.00	0.00	0.00	12.09	0.54	5.80
321	720	0.11	0.36	0.00	0.00	0.00	33.38	1.70	9.08
322	744	0.08	0.44	0.00	0.00	0.00	33.47	2.53	9.00
323	720	0.01	0.28	0.00	0.00	0.00	24.74	1.33	9.10
324	744	0.00	0.29	0.00	2.04	3.96	1.42	0.08	0.54
325	744	2.12	0.25	2.02	34.58	101.13	0.00	0.00	0.00
326	672	2.44	0.47	3.81	44.01	128.19	0.00	0.00	0.00
327	744	2.22	0.07	0.00	2.52	62.50	0.00	0.00	0.00
328	720	0.07	1.88	0.00	0.00	0.57	1.59	0.00	0.00
329	744	0.72	1.76	0.00	0.00	0.62	26.42	0.46	0.08
330	720	0.72	1.57	0.00	0.00	0.00	2.41	7.32	1.93
331	744	0.70	1.35	0.00	0.00	0.00	0.99	7.60	9.10
332	744	0.55	1.12	0.00	0.00	0.00	26.88	5.91	8.00
333	720	0.30	0.56	0.00	0.00	0.00	18.20	0.36	5.62
334	744	0.07	0.70	0.00	0.00	0.00	1.03	0.07	9.06
335	720	0.01	0.51	0.00	0.00	0.00	0.03	0.11	9.08
336	744	0.00	0.16	0.00	0.00	0.00	0.00	1.00	3.86
337	744	2.44	0.34	2.40	15.21	84.68	0.00	0.00	0.20
338	672	2.09	0.25	1.68	33.70	100.03	0.00	0.00	0.00
339	744	2.28	1.67	16.46	37.23	156.42	0.04	0.00	0.00
340	720	0.23	1.97	0.00	0.00	0.47	0.15	0.00	7.61
341	744	0.18	2.20	0.00	0.00	0.00	0.18	0.40	9.09
342	720	0.20	1.62	0.00	21.74	0.00	0.21	7.38	0.26
343	744	0.22	1.47	0.00	20.87	0.00	0.50	7.60	0.00
344	744	0.17	0.83	0.00	0.16	0.00	9.80	6.01	9.10
345	720	0.07	0.28	0.00	0.00	0.00	9.92	1.84	9.00
346	744	0.02	0.42	0.00	0.00	0.00	0.00	2.44	9.08
347	720	0.01	0.20	0.00	0.00	0.00	5.08	1.03	4.50
348	744	0.00	0.15	0.00	0.00	0.00	0.14	0.08	4.61
349	744	2.20	0.22	1.36	36.01	100.53	0.00	0.00	0.08
350	672	0.55	0.06	0.00	2.80	18.81	0.00	0.00	0.00
351	744	2.44	0.48	3.54	5.95	79.66	0.02	0.42	0.18
352	720	0.08	1.51	0.00	0.00	0.00	0.14	6.66	3.39
353	744	0.26	1.10	0.00	0.00	0.00	0.15	5.54	8.32
354	720	0.39	1.81	0.00	0.00	0.00	0.36	6.56	8.80
355	744	0.43	1.39	0.00	0.00	0.00	0.67	7.39	9.03
356	744	0.72	1.48	0.00	0.00	0.00	8.98	3.19	9.00
357	720	0.07	0.33	0.00	0.00	0.00	0.26	1.74	9.00
358	744	0.06	0.43	0.00	0.00	0.00	9.34	2.49	9.00
359	720	0.01	0.26	0.00	0.00	0.00	0.17	1.25	9.09
360	744	2.13	1.35	11.80	32.29	100.44	1.74	0.00	0.00

Table C1- NODOS Project, Power Operations, "Incidental", Alt C (Cont.)

NODOS Project- Alternative C -CALSIM Model Run-Median Deliveries, 30-year Planning Period (Cont.)

		Optimized Pumping (for Sites Plant)									
		Incidental Pumping , MW				Optimized Pumping					
		TC Canal	GCID Canal	TRR	Sac River	Sites					
Plant Capacity, MW		6.00	3.39	19.68	65.65	181.35					
Plant Capacity, cfs		2250	3000	1890	2000	MaxQ=5900 cfs					
Month	# of Hours	All Hours				On-Peak, MW	On-Peak, MWh	Off-Peak, MW	Off-Peak, MWh	On-Peak, cfs	Off-Peak, cfs
1	744	2.28	0.37	2.73	39.11	79.00	32924	169.89	55732	2305	5900
2	672	1.46	0.06	0.00	3.13	0.00	0	104.73	30207	0	5900
3	744	0.03	0.09	0.00	0.00	0.00	0	0.00	0	0	0
4	720	0.49	2.11	0.00	0.00	0.00	0	0.00	0	0	0
5	744	0.45	2.12	0.00	0.00	0.00	0	0.00	0	0	0
6	720	0.59	1.66	0.00	0.53	0.00	0	0.00	0	0	0
7	744	0.65	1.55	0.00	30.75	0.00	0	0.00	0	0	0
8	744	1.10	2.03	0.00	1.01	0.00	0	0.00	0	0	0
9	720	0.09	0.35	0.00	0.00	0.00	0	0.00	0	0	0
10	744	0.08	0.69	0.00	0.00	0.00	0	0.00	0	0	0
11	720	2.44	1.55	12.30	42.85	110.00	45589	168.00	63794	3336	5900
12	744	1.39	0.19	0.00	2.52	0.00	0	80.24	30910	0	5680
13	744	0.00	0.08	0.00	0.00	0.00	0	0.00	0	0	0
14	672	0.00	0.06	0.00	0.00	0.00	0	0.00	0	0	0
15	744	0.01	0.09	0.00	0.00	0.00	0	0.00	0	0	0
16	720	0.08	1.87	0.00	0.00	0.00	0	0.00	0	0	0
17	744	0.83	2.25	0.32	0.33	0.00	0	0.00	0	0	0
18	720	0.66	2.70	0.00	8.05	0.00	0	0.00	0	0	0
19	744	1.31	2.35	0.00	0.00	0.00	0	0.00	0	0	0
20	744	1.20	2.81	6.01	2.17	0.00	0	42.96	17481	0	4695
21	720	0.11	0.39	0.00	0.00	0.00	0	0.00	0	0	0
22	744	0.10	0.41	0.00	0.00	0.00	0	0.00	0	0	0
23	720	0.01	0.30	0.00	0.00	0.00	0	0.00	0	0	0
24	744	0.00	0.08	0.00	0.00	0.00	0	0.00	0	0	0
25	744	0.00	0.13	0.00	2.41	0.00	0	0.00	0	0	0
26	696	2.00	0.49	3.95	29.40	27.00	10797	172.65	65326	795	5900
27	744	0.24	0.10	0.00	2.52	0.00	0	24.06	8791	0	3985
28	720	0.09	1.95	0.00	0.00	0.00	0	0.00	0	0	0
29	744	0.99	2.20	0.00	0.41	0.00	0	0.00	0	0	0
30	720	0.63	1.93	0.00	7.86	0.00	0	0.00	0	0	0
31	744	0.65	1.53	0.00	0.16	0.00	0	0.00	0	0	0
32	744	1.58	2.76	5.85	2.52	0.00	0	60.36	24705	0	5308
33	720	0.11	0.37	0.00	0.00	0.00	0	0.00	0	0	0
34	744	0.01	0.39	0.00	0.00	0.00	0	0.00	0	0	0
35	720	0.00	0.31	0.00	0.00	0.00	0	0.00	0	0	0
36	744	0.00	0.15	0.00	0.00	0.00	0	0.00	0	0	0
37	744	0.00	0.13	0.00	0.00	0.00	0	0.00	0	0	0
38	672	0.08	0.09	0.00	0.00	0.00	0	0.00	0	0	0
39	744	2.31	0.37	1.01	5.64	0.00	0	122.47	49721	0	5900
40	720	0.08	2.46	0.00	0.00	0.00	0	0.00	0	0	0
41	744	0.10	2.26	0.00	0.00	0.00	0	0.00	0	0	0
42	720	0.05	1.65	0.00	0.00	0.00	0	0.00	0	0	0
43	744	0.06	1.39	0.00	0.00	0.00	0	0.00	0	0	0
44	744	0.09	1.89	0.00	0.00	0.00	0	0.00	0	0	0
45	720	0.04	0.58	0.00	0.00	0.00	0	0.00	0	0	0
46	744	0.07	0.76	0.00	0.00	0.00	0	0.00	0	0	0
47	720	0.01	0.52	0.00	0.00	0.00	0	0.00	0	0	0
48	744	0.00	0.27	0.00	0.00	0.00	0	0.00	0	0	0
49	744	0.00	0.08	0.00	0.00	0.00	0	0.00	0	0	0
50	672	0.01	0.08	0.00	0.00	0.00	0	0.00	0	0	0
51	744	0.04	0.11	0.00	0.00	0.00	0	0.00	0	0	0
52	720	0.02	1.12	0.00	0.00	0.00	0	0.00	0	0	0
53	744	0.01	0.73	0.00	0.00	0.00	0	0.00	0	0	0
54	720	0.03	1.14	0.00	0.00	0.00	0	0.00	0	0	0
55	744	0.29	1.36	0.00	0.00	0.00	0	0.00	0	0	0
56	744	0.43	1.30	0.00	2.31	0.00	0	0.00	0	0	0
57	720	0.12	0.35	0.00	0.00	0.00	0	0.00	0	0	0
58	744	0.07	0.56	0.00	0.00	0.00	0	0.00	0	0	0
59	720	0.01	0.32	0.00	0.00	0.00	0	0.00	0	0	0
60	744	1.62	0.75	5.83	9.62	0.00	0	69.90	29896	0	5900

Table C2- NODOS Project, Power Operations, "Optimized", Alt C

NODOS Project- Alternative C -CALSIM Model Run-Median Deliveries, 30-year Planning Period (Cont.)

