RESOLUTION NO. R 90-

WHEREAS, the City of Conway, Arkansas owns its electric system; and,

WHEREAS, the Conway Corporation, a non-profit corporation, operates the electric system owned by the City of Conway under a lease and franchise agreement; and,

WHEREAS, the Conway Corporation has conducted a preliminary economic and feasibility assessment study of a tri-partied agreement among the Corps of Engineers, Southwestern Power Administration, and the City of Conway/Conway Corporation to sponsor the Bull Shoals Uprate Project, said study having indicated that the project would be in the best interest of the citizens of Conway, Arkansas; and,

WHEREAS, by said agreement the City of Conway would provide financing for the project, the Corps of Engineers would own, operate and maintain the project, and the Southwestern Power Administration would receive the output of the project into their grid system and deliver to the Arkansas Power & Light transmission system to the credit of the Conway Corporation, an adjusted amount of firm capacity and accompanying energy.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF CONWAY, ARKANSAS:

1. That the City of Conway, as owners of the electric system, as a preferenced customer of SWPA, does herewith seek sponsorship of the Bull Shoals Uprate Project.

2. The Conway Corporation is herewith empowered and designated to act for and in behalf of the City of Conway in all matters regarding this project.

PASSED: Oct 9th, 1990.

APPROVED: David D. Kinley
Mayor

ATTEST:
Martha Hartwick
City Clerk-Treasurer

STEWART NOLAND, P.E.
CONSULTING ENGINEER

5210 SHERWOOD ROAD LITTLE ROCK, ARKANSAS 72207
(501) 661-9228

October 5, 1990

Mr. James H. Brewer
General Manager
Conway Corporation
P.O. Box 99
Conway, AR 72032

Re: Bull Shoals Uprate Project

Dear Mr. Brewer:

In response to your request, this letter report summarizes my preliminary economic assessment of the Bull Shoals Uprate Project as a potential electric generation resource. The Conway Corporation anticipates continued growth in its electric system such that it will need significant amounts of additional generating capacity. The Conway Corporation load and resource forecast shows that it will need approximately 32, 95, and 123 megawatts (MW) of additional capacity by the years 1995, 2000, and 2005, respectively. The Bull Shoals Uprate Project could provide an alternative to meeting a portion these additional requirements.

BACKGROUND

Bull Shoals Dam is one element of the Corps of Engineers' comprehensive plan for the White River Basin. Bull Shoals Dam includes a powerhouse and eight hydroelectric turbine generators with an aggregate nameplate generating capacity of 340 MW. As a result of a generator rewind project conducted at Bull Shoals from 1978-1983, there is an opportunity to uprate its turbines to increase its generating capacity.

According to preliminary information prepared by the Corps, approximately 20 MW of additional capacity could be developed by replacing four of the eight turbines. The work associated with the Bull Shoals Uprate Project would include removing four existing turbines, and furnishing and installing new, uprated turbines.

The Corps of Engineers and the Southwestern Power Administration (SWPA) have adopted policies whereby non-federal entities may sponsor development of additional hydroelectric facilities at existing federal hydropower projects. The Little Rock District Corps of Engineers has

indicated it would consider a non-federal proposal for the Bull Shoals Uprate Project. This assessment assumes the Conway Corporation, as non-federal sponsor, would provide 100 percent of the funds required for the construction, operation and maintenance of the Bull Shoals Uprate Project. In return, the Conway Corporation would receive an allocation of firm power and associated firm energy from the SWPA.

According to the Corps, approximately 20 MW (17 MW after accounting for SWPA system reserves and transmission losses) of additional capacity could be available as a result of the Project. It is assumed that 1200 megawatthours (MWH) of firm energy per MW of capacity also will be allocated to the Project sponsor. If satisfactory transmission arrangements can be made, the Conway Corporation would expect SWPA to deliver the allocated power and energy to the Arkansas Power and Light Company (AP&L) transmission system for ultimate delivery to the Conway Corporation.

