Duquesne Light Company Beaver Valley Power Station
P.O. Box 4
Shippingport, PA 15077-0004

SUSHIL C. JAIN
Division Vice President
Nuclear Services
Nuclear Power Division

(412) 393-5512
Fax (412) 643-8069

September 16, 1996

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555-0001

Subject: Beaver Valley Power Station, Unit No. 1
Docket No. 50-334, License No. DPR-66
Response to NRC Bulletin 96-01:
Control Rod Insertion Problems

The Duquesne Light Company (DLC) performed control rod drop timing tests on August 20, 1996, at Beaver Valley Power Station Unit No. 1 during an unscheduled outage to replace a main coolant pump lubrication oil cooler and to perform other maintenance work. The testing was performed to satisfy NRC Bulletin 96-01, Requested Action (3). Attached is a report that summarizes the data and documents the results obtained. All of the control rods met the required drop time criteria specified in the Unit No. 1 applicable technical specification. Analysis of the traces obtained during the control rod drop timing test indicates all control rods exhibited rod recoil on reaching full insertion. The maximum burnup of a rodded fuel assembly at the time of the test was approximately 35.5K MWD/MTU. Continued insertability and operability of the Beaver Valley Unit No. 1 control rods was demonstrated by the test.

If you have questions concerning this response, please contact Mr. Roy K. Brosi at (412) 393-5210.

Sincerely,

Sushil C. Jain

Attachment

IE57

c: Mr. D. M. Kern, Sr. Resident Inspector
Mr. H. J. Miller, NRC Region I Administrator
Mr. D. S. Brinkman, Sr. Project Manager

DELIVERING QUALITY ENERGY

AFFIDAVIT FOR APPLICATION

OF AMENDMENT

COMMONWEALTH OF PENNSYLVANIA)
) SS:
COUNTY OF BEAVER)

Subject: Beaver Valley Power Station, Unit No. 1
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Before me, the undersigned notary public, in and for the County and Commonwealth aforesaid, this day personally appeared Sushil C. Jain, to me known, who being duly sworn according to law, deposes and says that he is Division Vice President, Nuclear Services of the Nuclear Power Division, Duquesne Light Company, he is duly authorized to execute and file the foregoing submittal on behalf of said Company, and the statements set forth in the submittal are true and correct to the best of his knowledge, information and belief.

Sushil C. Jain

Subscribed and sworn to before me
on this 16th day of September, 1996

Tracey A. Baczek
Notary Public

Notarial Seal
Tracey A. Baczek, Notary Public
Shippingport Boro, Beaver County
My Commission Expires Aug. 16, 1997
Member, Pennsylvania Association of Notaries

DUQUESNE LIGHT COMPANY
Nuclear Power Division

ATTACHMENT 1

Beaver Valley Power Station Unit 1
Cycle 12 Control Rod Testing
August 20, 1996

Rod Drop Testing

On August 20, 1996, Control Rod Drop Time measurements were performed for all 48 rods in the core due to a reactor shutdown on August 5, 1996. Cycle burnup was 2924.78 MWD/MTU. Drop times were measured from the beginning of voltage decay on the stationary gripper coil to entry into the dashpot region and from entry into the dashpot region to rod bottom. Each trace was also checked for rod bottom recoil to ensure all rods reached the rod bottom position. All drop times to dashpot entry were within the Technical Specification limit of 2.7 seconds and all rods demonstrated positive evidence of recoil (3 or more bounces). A summary of the Beginning of Life (BOL) drop test for Cycle 12 and the drop test performed on August 20 is listed below.

	Time to dashpot (sec.)			Time to rod bottom (sec.)		
Test	Average	Fastest	Slowest	Average	Fastest	Slowest
Cycle 12 BOL	1.22	1.18	1.35	1.75	1.69	1.95
Cycle 12 Aug 20	1.26	1.22	1.41	1.75	1.69	1.95

All rod drop times for the August 20, 1996, test with the corresponding assembly burnups are listed in Table 1.

Attachment 1
Response to NRC Bulletin 96-01

Table 1.
Beaver Valley Power Station
Unit 1 Cycle 12 Rod Drop Test Results
August 20, 1996

Core Location	Assembly ID	Assembly Burnup (MWD/MTU)	Drop Time to Dashpot (sec.)	Dashpot to Rod Bottom (sec)	Total Drop Time (sec)
F6	M25	35488	1.26	0.50	1.76
K6	M12	35488	1.26	0.50	1.76
F10	M24	35488	1.26	0.46	1.72
K10	M02	35488	1.28	0.48	1.76
H6	M14	34425	1.26	0.54	1.80
F8	M22	34425	1.24	0.46	1.70
K8	M17	34425	1.26	0.49	1.75
H10	M13	34425	1.26	0.48	1.74
D6	M56	30880	1.26	0.46	1.72
M6	M44	30880	1.26	0.56	1.82
D10	M59	30880	1.26	0.52	1.78
M10	M34	30880	1.24	0.46	1.70
F4	M58	30192	1.26	0.48	1.74
K4	M38	30192	1.24	0.50	1.74
F12	M36	30192	1.24	0.50	1.74
K12	M37	30192	1.22	0.48	1.70
G7	N02	17975	1.24	0.49	1.73
J7	N01	17975	1.23	0.48	1.71
G9	N04	17975	1.24	0.49	1.73
J9	N03	17975	1.24	0.46	1.70
D4	N48	17973	1.26	0.55	1.81
M4	N38	17973	1.26	0.52	1.78
D12	N43	17973	1.24	0.48	1.72
M12	N37	17973	1.26	0.46	1.72
F2	N40	17143	1.25	0.51	1.76
K2	N41	17143	1.27	0.47	1.74
F14	N45	17143	1.27	0.51	1.78
K14	N42	17143	1.33	0.50	1.83
B6	N44	17106	1.41	0.54	1.95
P6	N39	17106	1.25	0.52	1.77
B10	N47	17106	1.30	0.49	1.79
P10	N46	17106	1.24	0.48	1.72
E5	N34	3743	1.22	0.48	1.70

Attachment 1
Response to NRC Bulletin 96-01

Table 1.
Beaver Valley Power Station
Unit 1 Cycle 12 Rod Drop Test Results
August 20, 1996

Core Location	Assembly ID	Assembly Burnup (MWD/MTU)	Drop Time to Dashpot (sec.)	Dashpot to Rod Bottom (sec)	Total Drop Time (sec)
[illegible]	N29	3743	1.22	0.48	1.70
[illegible]11	N33	3743	1.24	0.49	1.73
L11	N32	3743	1.23	0.47	1.70
C7	N25	3468	1.23	0.47	1.70
N7	N35	3468	1.23	0.46	1.69
C9	N27	3468	1.23	0.54	1.77
N9	N36	3468	1.25	0.46	1.71
G3	N28	3466	1.23	0.47	1.70
J3	N26	3466	1.23	0.52	1.75
G13	N31	3466	1.24	0.50	1.74
J13	N30	3466	1.26	0.46	1.72
H2	P41	3303	1.26	0.48	1.74
B8	P43	3303	1.35	0.54	1.89
P8	P42	3303	1.24	0.46	1.70
H14	P44	3303	1.26	0.48	1.74