		Optimized Pumping (for Sites Plant)									
		Incidental Pumping , MW				Optimized Pumping					
		TC Canal	GCID Canal	TRR	Sac River	Sites					
Plant Capacity, MW		6.00	3.39	19.68	65.65	181.35					
Plant Capacity, cfs		2250	3000	1890	2000	MaxQ=5900 cfs					
Month	# of Hours	All Hours				On-Peak, MW	On-Peak, MWh	Off-Peak, MW	Off-Peak, MWh	On-Peak, cfs	Off-Peak, cfs
61	744	2.05	0.30	2.27	32.51	10.00	4113	106.95	45669	457	5900
62	672	2.44	0.47	3.95	44.01	34.00	13189	123.00	50360	1412	5900
63	744	2.44	1.76	18.06	44.01	104.00	43177	140.80	60633	3648	5900
64	720	2.15	2.67	8.65	0.00	0.00	0	138.53	53345	0	5900
65	744	2.58	2.86	6.00	1.33	0.00	0	108.93	44142	0	5900
66	720	0.66	1.67	0.00	34.96	0.00	0	0.00	0	0	0
67	744	0.70	1.55	0.00	36.59	0.00	0	0.00	0	0	0
68	744	1.18	2.01	0.00	0.97	0.00	0	0.00	0	0	0
69	720	0.11	0.35	0.00	0.00	0.00	0	0.00	0	0	0
70	744	0.26	0.76	0.00	0.00	0.00	0	0.00	0	0	0
71	720	0.02	0.46	0.00	0.00	0.00	0	0.00	0	0	0
72	744	0.00	0.27	0.00	0.00	0.00	0	0.00	0	0	0
73	744	2.28	0.24	1.85	36.37	20.00	8120	152.22	67971	635	5900
74	696	1.83	0.31	2.24	21.80	0.00	0	143.63	59366	0	5900
75	744	2.43	1.44	13.64	13.93	55.00	23698	172.10	71988	1638	5900
76	720	0.05	2.77	6.11	0.00	0.00	0	40.42	14898	0	4432
77	744	0.46	2.14	0.00	0.00	0.00	0	0.00	0	0	0
78	720	0.39	1.66	0.00	0.46	0.00	0	0.00	0	0	0
79	744	0.42	1.50	0.00	24.05	0.00	0	0.00	0	0	0
80	744	0.70	1.29	0.00	0.70	0.00	0	0.00	0	0	0
81	720	0.06	0.34	0.00	0.00	0.00	0	0.00	0	0	0
82	744	0.04	0.41	0.00	0.00	0.00	0	0.00	0	0	0
83	720	0.00	0.25	0.00	0.00	0.00	0	0.00	0	0	0
84	744	0.00	0.15	0.00	0.00	0.00	0	0.00	0	0	0
85	744	2.28	0.27	1.81	38.52	21.00	8845	163.33	73970	644	5900
86	672	2.44	0.47	3.81	27.81	24.00	9226	173.72	70772	699	5900
87	744	0.01	0.10	0.00	0.00	0.00	0	0.00	0	0	0
88	720	0.06	2.00	0.00	0.00	0.00	0	0.00	0	0	0
89	744	0.20	1.89	0.00	0.14	0.00	0	0.00	0	0	0
90	720	0.50	1.62	0.00	2.37	0.00	0	0.00	0	0	0
91	744	1.24	1.78	0.00	0.00	0.00	0	0.00	0	0	0
92	744	1.00	2.03	0.00	0.00	0.00	0	0.00	0	0	0
93	720	0.09	0.36	0.00	0.00	0.00	0	0.00	0	0	0
94	744	0.07	0.43	0.00	0.00	0.00	0	0.00	0	0	0
95	720	0.02	0.33	0.00	0.00	0.00	0	0.00	0	0	0
96	744	0.00	0.18	0.00	0.00	0.00	0	0.00	0	0	0
97	744	2.12	0.37	2.73	33.66	18.00	7913	158.32	68850	595	5900
98	672	2.26	0.49	3.95	38.61	34.00	13186	167.51	67759	1037	5900
99	744	2.13	0.28	1.83	3.05	0.00	0	119.48	49857	0	5900
100	720	0.17	1.77	0.00	1.92	0.00	0	0.00	0	0	0
101	744	0.52	2.02	0.00	0.00	0.00	0	0.00	0	0	0
102	720	0.48	1.57	0.00	0.00	0.00	0	0.00	0	0	0
103	744	0.50	1.48	0.00	25.43	0.00	0	0.00	0	0	0
104	744	0.38	1.00	0.00	0.00	0.00	0	0.00	0	0	0
105	720	0.15	0.54	0.00	0.00	0.00	0	0.00	0	0	0
106	744	0.07	0.69	0.00	0.00	0.00	0	0.00	0	0	0
107	720	0.01	0.32	0.00	0.00	0.00	0	0.00	0	0	0
108	744	1.74	1.16	9.45	24.98	19.00	7737	157.67	70028	584	5900
109	744	2.36	0.37	2.73	41.51	39.00	17062	170.19	74590	1193	5900
110	672	1.27	0.06	0.00	3.30	0.00	0	65.01	27098	0	4141
111	744	0.01	0.07	0.00	0.00	0.00	0	0.00	0	0	0
112	720	0.07	1.41	0.00	0.00	0.00	0	0.00	0	0	0
113	744	0.74	2.28	0.82	0.45	0.00	0	0.00	0	0	0
114	720	0.62	2.78	0.00	8.31	0.00	0	0.00	0	0	0
115	744	1.54	2.79	0.00	0.17	0.00	0	0.00	0	0	0
116	744	1.22	2.07	0.00	0.00	0.00	0	0.00	0	0	0
117	720	0.09	0.38	0.00	0.00	0.00	0	0.00	0	0	0
118	744	0.58	2.08	12.35	2.48	0.00	0	99.71	42968	0	5900
119	720	0.00	0.24	0.00	0.00	0.00	0	0.00	0	0	0
120	744	0.00	0.20	0.00	1.78	0.00	0	0.00	0	0	0

Table C2- NODOS Project, Power Operations, "Optimized", Alt C (Cont.)

NODOS Project- Alternative C -CALSIM Model Run-Median Deliveries, 30-year Planning Period (Cont.)											
		Optimized Pumping (for Sites Plant)									
		Incidental Pumping , MW				Optimized Pumping					
		TC Canal	GCID Canal	TRR	Sac River	Sites					
Plant Capacity, MW		6.00	3.39	19.68	65.65	181.35					
Plant Capacity, cfs		2250	3000	1890	2000	MaxQ=5900 cfs					
Month	# of Hours	All Hours				On-Peak, MW	On-Peak, MWh	Off-Peak, MW	Off-Peak, MWh	On-Peak, cfs	Off-Peak, cfs
121	744	0.00	0.07	0.00	0.00	0.00	0	0.00	0	0	0
122	696	0.00	0.06	0.00	0.00	0.00	0	0.00	0	0	0
123	744	0.02	0.05	0.00	0.00	0.00	0	0.00	0	0	0
124	720	0.05	1.31	0.00	0.00	0.00	0	0.00	0	0	0
125	744	0.63	2.06	0.00	0.51	0.00	0	0.00	0	0	0
126	720	0.63	2.85	0.00	8.60	0.00	0	0.00	0	0	0
127	744	0.73	2.79	0.00	12.94	0.00	0	0.00	0	0	0
128	744	1.17	2.05	0.00	0.00	0.00	0	0.00	0	0	0
129	720	0.28	1.61	9.01	0.00	0.00	0	48.12	19704	0	4599
130	744	0.19	0.45	0.00	0.00	0.00	0	0.00	0	0	0
131	720	0.39	0.26	0.00	2.52	0.00	0	23.63	10551	0	3028
132	744	0.00	0.08	0.00	0.00	0.00	0	0.00	0	0	0
133	744	0.00	0.13	0.00	0.00	0.00	0	0.00	0	0	0
134	672	0.00	0.06	0.00	0.00	0.00	0	0.00	0	0	0
135	744	0.05	0.13	0.00	0.00	0.00	0	0.00	0	0	0
136	720	0.09	2.34	0.00	0.00	0.00	0	0.00	0	0	0
137	744	0.34	2.21	0.00	0.00	0.00	0	0.00	0	0	0
138	720	0.52	1.64	0.00	0.00	0.00	0	0.00	0	0	0
139	744	0.58	1.39	0.00	0.00	0.00	0	0.00	0	0	0
140	744	0.91	1.65	0.00	0.00	0.00	0	0.00	0	0	0
141	720	0.08	0.33	0.00	0.00	0.00	0	0.00	0	0	0
142	744	0.03	0.42	0.00	0.00	0.00	0	0.00	0	0	0
143	720	2.03	1.32	9.80	29.23	38.00	15959	152.23	64901	1289	5900
144	744	2.05	1.40	11.39	11.23	11.00	4597	162.87	71909	336	5900
145	744	0.03	0.12	0.00	1.54	0.00	0	0.00	0	0	0
146	672	2.44	0.39	3.37	2.80	0.00	0	125.48	52377	0	5900
147	744	0.21	0.10	0.00	2.52	0.00	0	17.85	7924	0	2727
148	720	0.19	2.17	0.00	0.00	0.00	0	0.00	0	0	0
149	744	0.74	2.22	0.00	0.00	0.00	0	0.00	0	0	0
150	720	0.44	1.55	0.00	0.00	0.00	0	0.00	0	0	0
151	744	0.47	1.40	0.00	0.00	0.00	0	0.00	0	0	0
152	744	0.79	2.00	0.00	0.00	0.00	0	0.00	0	0	0
153	720	0.28	0.55	0.00	0.00	0.00	0	0.00	0	0	0
154	744	0.16	0.74	0.00	0.00	0.00	0	0.00	0	0	0
155	720	0.01	0.27	0.00	0.00	0.00	0	0.00	0	0	0
156	744	0.00	0.21	0.00	0.00	0.00	0	0.00	0	0	0
157	744	2.28	0.29	2.40	38.48	15.00	6403	142.61	67053	534	5900
158	672	2.09	0.49	3.95	33.70	12.00	4496	152.64	64183	388	5900
159	744	2.43	1.79	17.87	44.01	114.00	49328	166.67	73136	3521	5900
160	720	0.40	2.76	7.08	0.00	0.00	0	59.05	25310	0	4340
161	744	0.10	1.89	0.00	0.97	0.00	0	0.00	0	0	0
162	720	0.37	1.64	0.00	22.33	0.00	0	0.00	0	0	0
163	744	0.42	1.40	0.00	0.00	0.00	0	0.00	0	0	0
164	744	0.69	2.01	0.00	0.00	0.00	0	0.00	0	0	0
165	720	0.05	0.36	0.00	0.00	0.00	0	0.00	0	0	0
166	744	0.17	0.76	0.00	0.00	0.00	0	0.00	0	0	0
167	720	0.02	0.54	0.00	0.00	0.00	0	0.00	0	0	0
168	744	0.00	0.14	0.00	0.00	0.00	0	0.00	0	0	0
169	744	0.40	0.07	0.00	2.48	0.00	0	21.23	9662	0	2982
170	696	2.18	0.49	3.95	34.58	23.00	9025	157.75	66366	728	5900
171	744	2.21	1.59	15.14	28.93	68.00	28352	169.64	77821	1988	5900
172	720	0.18	2.17	0.00	0.00	0.00	0	0.00	0	0	0
173	744	0.24	2.21	0.00	0.32	0.00	0	0.00	0	0	0
174	720	0.14	1.69	0.00	15.48	0.00	0	0.00	0	0	0
175	744	0.14	1.91	0.00	0.10	0.00	0	0.00	0	0	0
176	744	0.25	2.03	0.00	0.00	0.00	0	0.00	0	0	0
177	720	0.12	0.62	0.00	0.00	0.00	0	0.00	0	0	0
178	744	0.09	0.74	0.00	0.00	0.00	0	0.00	0	0	0
179	720	0.01	0.41	0.00	0.00	0.00	0	0.00	0	0	0
180	744	0.00	0.16	0.00	0.00	0.00	0	0.00	0	0	0

Table C2- NODOS Project, Power Operations, "Optimized", Alt C (Cont.)

NODOS Project- Alternative C -CALSIM Model Run-Median Deliveries, 30-year Planning Period (Cont.)