PROJECT COST ESTIMATES

The construction cost estimates utilized in this analysis were prepared by the Corps and include engineering, design, construction, construction supervision and administration, and contingencies. Estimated direct construction costs for the Bull Shoals Uprate Project are shown on the following table.

Estimated Construction Costs
Bull Shoals Uprate Project
(1990 $ x 1000)

Turbine Construction	$ 6,100
Engineering, Design, Supervision, & Administration	982
Contingency	915
Total Estimated Construction Cost	$ 7,997

Operation and maintenance costs are based on estimates provided by SWPA, and are representative of what existing SWPA customers pay for operation and maintenance. Estimated operation and maintenance costs for the anticipated 17 MW, 20,400 MWH Project are $315,302 (1990 dollars).

ECONOMIC ANALYSIS

The Conway Corporation owns 66.74 MW of capacity in the Independence and White Bluff coal-fired projects. It purchases its additional electric requirements from AP&L under both a peaking power agreement and a formula rate agreement. The Conway Corporation has forecasted the anticipated AP&L capacity and energy costs under both of

these agreements. The anticipated costs of capacity and energy from the Bull Shoals Uprate Project are compared to the forecasted cost of both AP&L peaking and formula rate costs for capacity and energy in this economic analysis.

AP&L formula rate capacity costs are estimated at $10.66 per kilowatt (KW) per month in 1991 and are assumed to escalate at 2 percent per year. Formula rate purchases are increased by 25 percent to account for reserves in accordance with the Conway/AP&L contract. AP&L formula rate energy costs are estimated at $.013959 per kilowatthour (KWH) in 1991, and are assumed to escalate at 2 percent per year.

Conway's peaking agreement with AP&L extends through April 1996. However, the peaking agreement is assumed to be available through the term of the economic analysis. AP&L peaking capacity costs will be $2.0425 per KW per month in 1991 and are assumed to escalate at 3 percent per year. AP&L peaking agreement energy costs will be $0.0464 per KWH in 1991 and are assumed to escalate at 3 percent per year.

In preparing the economic analysis, it is assumed the commercial operation date of the Bull Shoals Uprate Project will be January 1, 1995. The Corps' estimated construction cost for the Project is $7,997,000 in 1990 dollars. This estimate is escalated to 1994 (mid-point of construction) dollars at the rate of 4.5 percent per year. Operation and maintenance costs are also escalated at 4.5 percent per year.

According to its financial advisors, the Conway Corporation anticipates utilizing a 7.25 percent, 30-year, tax-exempt bond issue to finance the Project. Including an allowance for bond insurance and bond issuance costs, the total estimated financing requirements are $9,900,000. No allowances for capitalized interest or debt service reserve are included as these items can be funded from internally generated funds and existing reserves, according to Conway Corporation personnel.

Based on this financing requirement, the estimated production costs for the Bull Shoals Uprate Project (17 MW; 20,400 MWH) are shown on Tables 1 and 2. Table 1 includes the estimated costs of purchasing AP&L formula rate capacity and energy, and the annual savings in production costs from the Bull Shoals Uprate Project as compared to AP&L formula rate purchases.

Based on the specific assumptions used in this analysis, Table 1 results indicate the Bull Shoals Uprate Project will be more economical than formula rate purchases from AP&L beginning in its first year of operation. Furthermore, the Project shows potential cumulative savings of over $83 million over the 30 year financing period.

Table 2 includes the estimated costs of purchasing AP&L peaking power agreement capacity and energy, and the estimated annual savings and cumulative savings in production costs from the Project as compared to AP&L peaking agreement purchases.

Based on the specific assumptions used in this analysis, Table 2 results indicate the Bull Shoals Uprate Project will be more economical than peaking power purchases from AP&L beginning in its first year of operation. The Project shows potential cumulative savings of over $28 million over the 30 year financing period.

SUMMARY AND CONCLUSIONS

This letter report provides a preliminary economic assessment of the Bull Shoals Uprate Project when comparing the estimated costs of power and energy from the Project to anticipated costs of power and energy purchased from AP&L's formula and peaking agreement rates.

