UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
NORTHEAST REGION
One Blackburn Drive
Gloucester, MA 01930

Mr. Tony Banks, MPH, CHMM
Dominion Generation
5000 Dominion Boulevard
Glen Allen, VA 23060

MAR 23 2001

Dear Mr. Banks:

This letter is in response to your inquiry on February 6, 2001, requesting information on the presence of any federally listed threatened or endangered species and/or designated critical habitat for listed species in the vicinity of Dominion's Surry Power Station, Glen Allen, Virginia. Dominion Generation is applying for nuclear license renewal as required by the U.S. Nuclear Regulatory Commission (NRC) renewal process. The renewal process requires all applicants to identify adverse impacts to threatened or endangered species that may result from continued operation of the facility or refurbishment activities associated with renewal.

Potential spawning habitat for shortnose sturgeon has been thought to occur in the James River, but there have been no reports of shortnose sturgeon in this river system. However, Atlantic sturgeon, a candidate species under the Endangered Species Act of 1973, has been documented in the vicinity of the proposed project. Nevertheless, no federally listed or proposed threatened or endangered species and/or designated critical habitat for listed species under the jurisdiction of the National Marine Fisheries Service are known to exist in the project area. No further consultation pursuant to Section 7 of the Endangered Species Act of 1973, as amended, is required. If, however, project plans change or new information becomes available that changes the basis for this determination, then consultation should be reinitiated.

Sincerely,

Mary Colligan
Acting Assistant Regional Administrator
for Protected Resources

File Code: 1514 - 05(A), nsp

The College of
WILLIAM & MARY

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Virginia Institute of Marine Science
School of Marine Science
P.O. Box 1346
Gloucester Point, Virginia 23062 USA
804/684-7000 Fax: 804/684-7097

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Mr. Tony Banks, MPH, CHMM
License Renewal Project
Dominion Generation
Innsbrook Technical Center
5000 Dominion Blvd
Glen Allen, VA 23060

4 April 2001

Dear Tony,

This letter addresses the question of whether impingement and entrainment of fishes is a significant issue for Virginia Power at the Surry Power Plant, especially in regard to recent Fishery Management Plans (FMPs) of the Atlantic States Marine Fisheries Commission. In previous correspondence, I had reported to Dave Grimes (Virginia Department of Environmental Quality) that, based on my reading, there were no specific mandates in these FMPs that bear on this issue. In general, the FMPs call upon the states to ensure that water withdrawals do not result in stock declines for federally managed species. I did note that the Virginia Institute of Marine Science has no current data in the form of direct observations at the site on the impingement and/or entrainment of fishes. Further, Virginia Power is no longer required to monitor entrainment and/or impingement of fishes at the plant.

I have examined some ancillary data on the ichthyofauna in the James River that bears on the general question of potential vulnerability of federally managed species to impacts. The information consists of a five-year summary of data (1996-2000) from the VIMS Juvenile Finfish Trawl survey compiled by Patrick Geer of the VIMS Department of Fisheries Science. The table of pooled catches and a figure representing the locations of the trawl sites is attached to this letter. As you can see, a considerable sampling effort has been expended during the period and the ichthyofauna (especially the abundance and distribution of bottom-dwelling juvenile fishes) in the near-field of the Surry Nuclear Power Plant is well known. The catchability in this trawl gear of estuarine fish species varies by size (ontogeny) and species. Thus, large fishes (such as large specimens of Atlantic sturgeon or striped bass) and schooling, pelagic fishes (such as mature American shad or juvenile and adult menhaden) are not highly vulnerable to capture by the survey gear. Thus, we cannot infer much about the abundance of these fishes in the area from the trawl survey data.

Hogchoker, white perch, Atlantic croaker, bay anchovy, spot, blue catfish and weakfish make up approximately 92% of all fishes captured by the trawl gear. On the basis of their abundance in the trawl survey catches, these species might be considered the most likely to be impacted by

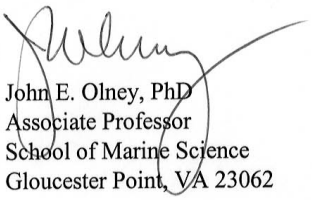
VIMS

entrainment on intake screens. Most are bottom fishes and three are important commercial species (Atlantic croaker, spot and weakfish). Two other commercial species captured in the trawl survey (but not in large numbers) that could be impacted by the plant are American eel (0.7% of the total catch during the 5-y period) and striped bass (0.7%).