		Optimized Pumping (for Sites Plant)									
		Incidental Pumping , MW				Optimized Pumping					
		TC Canal	GCID Canal	TRR	Sac River	Sites					
Plant Capacity, MW		6.00	3.39	19.68	65.65	181.35					
Plant Capacity, cfs		2250	3000	1890	2000	MaxQ=5900 cfs					
Month	# of Hours	All Hours				On-Peak, MW	On-Peak, MWh	Off-Peak, MW	Off-Peak, MWh	On-Peak, cfs	Off-Peak, cfs
181	744	2.20	0.27	1.81	36.03	12.00	5037	147.63	67241	406	5900
182	672	0.09	0.06	0.00	0.62	0.00	0	0.00	0	0	0
183	744	0.01	0.10	0.00	0.00	0.00	0	0.00	0	0	0
184	720	0.00	1.25	0.00	0.00	0.00	0	0.00	0	0	0
185	744	0.00	1.12	0.00	0.00	0.00	0	0.00	0	0	0
186	720	0.03	1.86	0.00	0.00	0.00	0	0.00	0	0	0
187	744	0.00	2.74	0.00	0.00	0.00	0	0.00	0	0	0
188	744	0.00	2.09	0.00	0.00	0.00	0	0.00	0	0	0
189	720	0.00	0.61	0.00	0.00	0.00	0	0.00	0	0	0
190	744	0.06	0.77	0.00	0.00	0.00	0	0.00	0	0	0
191	720	0.01	0.43	0.00	0.00	0.00	0	0.00	0	0	0
192	744	0.00	0.21	0.00	0.00	0.00	0	0.00	0	0	0
193	744	0.00	0.13	0.00	0.00	0.00	0	0.00	0	0	0
194	672	0.00	0.08	0.00	0.00	0.00	0	0.00	0	0	0
195	744	2.04	1.49	14.25	29.72	34.00	14349	104.81	48925	1629	5900
196	720	0.92	2.74	5.74	0.00	0.00	0	52.69	22293	0	4927
197	744	0.11	1.36	0.00	0.00	0.00	0	0.00	0	0	0
198	720	0.37	2.80	0.00	0.00	0.00	0	0.00	0	0	0
199	744	0.38	2.71	0.00	0.00	0.00	0	0.00	0	0	0
200	744	0.30	1.98	0.00	0.00	0.00	0	0.00	0	0	0
201	720	0.11	0.38	0.00	0.00	0.00	0	0.00	0	0	0
202	744	0.07	0.71	0.00	0.00	0.00	0	0.00	0	0	0
203	720	0.01	0.51	0.00	0.00	0.00	0	0.00	0	0	0
204	744	0.00	0.30	0.00	0.00	0.00	0	0.00	0	0	0
205	744	2.38	0.09	0.46	20.31	0.00	0	81.44	38034	0	5900
206	672	0.00	0.06	0.00	0.00	0.00	0	0.00	0	0	0
207	744	0.01	0.10	0.00	0.00	0.00	0	0.00	0	0	0
208	720	0.00	1.64	0.00	0.00	0.00	0	0.00	0	0	0
209	744	0.00	1.57	0.00	0.00	0.00	0	0.00	0	0	0
210	720	0.00	1.70	0.00	17.20	0.00	0	0.00	0	0	0
211	744	0.00	2.73	0.00	0.19	0.00	0	0.00	0	0	0
212	744	0.00	1.94	0.00	2.26	0.00	0	0.00	0	0	0
213	720	0.00	0.59	0.00	2.56	0.00	0	0.00	0	0	0
214	744	0.06	0.77	0.00	0.00	0.00	0	0.00	0	0	0
215	720	0.02	0.53	0.00	0.00	0.00	0	0.00	0	0	0
216	744	0.00	0.27	0.00	0.00	0.00	0	0.00	0	0	0
217	744	0.00	0.14	0.00	0.00	0.00	0	0.00	0	0	0
218	696	0.00	0.07	0.00	0.00	0.00	0	0.00	0	0	0
219	744	2.43	1.72	17.28	44.01	63.00	27300	97.79	44276	3321	5900
220	720	0.08	0.87	0.00	10.30	0.00	0	0.00	0	0	0
221	744	0.05	0.98	0.00	13.69	0.00	0	0.00	0	0	0
222	720	0.06	1.27	0.00	22.13	0.00	0	0.00	0	0	0
223	744	0.09	1.19	0.00	19.13	0.00	0	0.00	0	0	0
224	744	0.50	1.37	0.00	0.31	0.00	0	0.00	0	0	0
225	720	0.08	0.45	0.00	0.00	0.00	0	0.00	0	0	0
226	744	0.08	0.56	0.00	0.00	0.00	0	0.00	0	0	0
227	720	0.02	0.38	0.00	0.00	0.00	0	0.00	0	0	0
228	744	0.00	0.16	0.00	0.00	0.00	0	0.00	0	0	0
229	744	0.00	0.06	0.00	0.00	0.00	0	0.00	0	0	0
230	672	1.68	0.40	3.25	20.69	0.00	0	74.99	30949	0	5900
231	744	2.28	1.33	13.03	20.89	30.00	13084	110.82	49858	1404	5900
232	720	0.04	0.95	0.00	1.92	0.00	0	0.00	0	0	0
233	744	0.12	1.42	0.00	0.44	0.00	0	0.00	0	0	0
234	720	0.09	1.21	0.00	19.18	0.00	0	0.00	0	0	0
235	744	0.13	1.18	0.00	21.16	0.00	0	0.00	0	0	0
236	744	0.58	1.40	0.00	0.00	0.00	0	0.00	0	0	0
237	720	0.12	0.45	0.00	0.00	0.00	0	0.00	0	0	0
238	744	0.06	0.52	0.00	0.00	0.00	0	0.00	0	0	0
239	720	0.02	0.38	0.00	0.00	0.00	0	0.00	0	0	0
240	744	0.69	0.12	0.00	2.52	0.00	0	16.90	7764	0	3385

Table C2- NODOS Project, Power Operations, "Optimized", Alt C (Cont.)

		NODOS Project- Alternative C -CALSIM Model Run-Median Deliveries, 30-year Planning Period (Cont.)									
		Optimized Pumping (for Sites Plant)									
		Incidental Pumping , MW				Optimized Pumping					
		TC Canal	GCID Canal	TRR	Sac River	Sites					
Plant Capacity, MW		6.00	3.39	19.68	65.65	181.35					
Plant Capacity, cfs		2250	3000	1890	2000	MaxQ=5900 cfs					
Month	# of Hours	All Hours				On-Peak, MW	On-Peak, MWh	Off-Peak, MW	Off-Peak, MWh	On-Peak, cfs	Off-Peak, cfs
241	744	1.81	0.25	1.81	26.74	0.00	0	85.64	39246	0	5900
242	672	1.92	0.35	2.80	29.25	0.00	0	106.79	44920	0	5900
243	744	2.05	1.53	14.45	32.51	46.00	19305	128.90	60108	1782	5900
244	720	2.28	2.80	6.38	0.00	0.00	0	102.39	43300	0	5900
245	744	2.58	2.87	9.43	0.00	0.00	0	116.26	49260	0	5900
246	720	2.56	2.80	2.00	44.01	7.00	2622	156.90	64975	205	5900
247	744	0.68	1.60	0.00	32.69	0.00	0	0.00	0	0	0
248	744	1.12	2.03	0.00	0.19	0.00	0	0.00	0	0	0
249	720	0.34	0.63	0.00	0.00	0.00	0	0.00	0	0	0
250	744	0.17	0.74	0.00	0.00	0.00	0	0.00	0	0	0
251	720	0.02	0.44	0.00	0.00	0.00	0	0.00	0	0	0
252	744	0.83	0.24	0.00	2.52	0.00	0	33.08	15429	0	3516
253	744	0.00	0.08	0.00	0.00	0.00	0	0.00	0	0	0
254	672	2.44	0.49	3.95	42.65	37.00	14399	157.61	66411	1203	5900
255	744	0.03	0.06	0.00	0.00	0.00	0	0.00	0	0	0
256	720	0.06	1.08	0.00	17.08	0.00	0	0.00	0	0	0
257	744	0.20	0.79	0.00	12.36	0.00	0	0.00	0	0	0
258	720	0.37	1.22	0.00	0.00	0.00	0	0.00	0	0	0
259	744	1.08	1.14	0.00	0.00	0.00	0	0.00	0	0	0
260	744	1.06	0.98	0.00	0.00	0.00	0	0.00	0	0	0
261	720	0.33	0.42	0.00	0.00	0.00	0	0.00	0	0	0
262	744	0.13	0.54	0.00	0.00	0.00	0	0.00	0	0	0
263	720	0.01	0.22	0.00	0.00	0.00	0	0.00	0	0	0
264	744	0.00	0.14	0.00	0.00	0.00	0	0.00	0	0	0
265	744	2.43	0.35	2.73	44.01	32.00	13717	134.70	60951	1211	5900
266	696	2.44	0.47	3.95	44.01	34.00	13163	147.37	65690	1136	5900
267	744	2.20	1.61	15.84	36.81	78.00	33497	160.62	73228	2481	5900
268	720	2.27	2.78	6.95	0.00	0.00	0	126.55	54101	0	5900
269	744	1.36	2.87	9.14	0.42	0.00	0	86.30	37793	0	5633
270	720	0.57	2.80	0.00	7.66	0.00	0	0.00	0	0	0
271	744	0.71	2.79	0.00	14.90	0.00	0	16.02	6471	0	3998
272	744	1.20	2.25	1.24	0.59	0.00	0	0.00	0	0	0
273	720	0.37	0.61	0.00	0.00	0.00	0	0.00	0	0	0
274	744	0.10	0.47	0.00	0.00	0.00	0	0.00	0	0	0
275	720	0.03	0.33	0.00	0.00	0.00	0	0.00	0	0	0
276	744	2.05	1.31	11.27	19.16	28.00	11987	173.34	77976	823	5900
277	744	0.00	0.07	0.00	0.00	0.00	0	0.00	0	0	0
278	672	0.00	0.06	0.00	0.00	0.00	0	0.00	0	0	0
279	744	0.02	0.09	0.00	0.00	0.00	0	0.00	0	0	0
280	720	0.37	1.79	0.00	0.00	0.00	0	0.00	0	0	0
281	744	0.45	1.67	0.00	0.36	0.00	0	0.00	0	0	0
282	720	0.63	2.77	0.00	9.40	0.00	0	0.00	0	0	0
283	744	0.82	1.60	0.00	0.33	0.00	0	0.00	0	0	0
284	744	1.21	1.67	0.00	0.00	0.00	0	0.00	0	0	0
285	720	0.10	0.33	0.00	0.00	0.00	0	0.00	0	0	0
286	744	0.02	0.40	0.00	0.00	0.00	0	0.00	0	0	0
287	720	0.01	0.27	0.00	0.00	0.00	0	0.00	0	0	0
288	744	2.20	1.39	12.30	34.39	64.00	27835	162.93	72784	2032	5900
289	744	2.44	0.37	2.73	18.72	0.00	0	164.67	78249	0	5900
290	672	0.00	0.06	0.00	0.00	0.00	0	0.00	0	0	0
291	744	0.41	0.17	0.00	2.41	0.00	0	23.32	10683	0	2935
292	720	0.37	2.60	0.00	0.00	0.00	0	0.00	0	0	0
293	744	0.35	2.01	0.00	0.00	0.00	0	0.00	0	0	0
294	720	0.41	2.14	0.00	0.00	0.00	0	0.00	0	0	0
295	744	0.48	1.42	0.00	0.00	0.00	0	0.00	0	0	0
296	744	0.75	1.83	0.00	0.00	0.00	0	0.00	0	0	0
297	720	0.07	0.35	0.00	0.00	0.00	0	0.00	0	0	0
298	744	0.05	0.43	0.00	0.00	0.00	0	0.00	0	0	0
299	720	0.01	0.20	0.00	0.00	0.00	0	0.00	0	0	0
300	744	2.43	0.57	3.27	23.77	7.00	3058	151.33	70031	240	5900

Table C2- NODOS Project, Power Operations, "Optimized", Alt C (Cont.)

NODOS Project- Alternative C -CALSIM Model Run-Median Deliveries, 30-year Planning Period (Cont.)