Based on discussions with the Corps, the Corps would consider the Conway Corporation sponsoring the development of the Bull Shoals Uprate Project. As Project sponsor, the Conway Corporation would anticipate receiving an allocation of 17 MW of firm capacity along with 20,400 MWH of firm energy from SWPA.

Using estimated construction costs provided by the Corps, estimated AP&L power and energy costs provided by the Conway Corporation, and financing assumptions provided by Conway Corporation's financial advisor, Bull Shoals Uprate Project production costs were compared to capacity and energy that might otherwise be purchased from AP&L.

Based on the assumptions used in this analysis, the Project offers economic benefits in its first year of operation when compared to AP&L formula rate purchases, and a potential for cumulative savings of over $83 million over the 30 year financing period. When compared to AP&L peaking agreement purchases, the Project also results in annual savings during the first year of operation, and total potential cumulative savings of over $28 million over the 30 year financing period. Additional economic benefits could accrue after the 30 year financing period, as shown on Tables 1 and 2.

Based on the results of these analyses, it appears the Bull Shoals Uprate Project could provide economic benefits to the Conway Corporation when compared either to AP&L formula rate or peaking power purchases.

The results of these analyses are strongly influenced by the various assumptions stated herein and summarized in the

Appendix. The validity and reasonableness of these assumptions deserve further consideration, which can be provided during future Project evaluation efforts.

Notwithstanding this need for additional evaluation, it is recommended the Conway Corporation consider submitting a development and financing proposal to the Corps and SWPA to serve as the non-federal sponsor for the renewable energy resource Bull Shoals Uprate Project.

Yours truly,

Stewart Noland

Stewart Noland

cc: W. M. Hegeman

Appendix

The following assumptions were made as a part of this Bull Shoals Uprate Project preliminary economic assessment.

1. Conway Corporation load forecasts for additional generating capacity are reasonable.

2. Corps of Engineers estimates of additional capacity available as a result of the Project are reasonable.

3. Corps of Engineers Project construction cost estimates are reasonable.

4. Construction costs will escalate at 4.5 percent per year.

5. Southwestern Power Administration operation and maintenance cost estimates are reasonable.

6. Operation and maintenance costs will escalate at 4.5 percent per year.

7. Conway Corporation forecasts of Arkansas Power and Light (AP&L) formula rate and peaking power agreement costs for capacity and energy are reasonable.

8. AP&L formula rate capacity and energy costs will escalate at 2 percent per year.

9. AP&L peaking power agreement capacity and energy costs will escalate at 3 percent per year.

10. Tax-exempt, 7.25 percent, 30-year bonds can be used to finance the Project.

11. Capitalized interest and debt service reserve will be funded from Conway Corporation internally generated funds and existing reserves.