I have also examined a report of data collected by the Army Corps of Engineers (and their contractors) during a field study at the Goose Hill Channel last year. These data are proprietary and focused on channel areas where dredging occurs, however. Overall, the fishery hydro-acoustic surveys show that the fish densities are greatest in the deeper portions of the channels and along the south banks of the channels. Conventional fish sampling revealed occurrences and abundances of species that are similar to the VIMS trawl results.

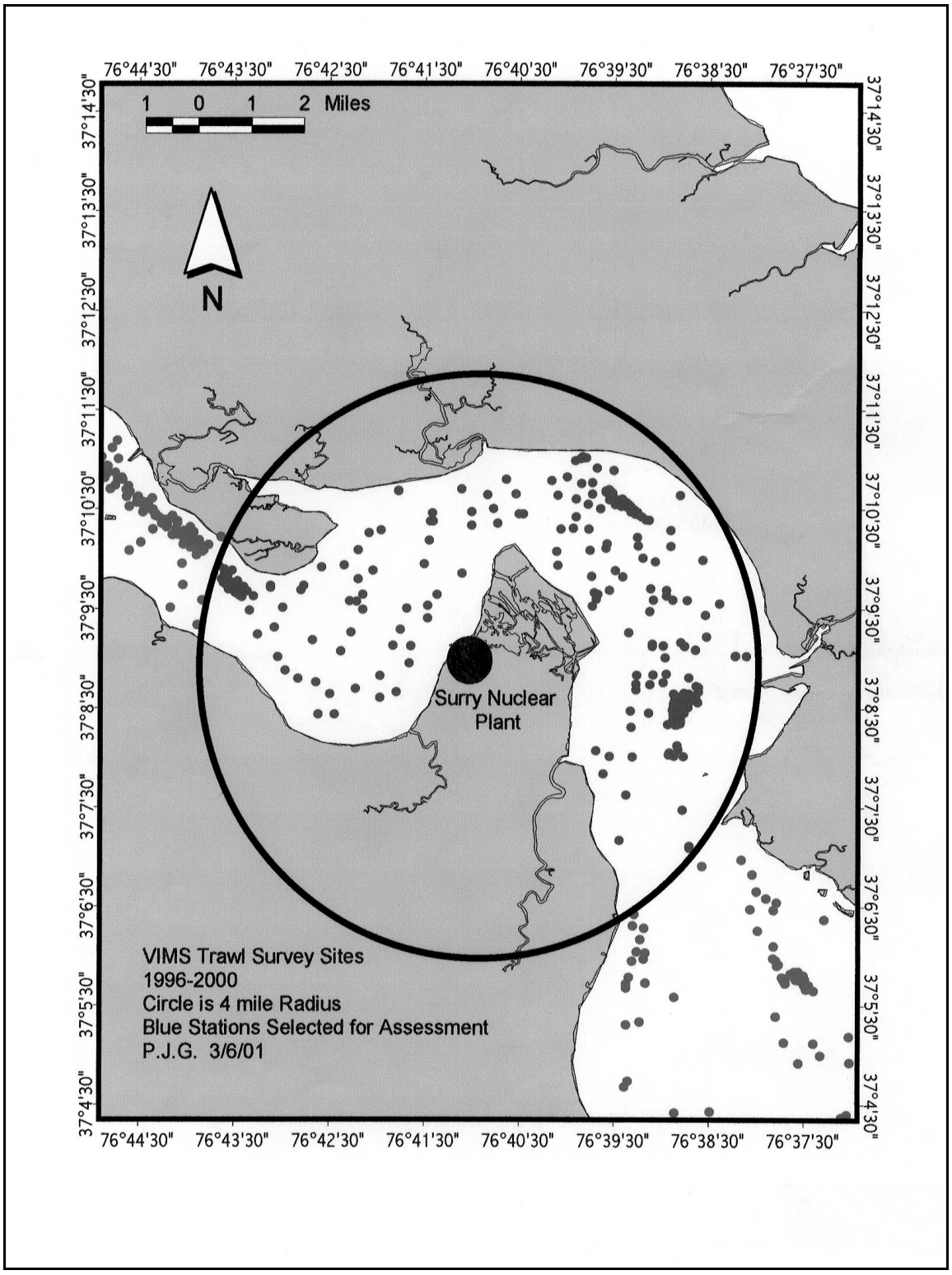
The information that you provided about the operation and maintenance of traveling fish screens, especially recent repairs and upgrades to the system at the Surry Plant, suggests that the performance of these devices is better now than it originally was during the required assessments in 1980. Since the plant was in compliance with federal guidelines then, we are in agreement that this is not likely to be an issue today. Further, the available information of abundance and distribution of fishes at the site suggests that there is a low probability that water withdrawals at the plant are causing declines in stocks of federally managed species. At this point, I believe that no further action is indicated. Please let me know if you need any further assistance.