		Optimized Pumping (for Sites Plant)									
		Incidental Pumping , MW				Optimized Pumping					
		TC Canal	GCID Canal	TRR	Sac River	Sites					
Plant Capacity, MW		6.00	3.39	19.68	65.65	181.35					
Plant Capacity, cfs		2250	3000	1890	2000	MaxQ=5900 cfs					
Month	# of Hours	All Hours				On-Peak, MW	On-Peak, MWh	Off-Peak, MW	Off-Peak, MWh	On-Peak, cfs	Off-Peak, cfs
294	720	0.41	2.14	0.00	0.00	0.00	0	0.00	0	0	0
295	744	0.48	1.42	0.00	0.00	0.00	0	0.00	0	0	0
296	744	0.75	1.83	0.00	0.00	0.00	0	0.00	0	0	0
297	720	0.07	0.35	0.00	0.00	0.00	0	0.00	0	0	0
298	744	0.05	0.43	0.00	0.00	0.00	0	0.00	0	0	0
299	720	0.01	0.20	0.00	0.00	0.00	0	0.00	0	0	0
300	744	2.43	0.57	3.27	23.77	7.00	3058	151.33	70031	240	5900
301	744	2.35	0.37	2.67	41.51	29.00	12669	162.28	74506	929	5900
302	672	2.44	0.49	3.95	44.01	40.00	15499	172.58	73664	1183	5900
303	744	0.05	0.09	0.00	2.52	0.00	0	11.15	5049	0	2490
304	720	0.04	1.63	0.00	0.00	0.00	0	0.00	0	0	0
305	744	0.12	1.23	0.00	0.44	0.00	0	0.00	0	0	0
306	720	0.56	2.81	0.00	11.35	0.00	0	11.49	4607	0	3631
307	744	0.74	2.80	0.00	9.88	0.00	0	0.00	0	0	0
308	744	1.23	2.09	0.00	0.00	0.00	0	0.00	0	0	0
309	720	0.34	1.63	9.01	0.00	0.00	0	46.15	19797	0	4496
310	744	0.05	0.44	0.00	0.00	0.00	0	0.00	0	0	0
311	720	0.46	0.40	0.00	2.59	0.00	0	28.13	12148	0	3318
312	744	0.00	0.15	0.00	0.00	0.00	0	0.00	0	0	0
313	744	0.00	0.08	0.00	0.00	0.00	0	0.00	0	0	0
314	696	0.00	0.06	0.00	0.00	0.00	0	0.00	0	0	0
315	744	0.01	0.09	0.00	0.00	0.00	0	0.00	0	0	0
316	720	0.17	1.98	0.55	0.00	0.00	0	0.00	0	0	0
317	744	0.80	2.20	0.00	0.45	0.00	0	0.00	0	0	0
318	720	0.56	2.51	0.00	5.94	0.00	0	0.00	0	0	0
319	744	0.66	1.45	0.00	0.00	0.00	0	0.00	0	0	0
320	744	1.10	1.90	0.00	0.00	0.00	0	0.00	0	0	0
321	720	0.11	0.36	0.00	0.00	0.00	0	0.00	0	0	0
322	744	0.08	0.44	0.00	0.00	0.00	0	0.00	0	0	0
323	720	0.01	0.28	0.00	0.00	0.00	0	0.00	0	0	0
324	744	0.00	0.29	0.00	2.04	0.00	0	0.00	0	0	0
325	744	2.12	0.25	2.02	34.58	9.00	3952	157.91	71608	298	5900
326	672	2.44	0.47	3.81	44.01	41.00	15731	167.78	70659	1235	5900
327	744	2.22	0.07	0.00	2.52	0.00	0	98.16	46553	0	5425
328	720	0.07	1.88	0.00	0.00	0.00	0	0.00	0	0	0
329	744	0.72	1.76	0.00	0.00	0.00	0	0.00	0	0	0
330	720	0.72	1.57	0.00	0.00	0.00	0	0.00	0	0	0
331	744	0.70	1.35	0.00	0.00	0.00	0	0.00	0	0	0
332	744	0.55	1.12	0.00	0.00	0.00	0	0.00	0	0	0
333	720	0.30	0.56	0.00	0.00	0.00	0	0.00	0	0	0
334	744	0.07	0.70	0.00	0.00	0.00	0	0.00	0	0	0
335	720	0.01	0.51	0.00	0.00	0.00	0	0.00	0	0	0
336	744	0.00	0.16	0.00	0.00	0.00	0	0.00	0	0	0
337	744	2.44	0.34	2.40	15.21	0.00	0	134.73	63240	0	5900
338	672	2.09	0.25	1.68	33.70	0.00	0	160.16	67438	0	5900
339	744	2.28	1.67	16.46	37.23	88.00	38029	171.22	78474	2642	5900
340	720	0.23	1.97	0.00	0.00	0.00	0	0.00	0	0	0
341	744	0.18	2.20	0.00	0.00	0.00	0	0.00	0	0	0
342	720	0.20	1.62	0.00	21.74	0.00	0	0.00	0	0	0
343	744	0.22	1.47	0.00	20.87	0.00	0	0.00	0	0	0
344	744	0.17	0.83	0.00	0.16	0.00	0	0.00	0	0	0
345	720	0.07	0.28	0.00	0.00	0.00	0	0.00	0	0	0
346	744	0.02	0.42	0.00	0.00	0.00	0	0.00	0	0	0
347	720	0.01	0.20	0.00	0.00	0.00	0	0.00	0	0	0
348	744	0.00	0.15	0.00	0.00	0.00	0	0.00	0	0	0
349	744	2.20	0.22	1.36	36.01	5.00	2152	155.47	72959	165	5900
350	672	0.55	0.06	0.00	2.80	0.00	0	29.63	12640	0	3312
351	744	2.44	0.48	3.54	5.95	0.00	0	129.66	59419	0	5900
352	720	0.08	1.51	0.00	0.00	0.00	0	0.00	0	0	0
353	744	0.26	1.10	0.00	0.00	0.00	0	0.00	0	0	0
354	720	0.39	1.81	0.00	0.00	0.00	0	0.00	0	0	0
355	744	0.43	1.39	0.00	0.00	0.00	0	0.00	0	0	0
356	744	0.72	1.48	0.00	0.00	0.00	0	0.00	0	0	0
357	720	0.07	0.33	0.00	0.00	0.00	0	0.00	0	0	0
358	744	0.06	0.43	0.00	0.00	0.00	0	0.00	0	0	0
359	720	0.01	0.26	0.00	0.00	0.00	0	0.00	0	0	0
360	744	2.13	1.35	11.80	32.29	43.00	18665	125.96	56310	1763	5900

Table C2- NODOS Project, Power Operations, "Optimized", Alt C (Cont.)

NODOS Project- Alternative C -CALSIM Model Run-Median Deliveries, 30-year Planning Period													
		Optimized Generation (except Sac River)											
		Optimized Genration, MW											
		Sites					TRR						
Plant Capacity, MW		123.00					9.33						
Plant Capacity, cfs		MaxQ=5100 cfs					MaxQ=1500 cfs						
Month	# of Hours	On-Peak, MW	On-Peak, MWh	Off-Peak, MW	On-Peak, cfs	Off-Peak, cfs	On-Peak	On-Peak, MWh	Off-Peak	Off-Peak, MWh	On-Peak, cfs	Off-Peak, cfs
1	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
2	672	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
3	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
4	720	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
5	744	26.47	9818	0.00	1141	0	0.81	300	0.00	0	116	0
6	720	114.95	39777	0.00	5100	0	9.18	3820	4.41	1341	1500	650
7	744	0.00	0	0.00	0	0	9.18	3967	4.17	1301	1500	613
8	744	30.10	9261	0.00	1366	0	1.44	443	0.00	0	207	0
9	720	107.43	28368	0.00	5009	0	4.07	1074	0.00	0	597	0
10	744	37.38	8916	0.00	1771	0	0.49	117	0.00	0	70	0
11	720	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
12	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
13	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
14	672	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
15	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
16	720	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
17	744	0.00	0	0.00	0	0	0.12	36	0.00	0	17	0
18	720	11.70	3508	0.00	503	0	2.99	896	0.00	0	435	0
19	744	36.38	10349	0.00	1579	0	3.13	890	0.00	0	455	0
20	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
21	720	73.73	16890	0.00	3217	0	5.19	1188	0.00	0	772	0
22	744	42.77	10242	0.00	1886	0	7.19	1722	0.00	0	1108	0
23	720	113.26	23951	0.00	5100	0	5.57	1071	0.00	0	833	0
24	744	24.86	4980	0.00	1128	0	2.63	526	0.00	0	381	0
25	744	0.00	0	0.00	0	0	0.15	32	0.00	0	21	0
26	696	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
27	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
28	720	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
29	744	0.00	0	0.00	0	0	0.72	228	0.00	0	104	0
30	720	55.68	15888	0.00	2412	0	9.18	3820	0.51	154	1500	73
31	744	114.37	33872	0.00	5100	0	9.18	3820	4.13	1355	1500	607
32	744	0.00	0	0.00	0	0	0.23	58	0.00	0	32	0
33	720	112.59	27407	0.00	5100	0	5.20	1193	0.00	0	773	0
34	744	47.37	10873	0.00	2179	0	7.33	1683	0.00	0	1133	0
35	720	108.36	22980	0.00	5100	0	5.82	1100	0.00	0	873	0
36	744	44.75	8756	0.00	2133	0	3.95	772	0.00	0	579	0
37	744	0.00	0	0.00	0	0	0.22	45	0.00	0	32	0
38	672	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
39	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
40	720	59.31	15142	0.00	2748	0	0.01	2	0.00	0	1	0
41	744	76.05	23901	0.00	3604	0	1.20	378	0.00	0	173	0
42	720	103.82	30822	0.00	5100	0	9.18	3673	4.46	1428	1500	657
43	744	98.69	35142	0.00	5100	0	9.18	3967	4.40	1373	1500	648
44	744	35.70	8912	0.00	1906	0	1.28	321	0.00	0	185	0
45	720	34.10	8196	0.00	1847	0	0.15	37	0.00	0	22	0
46	744	57.88	13884	0.00	3205	0	0.22	52	0.00	0	31	0
47	720	43.29	8585	0.00	2441	0	0.19	38	0.00	0	27	0
48	744	83.43	16702	0.00	4838	0	0.17	34	0.00	0	25	0
49	744	0.00	0	0.00	0	0	0.01	2	0.00	0	2	0
50	672	84.60	14199	0.00	5100	0	0.10	15	0.00	0	15	0
51	744	81.09	16769	0.00	5100	0	1.58	287	0.00	0	229	0
52	720	75.45	22665	0.00	5100	0	9.18	3820	3.57	1085	1500	522
53	744	68.61	17346	0.00	5078	0	9.18	3640	0.00	0	1500	0
54	720	60.69	19927	0.00	5100	0	9.18	3673	4.75	1519	1500	702
55	744	26.07	7296	0.00	2520	0	9.18	3072	0.00	0	1500	0
56	744	0.00	0	0.00	0	0	0.80	194	0.00	0	115	0
57	720	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
58	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
59	720	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
60	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
61	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
62	672	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
63	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
64	720	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
65	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
66	720	0.00	0	0.00	0	0	9.18	3820	4.26	1295	1500	626
67	744	0.00	0	0.00	0	0	9.18	3967	4.17	1301	1500	613
68	744	33.53	8541	0.00	1588	0	1.77	450	0.00	0	255	0
69	720	104.80	25858	0.00	5100	0	4.25	997	0.00	0	624	0
70	744	97.44	20764	0.00	4885	0	0.49	105	0.00	0	71	0
71	720	98.93	19752	0.00	5100	0	0.20	38	0.00	0	28	0
72	744	39.29	7697	0.00	2053	0	0.17	34	0.00	0	25	0
73	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
74	696	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
75	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
76	720	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
77	744	0.00	0	0.00	0	0	1.11	295	0.00	0	160	0
78	720	116.08	33681	0.00	5100	0	9.18	3820	4.41	1341	1500	650
79	744	12.71	3456	0.00	566	0	9.18	3820	5.09	1671	1500	757
80	744	92.42	23688	0.00	4189	0	9.18	3510	0.00	0	1500	0
81	720	105.93	24806	0.00	4940	0	5.46	1278	0.00	0	815	0
82	744	43.98	9470	0.00	2080	0	7.60	1636	0.00	0	1182	0
83	720	61.83	12134	0.00	2960	0	4.36	856	0.00	0	642	0
84	744	40.16	7744	0.00	1940	0	0.34	65	0.00	0	48	0
85	744	0.00	0	0.00	0	0	0.01	1	0.00	0	1	0
86	672	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
87	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
88	720	0.00	0	0.00	0	0	0.07	14	0.00	0	10	0
89	744	36.08	9464	0.00	1554	0	1.96	513	0.00	0	283	0
90	720	87.47	23404	0.00	3838	0	9.18	3820	3.89	1183	1500	570

