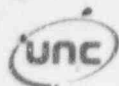


# UNITED NUCLEAR CORPORATION

40-8907



1720 Louisiana N.E.  
Suite 400

Albuquerque, New Mexico 87110  
Telephone 505/262-1800  
Fax 505/262-1809

U.S. Nuclear Regulatory Commission  
Mr. Joseph J. Hollonich, Chief  
Uranium Recovery Branch MS-T-7J9  
Division of Waste Management  
Office of Nuclear Materials Safety and Safeguards  
11545 Rockville Pike  
Rockville, MD 20853

January 30, 1997

Re: Site Reclamation Expenditures  
Quarterly Analysis - fourth quarter, 1996  
License Amendment Request SUA-1475

Dear Mr. Hollonich:

With this letter United Nuclear submits its quarterly analysis of reclamation costs as required in license condition No. 25 of our License SUA-1475 for the Church Rock site. This analysis is for the fourth quarter of 1996. With this letter, we also request adjustment of the surety amount currently required in our license of \$3,220,000 plus retainment of the \$2 million Letter of Credit on behalf of the U.S. Environmental Protection Agency to \$2,195,652 and a release of the Letter of Credit, as discussed in more detail later herein.

## FOURTH QUARTER 1996 COSTS

The costs incurred for tailings reclamation in the fourth quarter of 1996 totalled \$142,761. They were incurred in the areas of seepage cleanup actions and reclamation activities. The majority of the costs incurred during the fourth quarter reflect the continued operation of the seepage cleanup program and the cost of documenting the construction activities undertaken for surface reclamation in 1996.

### Seepage Cleanup

The costs incurred in the fourth quarter of 1996 for seepage cleanup activities totalled \$107,813 as follows;

#### Seepage Collection

electrical power	\$ 3714
equipment & supplies	\$ 2784
personnel	\$ 35395

#### Monitoring

sample analysis	\$ 26605
supplies	\$ 115
shipping	\$ 104

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Performance Review                      \$ 39096

### **Tailings Reclamation**

The costs incurred in the fourth quarter of 1996 for tailings reclamation activities totalled \$34,948 as follows;

<u>Construction Control &amp; Verification</u>	
personnel	\$ 20604
radiological monitoring	\$ 3490
geotech testing	\$ 678
materials & supplies	\$ 10176

Table I, attached, provides a comparison of actual vs. projected 1996 reclamation costs on a quarterly basis. We presented the projected costs in our letter of March 30, 1996 in which we provided the most recent cost estimate for the reclamation activities anticipated to be conducted in future years as part of the required annual financial surety update. There are several significant differences in comparing actual costs incurred and those estimated.

For example, the surety estimate assumed that United Nuclear would get approvals from NRC to decommission the seepage collection program by year-end 1995 and commence decommissioning the wells and the evaporation ponds in 1996. As shown by the table, United Nuclear continues to operate the system as such approvals have not been forthcoming. The seepage collection costs incurred in 1996 are for continued operation of the system rather than decommissioning.

Delay in approvals to decommission the seepage collection system requires that we defer the reclamation of the evaporation ponds. The expenditures incurred in that category in 1996 reflect the purchase of rock materials that will be needed at the time of closure. We look forward to a determination regarding the future operation of the seepage cleanup program in 1997.

There were significant savings realized in construction of the North and South Drainage Channels, and in regrading south of the buried jetty over the estimate provided in our March 30 letter. The savings in construction of the North Drainage Channel were a result of changes in the reclamation plan approved by NRC (see License Amendment No. 24). The savings in construction of the South Drainage Channel were in large part as a result of the presence of bedrock at unanticipated locations in the area of the excavation which eliminated the need for much of the 9" rock. The savings in regrading south of the buried jetty were a result of changes in the reclamation plan approved by NRC as contained in License Amendment No. 25.

### **LICENSE AMENDMENT REQUEST - SURETY REDUCTION**

The expenditures made in 1996 have resulted in the completion of all of the surface reclamation

approved in the reclamation plan, except those that will have to be postponed until the corrective action plan activities are completed. Table I can be used to derive the estimate of the remaining required surety coverage. Decommissioning the evaporation ponds will cost \$267,257 as follows;

Decommission Evaporation Ponds

fill & radon cover placement	\$ 181900
soil/rock matrix placement	\$ 39204
rock material placement	\$ 31920
gross receipts tax (5.625%)	\$ 14233

Well plugging will cost \$747,898 to plug 410 wells over two years.

