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Marilyn

As per our telephone discussion on December 1 I am providing information on the fish kill that occurred at Monticello. Attached is a list of the fish found following the reactor shutdown at NSP's Monticello Plant on November 25, 1997. The shutdown was necessary when power cables to the off gas control system double faulted causing a loss of power and the ability to manage the off gas being generated. This resulted in a loss of condenser vacuum requiring immediate shutdown of the reactor.

Normally during a shutdown in winter the plant tries to maintain a rate of temperature descent of less than 5 degrees F per hour. This slower rate of descent has been found to minimize the effects of cold shock on fish in the canal and eliminate it in the river. In this instance the plant was not able to maintain the recommended rate of temperature descent due to the need to bring the reactor down immediately.

Following the shutdown, the discharge canal area and the river downstream for about one-half mile was inspected for dead or dying fish. These areas were inspected on November 26 by Jim Bodensteiner and Al Peterson and again on November 28 by Al Peterson and Jeff Berrington all from NSP's Environmental and Regulatory Affairs Department. On November 26 a total of 85 fish were found all within the plant discharge canal. Fifty-five additional fish were found on November 28 of which about 20 were in the river below the discharge canal. These fish could have washed out of the canal or they could have been living in the river immediately downstream of the discharge weir. I inspected the discharge canal and the river downstream again on December 2 and found no additional dead fish.

*Reviewed by
D. Davis
12/10/97*

Dead Fish Found at Monticello Following Shutdown

Species	Length (in.)	Number of fish			Total
		11/26/97	11/28/97	12/2/97	
Channel catfish	5	0	20	0	20
	6	16	0	0	16
	9	6	0	0	6
	12	11	0	0	11
	18	12	5	0	17
Total catfish		45	25	0	70
Rock bass	5	0	1	0	1
Total rock bass		0	1	0	1
Smallmouth bass	<2		3	0	3
	2	2	11	0	13
	3	10	0	0	10
	4	7	2	0	9
	5	0	0	0	0
	6	2	0	0	2
Total smallmouth		21	16	0	37
Green sunfish	1	3	0	0	3
	2	5	0	0	5
	3	0	4	0	4
Total green sunfish		8	4	0	12
? Redhorse	8	1	0	0	1
	10	2			2
Total redhorse		3	0	0	3
Bluegill	1		2		2
Total bluegill		0	2	0	2
White crappie	4		1		1
Total white crappie		0	1	0	1
Carp	10		6	0	6
	12	2	0	0	2
	18	1	0	0	1
	24	5	0	0	5
Total carp		8	6	0	14
Total fish		85	55	0	140