Table C3- NODOS Project, Power Operations, "Pumpback", Alt C

NODOS Project- Alternative C -CALSIM Model Run-Median Deliveries, 30-year Planning Period													
		Optimized Generation (except Sac River)											
		Optimized Genration, MW											
		Sites					TRR						
Plant Capacity, MW		123.00					9.33						
Plant Capacity, cfs		MaxQ=5100 cfs					MaxQ=1500 cfs						
Month	# of Hours	On-Peak, MW	On-Peak, MWh	Off-Peak, MW	On-Peak, cfs	Off-Peak, cfs	On-Peak	On-Peak, MWh	Off-Peak	Off-Peak, MWh	On-Peak, cfs	Off-Peak, cfs	
91	744	83.15	22736	0.00	3733	0	9.18	3820	0.92	303	1500	133	
92	744	40.92	10549	0.00	1864	0	1.26	324	0.00	0	181	0	
93	720	109.03	27268	0.00	5100	0	5.24	1204	0.00	0	779	0	
94	744	105.44	27309	0.00	5100	0	7.91	1762	0.00	0	1241	0	
95	720	102.03	22247	0.00	5100	0	5.44	1084	0.00	0	811	0	
96	744	0.00	0	0.00	0	0	0.36	67	0.00	0	51	0	
97	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0	
98	672	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0	
99	744	0.00	0	0.00	0	0	0.18	33	0.00	0	25	0	
100	720	0.00	0	0.00	0	0	2.19	476	0.00	0	317	0	
101	744	99.28	25998	0.00	4321	0	1.43	375	0.00	0	206	0	
102	720	112.81	40225	0.00	5100	0	9.18	3820	4.26	1295	1500	627	
103	744	18.14	5165	0.00	838	0	9.18	3820	5.33	1749	1500	794	
104	744	106.72	36952	0.00	5100	0	9.18	3964	0.00	0	1500	0	
105	720	80.02	18565	0.00	3965	0	1.36	316	0.00	0	196	0	
106	744	0.00	0	0.00	0	0	0.01	2	0.00	0	1	0	
107	720	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0	
108	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0	
109	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0	
110	672	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0	
111	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0	
112	720	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0	
113	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0	
114	720	0.00	0	0.00	0	0	0.00	1	0.00	0	1	0	
115	744	29.13	8322	0.00	1255	0	0.07	19	0.00	0	9	0	
116	744	35.99	9057	0.00	1565	0	0.35	88	0.00	0	50	0	
117	720	34.68	8364	0.00	1523	0	3.72	898	0.00	0	544	0	
118	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0	
119	720	22.52	4280	0.00	967	0	3.20	608	0.00	0	466	0	
120	744	0.00	0	0.00	0	0	0.22	43	0.00	0	31	0	
121	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0	
122	696	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0	
123	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0	
124	720	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0	
125	744	0.00	0	0.00	0	0	0.00	1	0.00	0	1	0	
126	720	0.00	0	0.00	0	0	0.05	14	0.00	0	7	0	
127	744	0.00	0	0.00	0	0	0.01	2	0.00	0	1	0	
128	744	30.78	7768	0.00	1328	0	0.09	24	0.00	0	13	0	
129	720	0.00	0	0.00	0	0	0.31	73	0.00	0	44	0	
130	744	36.97	8095	0.00	1590	0	7.49	1639	0.00	0	1161	0	
131	720	0.00	0	0.00	0	0	0.74	146	0.00	0	107	0	
132	744	0.00	0	0.00	0	0	2.27	451	0.00	0	329	0	
133	744	0.00	0	0.00	0	0	0.13	24	0.00	0	19	0	
134	672	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0	
135	744	0.00	0	0.00	0	0	0.24	47	0.00	0	35	0	
136	720	42.00	8550	0.00	1806	0	4.05	825	0.00	0	595	0	
137	744	35.37	8860	0.00	1533	0	1.43	358	0.00	0	206	0	
138	720	114.97	31383	0.00	5100	0	9.18	3820	4.41	1341	1500	650	
139	744	110.08	43424	0.00	5100	0	9.18	3967	4.42	1380	1500	651	
140	744	105.18	28286	0.00	5100	0	6.15	1624	0.00	0	928	0	
141	720	101.49	26228	0.00	5100	0	4.95	1201	0.00	0	734	0	
142	744	97.90	22678	0.00	5100	0	7.20	1599	0.00	0	1109	0	
143	720	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0	
144	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0	
145	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0	
146	672	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0	
147	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0	
148	720	115.33	22648	0.00	5100	0	0.01	2	0.00	0	1	0	
149	744	102.85	25725	0.00	4649	0	0.95	237	0.00	0	137	0	
150	720	108.36	40709	0.00	5100	0	9.18	3820	4.60	1400	1500	680	
151	744	102.07	39357	0.00	5100	0	9.18	3820	4.53	1486	1500	668	
152	744	84.45	22642	0.00	4429	0	1.38	369	0.00	0	198	0	
153	720	78.32	19242	0.00	4249	0	0.15	37	0.00	0	22	0	
154	744	40.20	8887	0.00	2228	0	0.23	52	0.00	0	34	0	
155	720	43.23	8471	0.00	2433	0	0.18	36	0.00	0	26	0	
156	744	0.00	0	0.00	0	0	0.01	2	0.00	0	1	0	
157	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0	
158	672	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0	
159	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0	
160	720	0.00	0	0.00	0	0	0.04	8	0.00	0	6	0	
161	744	31.99	8081	0.00	1389	0	3.81	962	0.00	0	557	0	
162	720	16.58	4298	0.00	724	0	9.18	3820	4.52	1375	1500	667	
163	744	113.17	41701	0.00	5100	0	9.18	3820	4.67	1532	1500	690	
164	744	73.98	19663	0.00	3446	0	1.44	382	0.00	0	207	0	
165	720	105.13	24772	0.00	5039	0	4.10	966	0.00	0	602	0	
166	744	41.50	9651	0.00	2020	0	0.51	119	0.00	0	73	0	
167	720	101.83	20423	0.00	5071	0	0.39	77	0.00	0	55	0	
168	744	41.48	8087	0.00	2093	0	3.40	663	0.00	0	496	0	
169	744	0.00	0	0.00	0	0	0.22	42	0.00	0	31	0	
170	696	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0	
171	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0	
172	720	115.39	22937	0.00	5091	0	0.01	2	0.00	0	1	0	
173	744	93.27	23388	0.00	4201	0	1.39	349	0.00	0	201	0	
174	720	16.68	4325	0.00	759	0	9.18	3673	4.01	1282	1500	587	
175	744	109.02	34042	0.00	5100	0	9.18	2851	0.00	0	1500	0	
176	744	91.68	23640	0.00	4438	0	0.55	141	0.00	0	79	0	
177	720	87.43	21680	0.00	4355	0	0.01	2	0.00	0	1	0	
178	744	92.81	21708	0.00	4767	0	0.00	0	0.00	0	0	0	
179	720	96.32	19354	0.00	5100	0	0.00	0	0.00	0	0	0	
180	744	42.40	8678	0.00	2282	0	0.00	0	0.00	0	0	0	

Table C3- NODOS Project, Power Operations, "Pumpback", Alt C (Cont.)

NODOS Project- Alternative C -CALSIM Model Run-Median Deliveries, 30-year Planning Period													
		Optimized Generation (except Sac River)											
		Optimized Genration, MW											
		Sites					TRR						
Plant Capacity, MW		123.00					9.33						
Plant Capacity, cfs		MaxQ=5100 cfs					MaxQ=1500 cfs						
Month	# of Hours	On-Peak, MW	On-Peak, MWh	Off-Peak, MW	On-Peak, cfs	Off-Peak, cfs	On-Peak	On-Peak, MWh	Off-Peak	Off-Peak, MWh	On-Peak, cfs	Off-Peak, cfs
181	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
182	672	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
183	744	100.32	19619	0.00	5100	0	1.26	225	0.00	0	181	0
184	720	96.97	23261	0.00	5100	0	9.18	3758	0.00	0	1500	0
185	744	93.13	23270	0.00	5100	0	9.18	3873	0.00	0	1500	0
186	720	88.48	26857	0.00	5100	0	9.18	3673	0.95	303	1500	136
187	744	66.82	18909	0.00	4062	0	0.82	233	0.00	0	118	0
188	744	67.84	17461	0.00	4336	0	0.00	0	0.00	0	0	0
189	720	64.94	15999	0.00	4385	0	0.00	0	0.00	0	0	0
190	744	64.71	14914	0.00	4653	0	0.00	0	0.00	0	0	0
191	720	29.84	5754	0.00	2237	0	0.00	0	0.00	0	0	0
192	744	23.80	4832	0.00	1828	0	0.00	0	0.00	0	0	0
193	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
194	672	62.34	10530	0.00	5100	0	0.00	0	0.00	0	0	0
195	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
196	720	0.00	0	0.00	0	0	1.09	210	0.00	0	157	0
197	744	76.82	22376	0.00	5100	0	9.18	3820	0.14	47	1500	20
198	720	57.92	15592	0.00	4155	0	1.02	273	0.00	0	146	0
199	744	50.86	14430	0.00	3934	0	0.00	0	0.00	0	0	0
200	744	49.13	12700	0.00	4184	0	0.00	0	0.00	0	0	0
201	720	18.46	4611	0.00	1700	0	0.00	0	0.00	0	0	0
202	744	19.15	4294	0.00	1862	0	0.00	0	0.00	0	0	0
203	720	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
204	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
205	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
206	672	33.15	5700	0.00	2584	0	0.00	0	0.00	0	0	0
207	744	0.00	0	0.00	0	0	1.19	224	0.00	0	171	0
208	720	60.15	12885	0.00	5100	0	9.18	3623	0.00	0	1500	0
209	744	18.31	4650	0.00	1683	0	2.26	575	0.00	0	328	0
210	720	0.00	0	0.00	0	0	9.18	3820	3.49	1062	1500	510
211	744	7.76	2125	0.00	747	0	1.08	295	0.00	0	155	0
212	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
213	720	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
214	744	10.53	2361	0.00	1019	0	0.00	0	0.00	0	0	0
215	720	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
216	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
217	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
218	696	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
219	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
220	720	0.00	0	0.00	0	0	9.18	3187	0.00	0	1500	0
221	744	0.00	0	0.00	0	0	9.18	3833	0.00	0	1500	0
222	720	0.00	0	0.00	0	0	9.18	3820	4.50	1369	1500	664
223	744	0.00	0	0.00	0	0	9.18	3820	3.37	1104	1500	491
224	744	52.16	14166	0.00	3726	0	1.18	319	0.00	0	169	0
225	720	25.89	6264	0.00	1937	0	0.00	0	0.00	0	0	0
226	744	58.30	13450	0.00	4648	0	0.00	0	0.00	0	0	0
227	720	57.96	11828	0.00	5100	0	0.00	0	0.00	0	0	0
228	744	22.39	4505	0.00	2132	0	0.00	0	0.00	0	0	0
229	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
230	672	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
231	744	0.00	0	0.00	0	0	1.29	234	0.00	0	185	0
232	720	34.73	6786	0.00	2264	0	9.18	3241	0.00	0	1500	0
233	744	52.31	13170	0.00	3539	0	7.35	1852	0.00	0	1137	0
234	720	0.00	0	0.00	0	0	9.18	3820	3.34	1015	1500	487
235	744	0.00	0	0.00	0	0	9.18	3820	3.57	1171	1500	522
236	744	54.83	14690	0.00	3978	0	0.80	215	0.00	0	115	0
237	720	57.85	13805	0.00	4540	0	0.00	0	0.00	0	0	0
238	744	55.02	12624	0.00	4750	0	0.00	0	0.00	0	0	0
239	720	28.27	5799	0.00	2670	0	0.00	0	0.00	0	0	0
240	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
241	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
242	672	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
243	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
244	720	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
245	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
246	720	0.00	0	0.00	0	0	1.04	268	0.00	0	150	0
247	744	0.00	0	0.00	0	0	9.18	3967	3.36	1048	1500	490
248	744	29.45	7625	0.00	1410	0	1.24	321	0.00	0	178	0
249	720	34.74	8655	0.00	1681	0	0.15	37	0.00	0	21	0
250	744	89.04	20474	0.00	4405	0	0.22	52	0.00	0	32	0
251	720	99.90	19911	0.00	5085	0	0.18	36	0.00	0	26	0
252	744	0.00	0	0.00	0	0	0.01	2	0.00	0	2	0
253	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
254	672	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
255	744	37.91	7301	0.00	1783	0	1.27	245	0.00	0	183	0
256	720	0.00	0	0.00	0	0	9.18	3820	1.11	336	1500	159
257	744	0.00	0	0.00	0	0	9.18	3485	0.00	0	1500	0
258	720	104.33	36480	0.00	5100	0	9.18	3673	4.94	1581	1500	732
259	744	98.74	32606	0.00	5100	0	9.18	3967	1.58	492	1500	227
260	744	94.07	25323	0.00	5100	0	7.51	1957	0.00	0	1166	0
261	720	74.53	18711	0.00	4198	0	0.45	114	0.00	0	65	0
262	744	81.87	18474	0.00	4797	0	0.00	0	0.00	0	0	0
263	720	46.93	9605	0.00	2827	0	0.00	0	0.00	0	0	0
264	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
265	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
266	696	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
267	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
268	720	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
269	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
270	720	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0

Table C3- NODOS Project, Power Operations, "Pumpback", Alt C (Cont.)