All of these costs are included in the surety estimate previously approved by NRC. It will be necessary add an additional \$80,000 in labor costs to well plugging to account for the cost of our on-site supervision of a contractor. These additional costs will be incurred because well plugging has been deferred into the future instead of having been accomplished in conjunction with surface reclamation.

Thus, the total amount remaining for decommissioning the evaporation ponds and plugging the wells is \$1,109,155. Adding to this the amount calculated for long term surveillance, \$568,000, as contained in the surety calculation approved in November, 1995, produces an amount of \$1,743,155. This number is further adjusted by 3.7%, the rate obtained from Mr. Richard Turtill of your staff for inflation between August, 1995 and December, 1996, yielding a total amount of \$1,807,652 required for the remaining reclamation of the Church Rock facility and long term surveillance.

Therefore, United Nuclear requests that the current approved surety of \$3.22 million plus the \$2 million Letter of Credit (LC) required by EPA, be reduced to \$1,807,652 plus an amount which reflects the continued annual operation of the ground water remediation program.

United Nuclear budgets \$388,000 each year for continued operation at current levels as follow;

Seepage Cleanup

electrical power	\$ 20000
equipment & supplies	\$ 10000
Personnel	\$ 148000

Monitoring

sample analysis	\$ 63000
shipping & supplies	\$ 1000

<u>Performance Review</u>	\$ 100000
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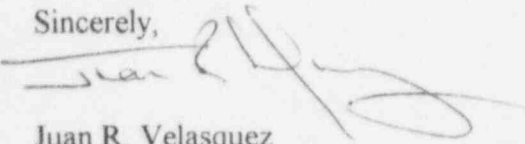
Replacement Wells

\$ 46000

United Nuclear Corporation's current required surety is significantly higher than that needed to meet its regulatory requirements. The current parent company surety agreement together with the EPA LC cover \$5.2 million. As the analysis discussed above indicates, this is well in excess of the amount currently needed. We request that the surety amount be reduced to a total of \$2,195,652 for all reclamation, including seepage cleanup, and that NRC support release by EPA of the \$2 million LC. The existing parent company agreement together with the power of the license, which requires seepage cleanup, are sufficient to ensure that the remaining work is completed without risk to either EPA or NRC. Release of the LC is desirable for our parent company because of its favorable impact on its financial strength.

We will be discussing this matter with EPA in the very near future and seek to amend to our license in this regard. If you have any questions regarding the information contained herein, please do not hesitate to call.

Sincerely,



Juan R. Velasquez

cc: Ed Morales  
NRC Region IV  
Ken Hooks - NRC Project Manager  
Don Williams - EPA