Sincerely,



John E. Olney, PhD
Associate Professor
School of Marine Science
Gloucester Point, VA 23062

Attachments
cc: Dr. Jud White, Manager
Dr. Eugene Burreson, VIMS Director for Research and Advisory Service
Mr. Patrick Geer, VIMS
Mr. Jack Travelstead, VMRC
Mr. David Grimes, DEQ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Surry Nuclear Plant
VIMS Trawl Survey Sites
1996-2000
Circle is 4 mile Radius
Blue Stations Selected for Assessment
P.J.G. 3/6/01

Table .

Month - All - Pooled, 1996-1999
River - James River - 4 mile radius around Surry Nuclear Plant
No. of Random Trawls Made - 177
No. of Fixed Trawls Made - 180
No. of Species - 61
Adjusted Percent of Catch Excludes Bay Anchovy and Hogchoker

Species	Number of Fish (All)	Frequency	Percent of Catch	Catch Per Trawl	Adjusted Percent of Catch	Number of Fish YOY	Average Length (mm)	Standard Error (length)	Minimum Length (mm)	Maximum Length (mm)
hogchoker	76,594	351	52.39	214.55	.	25,651	69	0.21	13	177
white perch	16,628	289	11.37	46.58	28.41	7,415	103	0.46	15	250
Atlantic croaker	15,757	302	10.78	44.14	26.92	14,577	86	0.74	9	403
bay anchovy	11,091	234	7.59	31.07	.	9,137	54	0.22	15	94
spot	7,932	191	5.43	22.22	13.55	7,709	119	0.63	19	224
blue catfish	4,815	221	3.29	13.49	8.23	1,940	185	0.93	48	477
blue crab, male	2,555	288	1.75	7.16	4.37	.	65	0.76	8	183
weakfish	2,348	138	1.61	6.58	4.01	2,275	75	0.82	17	316
blue crab, juvenile female	1,933	250	1.32	5.41	3.30	.	52	0.64	9	136
striped bass	1,032	117	0.71	2.89	1.76	908	99	2.90	15	501
American eel	960	188	0.66	2.69	1.64	.	247	1.73	113	755
gizzard shad	939	130	0.64	2.63	1.60	330	196	2.80	70	386
white catfish	782	186	0.53	2.19	1.34	103	189	2.39	48	539
channel catfish	425	131	0.29	1.19	0.73	23	289	4.28	50	594
blueback herring	367	22	0.25	1.03	0.63	366	71	1.22	54	242
blackcheek tonguefish	358	66	0.24	1.00	0.61	310	73	1.65	18	148
blue crab, adult female	352	59	0.24	0.99	0.60	.	148	0.78	110	196
jellyfish spp	254	28	0.17	0.71	0.43	.	.	.	.	.
threadfin shad	176	18	0.12	0.49	0.30	.	86	0.91	56	117
white shrimp	143	25	0.10	0.40	0.24	.	82	1.59	40	132
silver perch	133	34	0.09	0.37	0.23	121	122	2.44	52	200
brown shrimp	100	26	0.07	0.28	0.17	.	84	3.06	35	147
naked goby	72	35	0.05	0.20	0.12	.	36	0.94	17	70
Atlantic menhaden	60	32	0.04	0.17	0.10	37	146	6.96	45	321
alewife	60	26	0.04	0.17	0.10	60	108	1.62	80	137
spotted hake	56	5	0.04	0.16	0.10	56	98	1.52	68	128