NODOS Project- Alternative C -CALSIM Model Run-Median Deliveries, 30-year Planning Period													
		Optimized Generation (except Sac River)											
		Optimized Genration, MW											
		Sites					TRR						
Plant Capacity, MW		123.00					9.33						
Plant Capacity, cfs		MaxQ=5100 cfs					MaxQ=1500 cfs						
Month	# of Hours	On-Peak, MW	On-Peak, MWh	Off-Peak, MW	On-Peak, cfs	Off-Peak, cfs	On-Peak	On-Peak, MWh	Off-Peak	Off-Peak, MWh	On-Peak, cfs	Off-Peak, cfs
271	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
272	744	0.00	0	0.00	0	0	0.01	2	0.00	0	1	0
273	720	39.49	9833	0.00	1699	0	0.51	126	0.00	0	73	0
274	744	115.77	29580	0.00	5100	0	7.53	1681	0.00	0	1168	0
275	720	112.68	25157	0.00	5100	0	5.51	1138	0.00	0	823	0
276	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
277	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
278	672	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
279	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
280	720	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
281	744	0.00	0	0.00	0	0	0.04	10	0.00	0	6	0
282	720	0.00	0	0.00	0	0	2.14	566	0.00	0	309	0
283	744	114.00	31223	0.00	4997	0	9.18	3820	3.87	1271	1500	567
284	744	41.12	11119	0.00	1832	0	7.08	1915	0.00	0	1088	0
285	720	111.58	29405	0.00	5100	0	5.22	1292	0.00	0	776	0
286	744	108.05	27368	0.00	5100	0	7.61	1690	0.00	0	1185	0
287	720	104.87	23057	0.00	5100	0	4.52	940	0.00	0	667	0
288	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
289	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
290	672	44.93	7777	0.00	1930	0	0.00	0	0.00	0	0	0
291	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
292	720	0.00	0	0.00	0	0	0.07	14	0.00	0	10	0
293	744	39.25	9773	0.00	1688	0	1.54	383	0.00	0	222	0
294	720	115.88	30744	0.00	5100	0	9.18	2951	0.00	0	1500	0
295	744	111.21	41959	0.00	5100	0	9.18	3820	4.17	1369	1500	613
296	744	71.02	19229	0.00	3373	0	2.50	677	0.00	0	363	0
297	720	104.21	25922	0.00	5100	0	4.71	1125	0.00	0	697	0
298	744	100.48	26170	0.00	5100	0	7.51	1739	0.00	0	1165	0
299	720	97.04	20826	0.00	5100	0	3.19	666	0.00	0	465	0
300	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
301	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
302	672	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
303	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
304	720	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
305	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
306	720	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
307	744	0.00	0	0.00	0	0	0.00	1	0.00	0	1	0
308	744	30.56	7977	0.00	1318	0	0.09	24	0.00	0	13	0
309	720	0.00	0	0.00	0	0	0.43	107	0.00	0	62	0
310	744	39.67	9216	0.00	1706	0	7.02	1630	0.00	0	1077	0
311	720	0.00	0	0.00	0	0	0.69	139	0.00	0	99	0
312	744	0.00	0	0.00	0	0	3.32	688	0.00	0	484	0
313	744	0.00	0	0.00	0	0	0.18	37	0.00	0	26	0
314	696	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
315	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
316	720	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
317	744	0.00	0	0.00	0	0	0.25	59	0.00	0	35	0
318	720	23.25	6178	0.00	999	0	4.35	1155	0.00	0	640	0
319	744	114.72	44921	0.00	5100	0	9.18	3967	3.53	1100	1500	515
320	744	46.49	12154	0.00	2125	0	1.52	397	0.00	0	219	0
321	720	108.60	28380	0.00	5100	0	4.80	1196	0.00	0	710	0
322	744	104.95	27788	0.00	5100	0	7.52	1754	0.00	0	1168	0
323	720	101.55	21904	0.00	5100	0	4.62	935	0.00	0	681	0
324	744	0.00	0	0.00	0	0	0.29	60	0.00	0	41	0
325	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
326	672	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
327	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
328	720	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
329	744	0.00	0	0.00	0	0	1.42	344	0.00	0	205	0
330	720	114.02	30329	0.00	4975	0	9.18	3820	4.26	1295	1500	626
331	744	111.93	46332	0.00	5100	0	9.18	3967	5.01	1562	1500	743
332	744	106.26	33580	0.00	5100	0	9.18	3820	0.77	254	1500	112
333	720	39.50	9862	0.00	1940	0	1.04	260	0.00	0	150	0
334	744	95.91	21612	0.00	4828	0	0.23	52	0.00	0	33	0
335	720	95.91	20290	0.00	4972	0	0.36	75	0.00	0	51	0
336	744	36.55	7652	0.00	1921	0	3.49	731	0.00	0	510	0
337	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
338	672	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
339	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
340	720	70.99	14394	0.00	3069	0	0.01	2	0.00	0	1	0
341	744	97.37	23550	0.00	4292	0	1.24	300	0.00	0	179	0
342	720	0.00	0	0.00	0	0	9.18	3820	4.41	1341	1500	650
343	744	0.00	0	0.00	0	0	9.18	3967	5.01	1562	1500	743
344	744	110.95	37580	0.00	5100	0	9.18	3820	1.05	345	1500	151
345	720	106.59	27640	0.00	5100	0	5.13	1284	0.00	0	763	0
346	744	103.07	25765	0.00	5100	0	7.50	1696	0.00	0	1164	0
347	720	41.59	8835	0.00	2096	0	3.44	731	0.00	0	502	0
348	744	34.23	7200	0.00	1740	0	0.28	59	0.00	0	40	0
349	744	0.00	0	0.00	0	0	0.00	1	0.00	0	0	0
350	672	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0
351	744	0.00	0	0.00	0	0	1.56	313	0.00	0	226	0
352	720	111.64	23536	0.00	5100	0	9.18	3820	2.42	734	1500	350
353	744	108.17	30984	0.00	5100	0	9.18	3782	0.00	0	1500	0
354	720	103.69	33849	0.00	5100	0	9.18	3820	2.13	647	1500	308
355	744	97.74	37197	0.00	5100	0	9.18	3820	4.67	1533	1500	691
356	744	92.10	26094	0.00	5100	0	8.07	2198	0.00	0	1270	0
357	720	87.78	22203	0.00	5100	0	5.06	1220	0.00	0	752	0
358	744	83.17	21860	0.00	5100	0	7.37	1736	0.00	0	1139	0
359	720	78.59	17399	0.00	5100	0	4.14	883	0.00	0	608	0
360	744	0.00	0	0.00	0	0	0.00	0	0.00	0	0	0

Table C3- NODOS Project, Power Operations, "Pumpback", Alt C (Cont.)

NODOS Project- Alternative C -CALSIM Model Run-Median Deliveries, 30-year Planning Period										
		Pump Back Operations, MW								
		With Pump cycle			With Gen Cycle			Pure Pump Back		
Plant Capacity, MW		123.00			123.00			123.00		
Plant Capacity, cfs		MaxQ=5100 cfs			MaxQ=5100 cfs			MaxQ=5100 cfs		
Month	# of Hours	On-Peak	On-Peak, MWh	PumpBack Q cfs	On-Peak	On-Peak, MWh	PumpBack Q cfs	On-Peak	On-Peak, MWh	PumpBack Q cfs
1	744	0.00	0	0	0.00	0	0	0.00	0	0
2	672	51.61	16049	2226	0.00	0	0	0.00	0	0
3	744	0.00	0	0	0.00	0	0	118.32	35905	5100
4	720	0.00	0	0	0.00	0	0	118.34	34870	5100
5	744	0.00	0	0	91.65	33991	3959	0.00	0	0
6	720	0.00	0	0	0.00	0	0	0.00	0	0
7	744	0.00	0	0	0.00	0	0	112.55	33216	5100
8	744	0.00	0	0	82.05	25251	3734	0.00	0	0
9	720	0.00	0	0	1.96	518	91	0.00	0	0
10	744	0.00	0	0	70.16	16733	3329	0.00	0	0
11	720	0.00	0	0	0.00	0	0	0.00	0	0
12	744	117.71	26633	5100	0.00	0	0	0.00	0	0
13	744	0.00	0	0	0.00	0	0	118.39	24019	5100
14	672	0.00	0	0	0.00	0	0	118.39	17722	5100
15	744	0.00	0	0	0.00	0	0	118.39	23223	5100
16	720	0.00	0	0	0.00	0	0	118.41	27197	5100
17	744	0.00	0	0	0.00	0	0	118.34	36952	5100
18	720	0.00	0	0	106.45	31919	4597	0.00	0	0
19	744	0.00	0	0	81.00	23044	3521	0.00	0	0
20	744	117.06	30336	5100	0.00	0	0	0.00	0	0
21	720	0.00	0	0	43.21	9898	1883	0.00	0	0
22	744	0.00	0	0	72.76	17424	3214	0.00	0	0
23	720	0.00	0	0	0.00	0	0	0.00	0	0
24	744	0.00	0	0	87.23	17476	3972	0.00	0	0
25	744	0.00	0	0	0.00	0	0	111.82	24228	5100
26	696	0.00	0	0	0.00	0	0	0.00	0	0
27	744	118.37	27002	5100	0.00	0	0	0.00	0	0
28	720	0.00	0	0	0.00	0	0	118.40	30783	5100
29	744	0.00	0	0	0.00	0	0	118.24	37268	5100
30	720	0.00	0	0	62.04	17703	2688	0.00	0	0
31	744	0.00	0	0	0.00	0	0	0.00	0	0
32	744	113.64	29327	5100	0.00	0	0	0.00	0	0
33	720	0.00	0	0	0.00	0	0	0.00	0	0
34	744	0.00	0	0	63.44	14561	2921	0.00	0	0
35	720	0.00	0	0	0.00	0	0	0.00	0	0
36	744	0.00	0	0	62.19	12168	2967	0.00	0	0
37	744	0.00	0	0	0.00	0	0	106.12	21699	5100
38	672	0.00	0	0	0.00	0	0	106.12	16857	5100
39	744	64.59	12765	3023	0.00	0	0	0.00	0	0
40	720	0.00	0	0	50.80	12968	2352	0.00	0	0
41	744	0.00	0	0	31.64	9945	1496	0.00	0	0
42	720	0.00	0	0	0.00	0	0	0.00	0	0
43	744	0.00	0	0	0.00	0	0	0.00	0	0
44	744	0.00	0	0	59.76	14918	3194	0.00	0	0
45	720	0.00	0	0	59.96	14411	3253	0.00	0	0
46	744	0.00	0	0	34.29	8226	1895	0.00	0	0
47	720	0.00	0	0	47.15	9352	2659	0.00	0	0
48	744	0.00	0	0	4.54	909	262	0.00	0	0
49	744	0.00	0	0	0.00	0	0	86.32	16425	5100
50	672	0.00	0	0	0.00	0	0	0.00	0	0
51	744	0.00	0	0	0.00	0	0	0.00	0	0
52	720	0.00	0	0	0.00	0	0	0.00	0	0
53	744	0.00	0	0	0.30	75	22	0.00	0	0
54	720	0.00	0	0	0.00	0	0	0.00	0	0
55	744	0.00	0	0	26.69	7470	2580	0.00	0	0
56	744	0.00	0	0	0.00	0	0	51.71	12550	5100
57	720	0.00	0	0	0.00	0	0	51.80	12177	5100
58	744	0.00	0	0	0.00	0	0	51.69	11311	5100
59	720	0.00	0	0	0.00	0	0	51.71	9538	5100
60	744	29.78	5764	2614	0.00	0	0	0.00	0	0
61	744	0.00	0	0	0.00	0	0	0.00	0	0
62	672	0.00	0	0	0.00	0	0	0.00	0	0
63	744	0.00	0	0	0.00	0	0	0.00	0	0
64	720	21.65	4453	1078	0.00	0	0	0.00	0	0
65	744	62.20	15993	2967	0.00	0	0	0.00	0	0
66	720	0.00	0	0	0.00	0	0	108.19	29377	5100
67	744	0.00	0	0	0.00	0	0	107.90	29540	5100
68	744	0.00	0	0	74.02	18855	3512	0.00	0	0
69	720	0.00	0	0	0.00	0	0	0.00	0	0
70	744	0.00	0	0	4.31	918	215	0.00	0	0
71	720	0.00	0	0	0.00	0	0	0.00	0	0
72	744	0.00	0	0	58.24	11408	3047	0.00	0	0
73	744	0.00	0	0	0.00	0	0	0.00	0	0
74	696	37.40	5655	1771	0.00	0	0	0.00	0	0
75	744	0.00	0	0	0.00	0	0	0.00	0	0
76	720	117.98	26279	5100	0.00	0	0	0.00	0	0
77	744	0.00	0	0	0.00	0	0	118.26	31364	5100
78	720	0.00	0	0	0.00	0	0	0.00	0	0
79	744	0.00	0	0	101.38	27565	4534	0.00	0	0
80	744	0.00	0	0	20.16	5168	911	0.00	0	0
81	720	0.00	0	0	3.45	808	160	0.00	0	0
82	744	0.00	0	0	63.77	13731	3020	0.00	0	0
83	720	0.00	0	0	44.73	8779	2140	0.00	0	0
84	744	0.00	0	0	65.31	12594	3160	0.00	0	0
85	744	0.00	0	0	0.00	0	0	0.00	0	0
86	672	0.00	0	0	0.00	0	0	0.00	0	0
87	744	0.00	0	0	0.00	0	0	118.39	22538	5100
88	720	0.00	0	0	0.00	0	0	118.41	23979	5100
89	744	0.00	0	0	82.14	21545	3546	0.00	0	0
90	720	0.00	0	0	28.84	7715	1262	0.00	0	0