Table I

CHURCH ROCK  
RECLAMATION COST ESTIMATE  
1st, 2nd, 3rd, & 4th QUARTER, 1996

Jan, 1997

1996 TAILINGS RECLAMATION	VOLUME	UNITS	UNIT COST	TASK COST	TOTAL ESTIMATED COST	ACTUAL 1st QTR COST	ACTUAL 2nd QTR COST	ACTUAL 3rd QTR COST	ACTUAL 4th QTR COST	ACTUAL YEAR TO DATE	ACTUAL 1996 COST
Mobilization		lump sum		\$32,210	\$32,210			\$34,022		\$34,022	\$34,022
Clear & Grub		acres	\$280.00	\$9,520	\$9,520			\$1,422		\$1,422	\$1,422
North Diversion Ditch											
excavation	8510	cubic yards	\$1.90	\$16,169							
0.02" bedding material	261	cubic yards	\$9.99	\$2,607							
0.35" rock	254	cubic yards	\$18.98	\$4,821				\$5,092		\$5,092	
6" rock	755	cubic yards	\$38.36	\$28,962			\$30,591			\$30,591	
rock placement	755	cubic yards	\$15.00	\$11,325				\$10,615		\$10,615	
					\$63,884						\$46,296
North Drainage Channel											
excavation	4340	cubic yards	\$1.90	\$8,246				\$3,572		\$3,572	
fill	8300	cubic yards	\$1.30	\$10,790				\$2,039		\$2,039	
0.02" bedding material	300	cubic yards	\$9.99	\$2,997				\$1,333		\$1,333	
0.35" rock	284	cubic yards	\$18.98	\$5,390				\$5,693		\$5,693	
9" rock	1155	cubic yards	\$41.83	\$48,314			\$5,601	\$29,116		\$34,717	
rock placement	1155	cubic yards	\$15.00	\$17,325				\$10,235		\$10,235	
					\$93,062						\$57,589
South Drainage Channel											
excavation	64386	cubic yards	\$2.60	\$167,404				\$93,174		\$93,174	
0.02" bedding material	1101	cubic yards	\$9.99	\$10,999			\$6,071			\$6,071	
0.35" rock	685	cubic yards	\$18.98	\$13,001				\$10,645		\$10,645	
9" rock	2600	cubic yards	\$41.83	\$108,758				\$29,581		\$29,581	
rock placement	2600	cubic yards	\$15.00	\$39,000				\$10,191		\$10,191	
					\$339,162						\$149,662
Regrade South of Jetty	144711	square yard	\$1.30	\$188,124	\$188,124			\$1,060		\$1,060	\$1,060
Buried Jetty											
excavation & placement		lump sum		\$70,000				\$73,938		\$73,938	
6" rock	3436	cubic yards	\$38.36	\$131,805			\$139,219			\$139,219	
regrade north of jetty	46911	square yard	\$0.40	\$18,764				\$64,728		\$64,728	
low flow channel	24450	square yard	\$0.40	\$9,780				\$15,271		\$15,271	
					\$230,349						\$293,156
Decommission Evaporation Ponds											
fill & 1.5 ft Rn soil cover	107000	cubic yards	\$1.70	\$181,900							
6" soil/rock matrix	43560	square yard	\$0.90	\$39,204							
0.02" bedding material	822	cubic yards	\$9.99	\$8,212			\$5,182			\$5,182	
0.35" rock	325	cubic yards	\$18.98	\$6,169				\$6,516		\$6,516	
1.5" rock	454	cubic yards	\$19.91	\$9,039			\$93,580			\$93,580	
3" rock	600	cubic yards	\$25.65	\$15,390							
rock placement	1064	cubic yards	\$30.00	\$31,920							
					\$291,833						\$105,278
C. & N. Cell Slope Protection											
1.5" rock	2270	cubic yards	\$19.91	\$45,196			\$15,920	\$31,819		\$47,739	
rock placement	2270	cubic yards	\$6.00	\$13,620							
					\$58,816						\$47,739
NM Gross Receipts Tax (5.625%)				\$73,517	\$73,517						
Construction Control & Verification											
geotech testing		lump sum		\$40,000		\$603		\$9,878	\$678	\$11,159	
as built report		lump sum		\$20,000		\$79	\$8,800	\$7,000		\$15,879	
radiological monitoring	20	employees	\$100.00	\$2,000			\$200	\$5,508	\$3,490	\$9,198	
materials & supplies				\$20,000		\$11,349	\$3,164	\$3,252	\$10,176	\$27,941	
personnel				\$98,000		\$22,501	\$24,908	\$26,017	\$20,603	\$94,029	
Supervisor (50% of time)											
Survey Engineer (50% of time)											
Survey Tech (100% of time)											
					\$180,000						\$158,206
Total Surface Reclamation					\$1,560,477	\$34,532	\$333,236	\$491,717	\$34,947	\$894,432	\$894,432
Seepage Collection											
plug wells	205	wells	\$1,727	\$354,035			\$8,795			\$8,795	
NM gross receipts tax (5.625%)				\$19,914							
electrical power						\$3,368	\$4,190	\$9,336	\$3,714	\$20,608	
equipment & supplies						\$2,645	\$4,584	\$282	\$2,785	\$10,296	
personnel						\$37,668	\$31,765	\$38,531	\$35,395	\$143,359	
Ground Water Monitoring											
sample analysis						\$13,320	\$6,908	\$6,813	\$26,605	\$53,646	
supplies						\$153	\$124	\$186	\$115	\$578	
shipping						\$120	\$94	\$189	\$104	\$507	
Performance Review						\$20,594	\$7,344	\$8,919	\$39,096	\$75,953	
Total Seepage Cleanup					\$373,949	\$77,868	\$63,804	\$64,256	\$107,814	\$313,742	\$313,742
TOTAL RECLAMATION 1996					\$1,934,427	\$112,400	\$397,040	\$555,973	\$142,761	\$1,208,174	\$1,208,174