TABLE 1

BULL SHOALS PROJECT
17.0 MW FIRM CAPACITY
20.4 GWH

10.66
0.013959
2.00%
4.50%
17000
20400000

YEAR	PRESENT CONTRACT AP&L ANNUAL COST CAPACITY	ENERGY	ANNUAL COST	CUMULATIVE COST	BULL SHOALS HYDRO-STUDY COSTS O & M COST	DEBT SERVICE	ANNUAL COST	ANNUAL (COST) SAVING	CUMULATIVE COST	CUMULATIVE SAVINGS (COST)
1991	$2,718,300	$284,764	$3,003,064							
1992	$2,772,666	$290,459	$3,063,125							
1993	$2,828,119	$296,268	$3,124,387							
1994	$2,884,682	$302,193	$3,186,875							
1995	$2,942,375	$308,237	$3,250,613	$3,250,613	$392,924	$817,934	$1,210,858	$2,549,451	$1,210,858	$2,039,754
1996	$3,001,350	$314,402	$3,315,752	$6,566,365	$410,606	$817,934	$1,228,540	$2,590,744	$2,439,398	$4,126,967
1997	$3,061,377	$320,690	$3,382,067	$9,948,432	$429,083	$817,934	$1,247,017	$2,632,294	$3,686,415	$6,262,017
1998	$3,122,605	$327,104	$3,449,708	$13,398,140	$448,392	$817,934	$1,266,326	$2,674,213	$4,952,741	$8,445,399
1999	$3,185,057	$333,646	$3,518,703	$16,916,843	$468,569	$817,934	$1,286,503	$2,716,487	$6,239,244	$10,677,598
2000	$3,248,758	$340,319	$3,589,077	$20,505,919	$489,655	$817,934	$1,307,589	$2,759,103	$7,546,833	$12,959,086
2001	$3,313,733	$347,125	$3,660,858	$24,166,777	$511,689	$817,934	$1,329,623	$2,802,044	$8,876,457	$15,290,321
2002	$3,380,008	$354,068	$3,734,075	$27,900,853	$534,715	$817,934	$1,352,650	$2,845,292	$10,229,106	$17,671,746
2003	$3,447,608	$361,149	$3,808,757	$31,709,610	$558,777	$817,934	$1,376,712	$2,888,830	$11,605,818	$20,103,792
2004	$3,516,560	$368,372	$3,884,932	$35,594,542	$583,922	$817,934	$1,401,857	$2,932,637	$13,007,675	$22,586,867
2005	$3,586,891	$375,740	$3,962,631	$39,557,172	$610,199	$817,934	$1,428,133	$2,976,692	$14,435,808	$25,121,364
2006	$3,658,629	$383,254	$4,041,883	$43,599,055	$637,658	$817,934	$1,455,592	$3,020,971	$15,891,400	$27,707,655
2007	$3,731,801	$390,919	$4,122,721	$47,721,776	$666,353	$817,934	$1,484,287	$3,065,449	$17,375,687	$30,346,090
2008	$3,806,438	$398,738	$4,205,175	$51,926,952	$696,338	$817,934	$1,514,273	$3,110,099	$18,889,959	$33,036,992
2009	$3,882,566	$406,713	$4,289,279	$56,216,230	$727,674	$817,934	$1,545,608	$3,154,893	$20,435,567	$35,780,663
2010	$3,960,218	$414,847	$4,375,064	$60,591,295	$760,419	$817,934	$1,578,353	$3,199,799	$22,013,920	$38,577,374
2011	$4,039,422	$423,144	$4,462,566	$65,053,860	$794,638	$817,934	$1,612,572	$3,244,784	$23,626,492	$41,427,368
2012	$4,120,210	$431,607	$4,551,817	$69,605,677	$830,396	$817,934	$1,648,331	$3,289,814	$25,274,823	$44,330,854