Table C3- NODOS Project, Power Operations, "Pumpback", Alt C (Cont.)

NODOS Project- Alternative C -CALSIM Model Run-Median Deliveries, 30-year Planning Period										
		Pump Back Operations, MW								
		With Pump cycle			With Gen Cycle			Pure Pump Back		
Plant Capacity, MW		123.00			123.00			123.00		
Plant Capacity, cfs		MaxQ=5100 cfs			MaxQ=5100 cfs			MaxQ=5100 cfs		
Month	# of Hours	On-Peak	On-Peak, MWh	PumpBack Q cfs	On-Peak	On-Peak, MWh	PumpBack Q cfs	On-Peak	On-Peak, MWh	PumpBack Q cfs
91	744	0.00	0	0	30.53	8348	1367	0.00	0	0
92	744	0.00	0	0	70.97	18295	3236	0.00	0	0
93	720	0.00	0	0	0.00	0	0	0.00	0	0
94	744	0.00	0	0	0.00	0	0	0.00	0	0
95	720	0.00	0	0	0.00	0	0	0.00	0	0
96	744	0.00	0	0	0.00	0	0	100.55	18718	5100
97	744	0.00	0	0	0.00	0	0	0.00	0	0
98	672	0.00	0	0	0.00	0	0	0.00	0	0
99	744	95.41	18075	4152	0.00	0	0	0.00	0	0
100	720	0.00	0	0	0.00	0	0	118.42	25780	5100
101	744	0.00	0	0	17.97	4706	779	0.00	0	0
102	720	0.00	0	0	0.00	0	0	0.00	0	0
103	744	0.00	0	0	91.90	26158	4262	0.00	0	0
104	744	0.00	0	0	0.00	0	0	0.00	0	0
105	720	0.00	0	0	22.98	5333	1135	0.00	0	0
106	744	0.00	0	0	0.00	0	0	101.46	22892	5100
107	720	0.00	0	0	0.00	0	0	101.47	20045	5100
108	744	0.00	0	0	0.00	0	0	0.00	0	0
109	744	0.00	0	0	0.00	0	0	0.00	0	0
110	672	118.01	19007	5100	0.00	0	0	0.00	0	0
111	744	0.00	0	0	0.00	0	0	118.43	21487	5100
112	720	0.00	0	0	0.00	0	0	118.45	24925	5100
113	744	0.00	0	0	0.00	0	0	118.54	29803	5100
114	720	0.00	0	0	0.00	0	0	118.54	31824	5100
115	744	0.00	0	0	89.03	25433	3845	0.00	0	0
116	744	0.00	0	0	81.13	20414	3535	0.00	0	0
117	720	0.00	0	0	81.30	19606	3577	0.00	0	0
118	744	111.02	25316	4826	0.00	0	0	0.00	0	0
119	720	0.00	0	0	96.02	18245	4133	0.00	0	0
120	744	0.00	0	0	0.00	0	0	118.39	23505	5100
121	744	0.00	0	0	0.00	0	0	118.48	22043	5100
122	696	0.00	0	0	0.00	0	0	118.48	18349	5100
123	744	0.00	0	0	0.00	0	0	118.48	22796	5100
124	720	0.00	0	0	0.00	0	0	118.49	25175	5100
125	744	0.00	0	0	0.00	0	0	118.43	30376	5100
126	720	0.00	0	0	0.00	0	0	118.26	31548	5100
127	744	0.00	0	0	0.00	0	0	118.32	33758	5100
128	744	0.00	0	0	87.19	22001	3772	0.00	0	0
129	720	118.12	28386	5100	0.00	0	0	0.00	0	0
130	744	0.00	0	0	81.45	17835	3510	0.00	0	0
131	720	118.46	23255	5100	0.00	0	0	0.00	0	0
132	744	0.00	0	0	0.00	0	0	118.53	23522	5100
133	744	0.00	0	0	0.00	0	0	118.53	22136	5100
134	672	0.00	0	0	0.00	0	0	118.53	18531	5100
135	744	0.00	0	0	0.00	0	0	118.53	22646	5100
136	720	0.00	0	0	76.49	15569	3294	0.00	0	0
137	744	0.00	0	0	82.15	20579	3567	0.00	0	0
138	720	0.00	0	0	0.00	0	0	0.00	0	0
139	744	0.00	0	0	0.00	0	0	0.00	0	0
140	744	0.00	0	0	0.00	0	0	0.00	0	0
141	720	0.00	0	0	0.00	0	0	0.00	0	0
142	744	0.00	0	0	0.00	0	0	0.00	0	0
143	720	0.00	0	0	0.00	0	0	0.00	0	0
144	744	0.00	0	0	0.00	0	0	0.00	0	0
145	744	0.00	0	0	0.00	0	0	111.76	20366	5100
146	672	93.63	14687	4185	0.00	0	0	0.00	0	0
147	744	116.47	21510	5100	0.00	0	0	0.00	0	0
148	720	0.00	0	0	0.00	0	0	0.00	0	0
149	744	0.00	0	0	10.02	2505	451	0.00	0	0
150	720	0.00	0	0	0.00	0	0	0.00	0	0
151	744	0.00	0	0	0.00	0	0	0.00	0	0
152	744	0.00	0	0	12.86	3447	671	0.00	0	0
153	720	0.00	0	0	15.76	3872	851	0.00	0	0
154	744	0.00	0	0	51.78	11447	2872	0.00	0	0
155	720	0.00	0	0	47.39	9286	2667	0.00	0	0
156	744	0.00	0	0	0.00	0	0	89.59	17327	5100
157	744	0.00	0	0	0.00	0	0	0.00	0	0
158	672	0.00	0	0	0.00	0	0	0.00	0	0
159	744	0.00	0	0	0.00	0	0	0.00	0	0
160	720	116.91	23091	5100	0.00	0	0	0.00	0	0
161	744	0.00	0	0	85.31	21551	3711	0.00	0	0
162	720	0.00	0	0	99.92	25898	4376	0.00	0	0
163	744	0.00	0	0	0.00	0	0	0.00	0	0
164	744	0.00	0	0	35.56	9452	1654	0.00	0	0
165	720	0.00	0	0	1.28	302	61	0.00	0	0
166	744	0.00	0	0	63.22	14701	3080	0.00	0	0
167	720	0.00	0	0	0.59	117	29	0.00	0	0
168	744	0.00	0	0	59.55	11609	3007	0.00	0	0
169	744	101.06	19436	5100	0.00	0	0	0.00	0	0
170	696	0.00	0	0	0.00	0	0	0.00	0	0
171	744	0.00	0	0	0.00	0	0	0.00	0	0
172	720	0.00	0	0	0.21	43	9	0.00	0	0
173	744	0.00	0	0	20.02	5019	899	0.00	0	0
174	720	0.00	0	0	95.12	24662	4341	0.00	0	0
175	744	0.00	0	0	0.00	0	0	0.00	0	0
176	744	0.00	0	0	13.74	3542	662	0.00	0	0
177	720	0.00	0	0	15.01	3723	745	0.00	0	0
178	744	0.00	0	0	6.52	1525	333	0.00	0	0
179	720	0.00	0	0	0.00	0	0	0.00	0	0
180	744	0.00	0	0	52.33	10708	2818	0.00	0	0

Table C3- NODOS Project, Power Operations, "Pumpback", Alt C (Cont.)