blue crab, sex unknown	48	3	0.03	0.13	0.08	.	13	1.11	8	16
kingfish spp	47	24	0.03	0.13	0.08	47	104	4.19	39	141
common carp	34	15	0.02	0.10	0.06	.	564	13.93	292	725
summer flounder	28	20	0.02	0.08	0.05	21	199	15.58	93	423
banded drum	24	2	0.02	0.07	0.04	.	87	2.31	67	105
harvestfish	14	9	0.01	0.04	0.02	14	39	4.71	15	89
spottail shiner	13	2	0.01	0.04	0.02	.	86	1.90	74	96
pink shrimp	8	7	0.01	0.02	0.01	.	88	7.70	59	113
seaboard goby	7	2	0.00	0.02	0.01	.	35	1.11	32	40
Atlantic sturgeon	6	6	0.00	0.02	0.01	.	519	39.39	394	640
American shad	6	5	0.00	0.02	0.01	6	110	2.95	99	118
oyster toadfish	6	4	0.00	0.02	0.01	.	125	21.21	23	162
tessellated darter	6	3	0.00	0.02	0.01	.	67	11.05	15	94
brown bullhead	5	5	0.00	0.01	0.01	.	148	26.63	87	209
spider crab, 6 spine	4	1	0.00	0.01	0.01	.	.	.	.	.
sea lamprey	3	3	0.00	0.01	0.01	.	160	2.73	156	165
Spanish mackerel	3	2	0.00	0.01	0.01	.	112	7.36	97	120
Atlantic silverside	3	2	0.00	0.01	0.01	3	79	10.48	66	100
bluefish	2	2	0.00	0.01	0.00	.	163	38.00	125	201
Atlantic herring	2	2	0.00	0.01	0.00	.	68	9.00	59	77
butterfish	2	1	0.00	0.01	0.00	2	50	29.50	20	79
Atlantic spadefish	1	1	0.00	0.00	0.00	.	41	.	41	41
northern searobin	1	1	0.00	0.00	0.00	1	105	.	105	105
striped anchovy	1	1	0.00	0.00	0.00	1	107	.	107	107
eastern silvery minnow	1	1	0.00	0.00	0.00	.	91	.	91	91
northern pipefish	1	1	0.00	0.00	0.00	.	101	.	101	101
pumpkinseed	1	1	0.00	0.00	0.00	.	141	.	141	141
bluegill	1	1	0.00	0.00	0.00	.	55	.	55	55
skilletfish	1	1	0.00	0.00	0.00	.	49	.	49	49
roughtail stingray	1	1	0.00	0.00	0.00	.	58	.	58	58
inshore lizardfish	1	1	0.00	0.00	0.00	1	181	.	181	181
Atlantic cutlassfish	1	1	0.00	0.00	0.00	.	235	.	235	235
white mullet	1	1	0.00	0.00	0.00	.	225	.	225	225
gobie spp	1	1	0.00	0.00	0.00	.	23	.	23	23
roughneck shrimp	1	1	0.00	0.00	0.00	.	.	.	.	.
grass shrimp spp	.	94	.	.	.	.	.	.	.	.
wedge rangia clam	.	79	.	.	.	.	.	.	.	.
sand shrimp	.	68	.	.	.	.	.	.	.	.
mud crab spp	.	45	.	.	.	.	.	.	.	.
bent mussel	.	27	.	.	.	.	.	.	.	.
river shrimp	.	20	.	.	.	.	.	.	.	.
mysid shrimp	.	10	.	.	.	.	.	.	.	.
oyster, common	.	8	.	.	.	.	.	.	.	.
Amphipod spp	.	8	.	.	.	.	.	.	.	.
comb jelly spp	.	7	.	.	.	.	.	.	.	.
worm spp	.	7	.	.	.	.	.	.	.	.
little surf clam	.	4	.	.	.	.	.	.	.	.
yoldias clam spp	.	3	.	.	.	.	.	.	.	.
Tellinia clam	.	3	.	.	.	.	.	.	.	.
soft-shell clam	.	2	.	.	.	.	.	.	.	.
sea cucumber spp	.	2	.	.	.	.	.	.	.	.
All Species Combined	146,207									