2013	$4,202,615	$440,239	$4,642,853	$74,248,531	$867,764	$817,934	$1,685,699	$3,334,850	$26,960,522	$47,288,009
2014	$4,286,667	$449,044	$4,735,710	$78,984,241	$906,814	$817,934	$1,724,748	$3,379,853	$28,685,269	$50,298,972
2015	$4,372,400	$458,024	$4,830,425	$83,814,666	$947,620	$817,934	$1,765,555	$3,424,780	$30,450,824	$53,363,842
2016	$4,459,848	$467,185	$4,927,033	$88,741,699	$990,263	$817,934	$1,808,197	$3,469,585	$32,259,022	$56,482,677
2017	$4,549,045	$476,529	$5,025,574	$93,767,273	$1,034,825	$817,934	$1,852,759	$3,514,220	$34,111,781	$59,655,492
2018	$4,640,026	$486,059	$5,126,085	$98,893,358	$1,081,392	$817,934	$1,899,326	$3,558,634	$36,011,107	$62,882,251
2019	$4,732,827	$495,780	$5,228,607	$104,121,965	$1,130,055	$817,934	$1,947,989	$3,602,772	$37,959,096	$66,162,868
2020	$4,827,483	$505,696	$5,333,179	$109,455,144	$1,180,907	$817,934	$1,998,842	$3,646,576	$39,957,938	$69,497,206
2021	$4,924,033	$515,810	$5,439,843	$114,894,986	$1,234,048	$817,934	$2,051,982	$3,689,985	$42,009,920	$72,885,066
2022	$5,022,513	$526,126	$5,548,640	$120,443,626	$1,289,580	$817,934	$2,107,515	$3,732,933	$44,117,435	$76,326,191
2023	$5,122,964	$536,649	$5,659,612	$126,103,238	$1,347,611	$817,934	$2,165,546	$3,775,352	$46,282,981	$79,820,258
2024	$5,225,423	$547,382	$5,772,805	$131,876,043	$1,408,254	$817,934	$2,226,188	$3,817,169	$48,509,169	$83,366,874
2025	$5,329,931	$558,329	$5,888,261	$137,764,303	$1,471,625		$1,471,625	$3,858,306	$49,980,794	$87,783,509
2026	$5,436,530	$569,496	$6,006,026	$143,770,329	$1,537,849		$1,537,849	$3,898,682	$51,518,643	$92,251,687
2027	$5,545,261	$580,886	$6,126,146	$149,896,476	$1,607,052		$1,607,052	$3,938,209	$53,125,694	$96,770,781
2028	$5,656,166	$592,503	$6,248,669	$156,145,145	$1,679,369		$1,679,369	$3,976,797	$54,805,063	$101,340,082
2029	$5,769,289	$604,353	$6,373,643	$162,518,788	$1,754,941		$1,754,941	$4,014,349	$56,560,004	$105,958,784
2030	$5,884,675	$616,441	$6,501,116	$169,019,903	$1,833,913		$1,833,913	$4,050,762	$58,393,917	$110,625,986
2031	$6,002,369	$628,769	$6,631,138	$175,651,041	$1,916,439		$1,916,439	$4,085,929	$60,310,356	$115,340,685
2032	$6,122,416	$641,345	$6,763,761	$182,414,801	$2,002,679		$2,002,679	$4,119,737	$62,313,035	$120,101,767
2033	$6,244,864	$654,172	$6,899,036	$189,313,837	$2,092,799		$2,092,799	$4,152,065	$64,405,834	$124,908,003
2034	$6,369,761	$667,255	$7,037,017	$196,350,854	$2,186,975		$2,186,975	$4,182,786	$66,592,810	$129,758,044
2035	$6,497,157	$680,600	$7,177,757	$203,528,611	$2,285,389		$2,285,389	$4,211,767	$68,878,199	$134,650,412