NODOS Project- Alternative C -CALSIM Model Run-Median Deliveries, 30-year Planning Period										
		Pump Back Operations, MW								
		With Pump cycle			With Gen Cycle			Pure Pump Back		
Plant Capacity, MW		123.00			123.00			123.00		
Plant Capacity, cfs		MaxQ=5100 cfs			MaxQ=5100 cfs			MaxQ=5100 cfs		
Month	# of Hours	On-Peak	On-Peak, MWh	PumpBack Q cfs	On-Peak	On-Peak, MWh	PumpBack Q cfs	On-Peak	On-Peak, MWh	PumpBack Q cfs
181	744	0.00	0	0	0.00	0	0	0.00	0	0
182	672	0.00	0	0	0.00	0	0	101.85	16660	5100
183	744	0.00	0	0	0.00	0	0	0.00	0	0
184	720	0.00	0	0	0.00	0	0	0.00	0	0
185	744	0.00	0	0	0.00	0	0	0.00	0	0
186	720	0.00	0	0	0.00	0	0	0.00	0	0
187	744	0.00	0	0	17.15	4852	1038	0.00	0	0
188	744	0.00	0	0	12.02	3094	764	0.00	0	0
189	720	0.00	0	0	10.65	2625	715	0.00	0	0
190	744	0.00	0	0	6.26	1442	447	0.00	0	0
191	720	0.00	0	0	38.14	7357	2863	0.00	0	0
192	744	0.00	0	0	42.50	8628	3272	0.00	0	0
193	744	0.00	0	0	0.00	0	0	65.02	12235	5100
194	672	0.00	0	0	0.00	0	0	0.00	0	0
195	744	0.00	0	0	0.00	0	0	0.00	0	0
196	720	79.25	15231	5100	0.00	0	0	0.00	0	0
197	744	0.00	0	0	0.00	0	0	0.00	0	0
198	720	0.00	0	0	13.25	3567	945	0.00	0	0
199	744	0.00	0	0	15.15	4297	1166	0.00	0	0
200	744	0.00	0	0	10.82	2797	916	0.00	0	0
201	720	0.00	0	0	36.78	9188	3400	0.00	0	0
202	744	0.00	0	0	33.21	7445	3238	0.00	0	0
203	720	0.00	0	0	0.00	0	0	51.30	10368	5100
204	744	0.00	0	0	0.00	0	0	51.40	10365	5100
205	744	17.27	3270	1464	0.00	0	0	0.00	0	0
206	672	0.00	0	0	32.27	5549	2516	0.00	0	0
207	744	0.00	0	0	0.00	0	0	63.68	11979	5100
208	720	0.00	0	0	0.00	0	0	0.00	0	0
209	744	0.00	0	0	37.06	9412	3417	0.00	0	0
210	720	0.00	0	0	0.00	0	0	53.44	14280	5100
211	744	0.00	0	0	44.83	12279	4353	0.00	0	0
212	744	0.00	0	0	0.00	0	0	52.33	14072	5100
213	720	0.00	0	0	0.00	0	0	53.12	13251	5100
214	744	0.00	0	0	41.90	9398	4081	0.00	0	0
215	720	0.00	0	0	0.00	0	0	51.31	10505	5100
216	744	0.00	0	0	0.00	0	0	51.40	9908	5100
217	744	0.00	0	0	0.00	0	0	51.47	10392	5100
218	696	0.00	0	0	0.00	0	0	51.47	8596	5100
219	744	0.00	0	0	0.00	0	0	0.00	0	0
220	720	0.00	0	0	0.00	0	0	74.29	13652	5100
221	744	0.00	0	0	0.00	0	0	74.22	18465	5100
222	720	0.00	0	0	0.00	0	0	74.05	19938	5100
223	744	0.00	0	0	0.00	0	0	73.82	20281	5100
224	744	0.00	0	0	19.31	5244	1374	0.00	0	0
225	720	0.00	0	0	42.18	10205	3163	0.00	0	0
226	744	0.00	0	0	5.72	1319	452	0.00	0	0
227	720	0.00	0	0	0.00	0	0	0.00	0	0
228	744	0.00	0	0	31.12	6263	2968	0.00	0	0
229	744	0.00	0	0	0.00	0	0	51.68	10410	5100
230	672	25.24	4430	2178	0.00	0	0	0.00	0	0
231	744	0.00	0	0	0.00	0	0	0.00	0	0
232	720	0.00	0	0	43.48	8496	2836	0.00	0	0
233	744	0.00	0	0	23.14	5827	1561	0.00	0	0
234	720	0.00	0	0	0.00	0	0	73.15	18731	5100
235	744	0.00	0	0	0.00	0	0	72.86	20686	5100
236	744	0.00	0	0	15.54	4163	1122	0.00	0	0
237	720	0.00	0	0	7.19	1715	560	0.00	0	0
238	744	0.00	0	0	4.08	937	350	0.00	0	0
239	720	0.00	0	0	25.75	5282	2430	0.00	0	0
240	744	54.87	10762	5100	0.00	0	0	0.00	0	0
241	744	18.22	3630	1457	0.00	0	0	0.00	0	0
242	672	9.33	1571	641	0.00	0	0	0.00	0	0
243	744	0.00	0	0	0.00	0	0	0.00	0	0
244	720	61.66	12334	3363	0.00	0	0	0.00	0	0
245	744	42.02	10327	2171	0.00	0	0	0.00	0	0
246	720	0.00	0	0	0.00	0	0	0.00	0	0
247	744	0.00	0	0	0.00	0	0	106.74	30403	5100
248	744	0.00	0	0	76.89	19906	3690	0.00	0	0
249	720	0.00	0	0	70.51	17567	3419	0.00	0	0
250	744	0.00	0	0	14.12	3246	695	0.00	0	0
251	720	0.00	0	0	0.29	57	15	0.00	0	0
252	744	100.32	20345	5100	0.00	0	0	0.00	0	0
253	744	0.00	0	0	0.00	0	0	100.75	20962	5100
254	672	0.00	0	0	0.00	0	0	0.00	0	0
255	744	0.00	0	0	70.43	13562	3317	0.00	0	0
256	720	0.00	0	0	0.00	0	0	107.50	21604	5100
257	744	0.00	0	0	0.00	0	0	107.39	26099	5100
258	720	0.00	0	0	0.00	0	0	0.00	0	0
259	744	0.00	0	0	0.00	0	0	0.00	0	0
260	744	0.00	0	0	0.00	0	0	0.00	0	0
261	720	0.00	0	0	16.08	4036	902	0.00	0	0
262	744	0.00	0	0	5.21	1175	303	0.00	0	0
263	720	0.00	0	0	37.77	7731	2273	0.00	0	0
264	744	0.00	0	0	0.00	0	0	83.46	17150	5100
265	744	0.00	0	0	0.00	0	0	0.00	0	0
266	696	0.00	0	0	0.00	0	0	0.00	0	0
267	744	0.00	0	0	0.00	0	0	0.00	0	0
268	720	74.13	14680	3311	0.00	0	0	0.00	0	0
269	744	117.66	27733	5100	0.00	0	0	0.00	0	0
270	720	0.00	0	0	0.00	0	0	118.49	31685	5100

Table C3- NODOS Project, Power Operations, "Pumpback", Alt C (Cont.)

NODOS Project- Alternative C -CALSIM Model Run-Median Deliveries, 30-year Planning Period										
		Pump Back Operations, MW								
		With Pump cycle			With Gen Cycle			Pure Pump Back		
Plant Capacity, MW		123.00			123.00			123.00		
Plant Capacity, cfs		MaxQ=5100 cfs			MaxQ=5100 cfs			MaxQ=5100 cfs		
Month	# of Hours	On-Peak	On-Peak, MWh	PumpBack Q cfs	On-Peak	On-Peak, MWh	PumpBack Q cfs	On-Peak	On-Peak, MWh	PumpBack Q cfs
271	744	118.69	32591	5100	0.00	0	0	0.00	0	0
272	744	0.00	0	0	0.00	0	0	118.67	32172	5100
273	720	0.00	0	0	78.95	19656	3401	0.00	0	0
274	744	0.00	0	0	0.00	0	0	0.00	0	0
275	720	0.00	0	0	0.00	0	0	0.00	0	0
276	744	0.00	0	0	0.00	0	0	0.00	0	0
277	744	0.00	0	0	0.00	0	0	118.62	23092	5100
278	672	0.00	0	0	0.00	0	0	118.62	20383	5100
279	744	0.00	0	0	0.00	0	0	118.62	22845	5100
280	720	0.00	0	0	0.00	0	0	118.63	22549	5100
281	744	0.00	0	0	0.00	0	0	118.56	29457	5100
282	720	0.00	0	0	0.00	0	0	118.38	31368	5100
283	744	0.00	0	0	2.36	646	103	0.00	0	0
284	744	0.00	0	0	73.26	19810	3268	0.00	0	0
285	720	0.00	0	0	0.00	0	0	0.00	0	0
286	744	0.00	0	0	0.00	0	0	0.00	0	0
287	720	0.00	0	0	0.00	0	0	0.00	0	0
288	744	0.00	0	0	0.00	0	0	0.00	0	0
289	744	18.69	3804	815	0.00	0	0	0.00	0	0
290	672	0.00	0	0	73.68	12754	3170	0.00	0	0
291	744	118.60	23012	5100	0.00	0	0	0.00	0	0
292	720	0.00	0	0	0.00	0	0	118.64	22677	5100
293	744	0.00	0	0	79.21	19725	3412	0.00	0	0
294	720	0.00	0	0	0.00	0	0	0.00	0	0
295	744	0.00	0	0	0.00	0	0	0.00	0	0
296	744	0.00	0	0	36.44	9866	1727	0.00	0	0
297	720	0.00	0	0	0.00	0	0	0.00	0	0
298	744	0.00	0	0	0.00	0	0	0.00	0	0
299	720	0.00	0	0	0.00	0	0	0.00	0	0
300	744	0.00	0	0	0.00	0	0	0.00	0	0
301	744	0.00	0	0	0.00	0	0	0.00	0	0
302	672	0.00	0	0	0.00	0	0	0.00	0	0
303	744	118.56	22303	5100	0.00	0	0	0.00	0	0
304	720	0.00	0	0	0.00	0	0	118.59	23686	5100
305	744	0.00	0	0	0.00	0	0	118.51	29583	5100
306	720	118.67	30302	5100	0.00	0	0	0.00	0	0
307	744	0.00	0	0	0.00	0	0	118.41	33734	5100
308	744	0.00	0	0	87.49	22840	3782	0.00	0	0
309	720	118.20	29401	5100	0.00	0	0	0.00	0	0
310	744	0.00	0	0	78.78	18303	3394	0.00	0	0
311	720	118.28	23845	5100	0.00	0	0	0.00	0	0
312	744	0.00	0	0	0.00	0	0	118.56	24576	5100
313	744	0.00	0	0	0.00	0	0	118.51	24408	5100
314	696	0.00	0	0	0.00	0	0	118.51	20799	5100
315	744	0.00	0	0	0.00	0	0	118.51	22455	5100
316	720	0.00	0	0	0.00	0	0	118.63	23824	5100
317	744	0.00	0	0	0.00	0	0	118.54	28545	5100
318	720	0.00	0	0	95.21	25295	4101	0.00	0	0
319	744	0.00	0	0	0.00	0	0	0.00	0	0
320	744	0.00	0	0	65.03	16998	2975	0.00	0	0
321	720	0.00	0	0	0.00	0	0	0.00	0	0
322	744	0.00	0	0	0.00	0	0	0.00	0	0
323	720	0.00	0	0	0.00	0	0	0.00	0	0
324	744	0.00	0	0	0.00	0	0	100.35	20908	5100
325	744	0.00	0	0	0.00	0	0	0.00	0	0
326	672	0.00	0	0	0.00	0	0	0.00	0	0
327	744	117.26	23227	5100	0.00	0	0	0.00	0	0
328	720	0.00	0	0	0.00	0	0	118.71	23956	5100
329	744	0.00	0	0	0.00	0	0	118.60	28621	5100
330	720	0.00	0	0	2.87	764	125	0.00	0	0
331	744	0.00	0	0	0.00	0	0	0.00	0	0
332	744	0.00	0	0	0.00	0	0	0.00	0	0
333	720	0.00	0	0	64.27	16047	3160	0.00	0	0
334	744	0.00	0	0	5.44	1226	272	0.00	0	0
335	720	0.00	0	0	2.49	526	128	0.00	0	0
336	744	0.00	0	0	60.40	12644	3179	0.00	0	0
337	744	27.64	5544	1408	0.00	0	0	0.00	0	0
338	672	0.00	0	0	0.00	0	0	0.00	0	0
339	744	0.00	0	0	0.00	0	0	0.00	0	0
340	720	0.00	0	0	47.04	9537	2031	0.00	0	0
341	744	0.00	0	0	18.39	4448	808	0.00	0	0
342	720	0.00	0	0	0.00	0	0	114.08	30382	5100
343	744	0.00	0	0	0.00	0	0	113.78	31287	5100
344	744	0.00	0	0	0.00	0	0	0.00	0	0
345	720	0.00	0	0	0.00	0	0	0.00	0	0
346	744	0.00	0	0	0.00	0	0	0.00	0	0
347	720	0.00	0	0	59.57	12654	3004	0.00	0	0
348	744	0.00	0	0	65.97	13876	3360	0.00	0	0
349	744	0.00	0	0	0.00	0	0	0.00	0	0
350	672	107.78	20088	5100	0.00	0	0	0.00	0	0
351	744	65.83	13198	3012	0.00	0	0	0.00	0	0
352	720	0.00	0	0	0.00	0	0	0.00	0	0
353	744	0.00	0	0	0.00	0	0	0.00	0	0
354	720	0.00	0	0	0.00	0	0	0.00	0	0
355	744	0.00	0	0	0.00	0	0	0.00	0	0
356	744	0.00	0	0	0.00	0	0	0.00	0	0
357	720	0.00	0	0	0.00	0	0	0.00	0	0
358	744	0.00	0	0	0.00	0	0	0.00	0	0
359	720	0.00	0	0	0.00	0	0	0.00	0	0
360	744	0.00	0	0	0.00	0	0	0.00	0	0

Table C3- NODOS Project, Power Operations, "Pumpback", Alt C (Cont.)