2036	$6,627,100	$694,212	$7,321,312	$210,849,923	$2,388,232	$2,388,232	$4,238,868	$71,266,430	$139,583,492
2037	$6,759,642	$708,096	$7,467,738	$218,317,661	$2,495,702	$2,495,702	$4,263,940	$73,762,133	$144,555,528
2038	$6,894,835	$722,258	$7,617,093	$225,934,754	$2,608,009	$2,608,009	$4,286,826	$76,370,141	$149,564,612
2039	$7,032,731	$736,703	$7,769,435	$233,704,189	$2,725,369	$2,725,369	$4,307,362	$79,095,511	$154,608,678
2040	$7,173,386	$751,438	$7,924,824	$241,629,012	$2,848,011	$2,848,011	$4,325,375	$81,943,521	$159,685,491
2041	$7,316,854	$766,466	$8,083,320	$249,712,332	$2,976,171	$2,976,171	$4,340,682	$84,919,693	$164,792,640
2042	$7,463,191	$781,796	$8,244,986	$257,957,319	$3,110,099	$3,110,099	$4,353,092	$88,029,792	$169,927,527

TABLE 2

BULL SHOALS PROJECT
17.0 MW FIRM CAPACITY
20.4 GWH

2.0425
0.0464
3.00%
4.50%
17000
20400000

YEAR	PEAKING CONTRACT AP&L ANNUAL COST CAPACITY	ENERGY	ANNUAL COST	CUMULATIVE COST	BULL SHOALS HYDRO-STUDY COSTS O & M COST	DEBT SERVICE	ANNUAL COST	ANNUAL (COST) SAVING	CUMULATIVE COST	CUMULATIVE SAVINGS (COST)
1991	$416,670	$946,560	$1,363,230							
1992	$501,330	$974,957	$1,476,287							
1993	$516,370	$1,004,206	$1,520,575							
1994	$531,861	$1,034,332	$1,566,193							
1995	$547,817	$1,065,362	$1,613,178	$1,613,178	$392,924	$817,934	$1,210,858	$402,320	$1,210,858	$402,320
1996	$564,251	$1,097,322	$1,661,574	$3,274,752	$410,606	$817,934	$1,228,540	$433,034	$2,439,398	$835,354
1997	$581,179	$1,130,242	$1,711,421	$4,986,173	$429,083	$817,934	$1,247,017	$464,404	$3,686,415	$1,299,758
1998	$598,614	$1,164,149	$1,762,764	$6,748,937	$448,392	$817,934	$1,266,326	$496,438	$4,952,741	$1,796,196
1999	$616,573	$1,199,074	$1,815,647	$8,564,583	$468,569	$817,934	$1,286,503	$529,143	$6,239,244	$2,325,339
2000	$635,070	$1,235,046	$1,870,116	$10,434,699	$489,655	$817,934	$1,307,589	$562,527	$7,546,833	$2,887,866
2001	$654,122	$1,272,097	$1,926,219	$12,360,919	$511,689	$817,934	$1,329,623	$596,596	$8,876,457	$3,484,462
2002	$673,746	$1,310,260	$1,984,006	$14,344,925	$534,715	$817,934	$1,352,650	$631,357	$10,229,106	$4,115,819
2003	$693,958	$1,349,568	$2,043,526	$16,388,451	$558,777	$817,934	$1,376,712	$666,815	$11,605,818	$4,782,633
2004	$714,777	$1,390,055	$2,104,832	$18,493,283	$583,922	$817,934	$1,401,857	$702,975	$13,007,675	$5,485,608
2005	$736,220	$1,431,757	$2,167,977	$20,661,260	$610,199	$817,934	$1,428,133	$739,844	$14,435,808	$6,225,452
2006	$758,307	$1,474,710	$2,233,016	$22,894,276	$637,658	$817,934	$1,455,592	$777,424	$15,891,400	$7,002,876
2007	$781,056	$1,518,951	$2,300,007	$25,194,283	$666,353	$817,934	$1,484,287	$815,720	$17,375,687	$7,818,596
2008	$804,487	$1,564,519	$2,369,007	$27,563,290	$696,338	$817,934	$1,514,273	$854,734	$18,889,959	$8,673,331
2009	$828,622	$1,611,455	$2,440,077	$30,003,367	$727,674	$817,934	$1,545,608	$894,469	$20,435,567	$9,567,800
2010	$853,481	$1,659,799	$2,513,279	$32,516,646	$760,419	$817,934	$1,578,353	$934,926	$22,013,920	$10,502,726
2011	$879,085	$1,709,593	$2,588,678	$35,105,324	$794,638	$817,934	$1,612,572	$976,106	$23,626,492	$11,478,832
2012	$905,458	$1,760,880	$2,666,338	$37,771,662	$830,396	$817,934	$1,648,331	$1,018,007	$25,274,823	$12,496,839
2013	$932,621	$1,813,707	$2,746,328	$40,517,991	$867,764	$817,934	$1,685,699	$1,060,630	$26,960,522	$13,557,469
2014	$960,600	$1,868,118	$2,828,718	$43,346,709	$906,814	$817,934	$1,724,748	$1,103,970	$28,685,269	$14,661,439
2015	$989,418	$1,924,162	$2,913,580	$46,260,289	$947,620	$817,934	$1,765,555	$1,148,025	$30,450,824	$15,809,465
2016	$1,019,101	$1,981,886	$3,000,987	$49,261,276	$990,263	$817,934	$1,808,197	$1,192,790	$32,259,022	$17,002,254
2017	$1,049,674	$2,041,343	$3,091,017	$52,352,293	$1,034,825	$817,934	$1,852,759	$1,238,257	$34,111,781	$18,240,512
2018	$1,081,164	$2,102,583	$3,183,747	$55,536,040	$1,081,392	$817,934	$1,899,326	$1,284,421	$36,011,107	$19,524,932
2019	$1,113,599	$2,165,661	$3,279,260	$58,815,299	$1,130,055	$817,934	$1,947,989	$1,331,271	$37,959,096	$20,856,203
2020	$1,147,007	$2,230,631	$3,377,637	$62,192,937	$1,180,907	$817,934	$1,998,842	$1,378,796	$39,957,938	$22,234,999
2021	$1,181,417	$2,297,550	$3,478,967	$65,671,903	$1,234,048	$817,934	$2,051,982	$1,426,984	$42,009,920	$23,661,983
2022	$1,216,859	$2,366,476	$3,583,336	$69,255,239	$1,289,580	$817,934	$2,107,515	$1,475,821	$44,117,435	$25,137,804
2023	$1,253,365	$2,437,470	$3,690,836	$72,946,075	$1,347,611	$817,934	$2,165,546	$1,525,290	$46,282,981	$26,663,094
2024	$1,290,966	$2,510,594	$3,801,561	$76,747,635	$1,408,254	$817,934	$2,226,188	$1,575,372	$48,509,169	$28,238,466
2025	$1,329,695	$2,585,912	$3,915,608	$80,663,243	$1,471,625		$1,471,625	$2,443,982	$49,980,794	$30,682,449
2026	$1,369,586	$2,663,490	$4,033,076	$84,696,318	$1,537,849		$1,537,849	$2,495,227	$51,518,643	$33,177,676
2027	$1,410,674	$2,743,394	$4,154,068	$88,850,386	$1,607,052		$1,607,052	$2,547,016	$53,125,694	$35,724,692
2028	$1,452,994	$2,825,696	$4,278,690	$93,129,076	$1,679,369		$1,679,369	$2,599,321	$54,805,063	$38,324,013
2029	$1,496,584	$2,910,467	$4,407,051	$97,536,127	$1,754,941		$1,754,941	$2,652,110	$56,560,004	$40,976,123
2030	$1,541,481	$2,997,781	$4,539,262	$102,075,389	$1,833,913		$1,833,913	$2,705,349	$58,393,917	$43,681,472
2031	$1,587,726	$3,087,714	$4,675,440	$106,750,830	$1,916,439		$1,916,439	$2,759,001	$60,310,356	$46,440,474
2032	$1,635,357	$3,180,346	$4,815,703	$111,566,533	$2,002,679		$2,002,679	$2,813,025	$62,313,035	$49,253,498
2033	$1,684,418	$3,275,756	$4,960,174	$116,526,707	$2,092,799		$2,092,799	$2,867,375	$64,405,834	$52,120,873
2034	$1,734,951	$3,374,029	$5,108,980	$121,635,687	$2,186,975		$2,186,975	$2,922,004	$66,592,810	$55,042,878
2035	$1,786,999	$3,475,250	$5,262,249	$126,897,936	$2,285,389		$2,285,389	$2,976,860	$68,878,199	$58,019,737

2036	$1,840,609	$3,579,507	$5,420,117	$132,318,053	$	$2,388,232	$2,388,232	$3,031,885	$71,266,430	$61,051,622
2037	$1,895,827	$3,686,893	$5,582,720	$137,900,773	$	$2,495,702	$2,495,702	$3,087,018	$73,762,133	$64,138,640
2038	$1,952,702	$3,797,499	$5,750,202	$143,650,974	$	$2,608,009	$2,608,009	$3,142,193	$76,370,141	$67,280,833
2039	$2,011,283	$3,911,424	$5,922,708	$149,573,682	$	$2,725,369	$2,725,369	$3,197,339	$79,095,511	$70,478,171
2040	$2,071,622	$4,028,767	$6,100,389	$155,674,071	$	$2,848,011	$2,848,011	$3,252,378	$81,943,521	$73,730,550
2041	$2,133,770	$4,149,630	$6,283,401	$161,957,471	$	$2,976,171	$2,976,171	$3,307,229	$84,919,693	$77,037,779
2042	$2,197,784	$4,274,119	$6,471,903	$168,429,374	$	$3,110,099	$3,110,099	$3,361,804	$88,029,792	$80,399,582