



Commonwealth Edison

One First National Plaza, Chicago, Illinois
Address Reply to: Post Office Box 767
Chicago, Illinois 60690

December 30, 1983

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: Byron Generating Station Units 1 and 2
Braidwood Generating Station Units 1 and 2
Environmental Qualification of Equipment
NRC Docket Nos. 50-454, 50-455, 50-456 and 50-457

- References:
- 1) July 20, 1983 letter from
B. J. Youngblood to D. L. Farrar
 - 2) May 20, 1983 letter from
B. J. Youngblood to D. L. Farrar
 - 3) January 14, 1983 letter from
T. R. Tramm to H. R. Denton

Dear Mr. Denton:

This is to provide summary information regarding the environmental qualification of mechanical equipment at Byron and Braidwood stations. We understand that the NRC intends to review in detail three items of mechanical equipment. Detailed qualification information will be provided as soon as possible on the items selected.

Reference 3 transmitted our description of the Byron/Braidwood Mechanical Equipment Environmental Qualification Program. Three methods for demonstrating qualification of mechanical equipment were discussed in this program. In References 1 and 2, the NRC requested a list of all mechanical equipment included in our program and indicated that 3 pieces of equipment would be selected to audit.

Attachment 1 is the list of all equipment in our program. Our list contains active safety related mechanical equipment.

Attachment 2 explains the qualification established for all BOP equipment on the list except 8 valves. Almost half of the BOP equipment has been qualified by the first method described in Reference 3. Specifications were reviewed and the appropriate environmental parameters were specified originally when the equipment was procured. The remainder of the BOP equipment, excluding the 8 valves, has been investigated and qualification has been established by analysis per method 2 of Reference 3. The remaining 8 valves are still under review. Prior to fuel load, these 8 valves will be qualified or a justification for interim operation will be prepared.

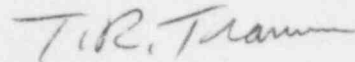
-2-

Attachment 3 explains the Westinghouse position for environmental qualification of NSSS mechanical equipment.

Please direct questions regarding this matter to this office.

One signed original and fifteen copies of this letter and the attachments are provided for NRC review.

Very truly yours,



T. R. Tramm
Nuclear Licensing Administrator

Attachments

7900N

BYRON/BRAIDWOOD MECHANICAL EQUIPMENT QUALIFICATION LIST

EQUIPMENT NUMBER	EQUIPMENT NAME	SPEC.	BLDG.	COL. - ROW	EL.	ENV ZONE
1CV01PA	CENTRIFUGAL CHARGING PUMP 1A	F/L-2702	AUX.	16V	364	A13g
1CV01PB	CENTRIFUGAL CHARGING PUMP 1B	F/L-2702	AUX.	14Z	364	A13g
2CV01PA	CENTRIFUGAL CHARGING PUMP 2A	F/L-2702	AUX.	20V	364	A13g
2CV01PB	CENTRIFUGAL CHARGING PUMP 2B	F/L-2702	AUX.	22Z	364	A13g
1RH01PA	RESIDUAL HEAT REMOVAL PUMP 1A	F/L-2702	AUX.	13U	346	A13c
1RH01PB	RESIDUAL HEAT REMOVAL PUMP 1B	F/L-2702	AUX.	13Y	346	A13c
2RH01PA	RESIDUAL HEAT REMOVAL PUMP 2A	F/L-2702	AUX.	23U	346	A13c
2RH01PB	RESIDUAL HEAT REMOVAL PUMP 2B	F/L-2702	AUX.	23Y	346	A13c
1SI01PA	SAFETY INJECTION PUMP 1A	F/L-2702	AUX.	16Q	364	A13c
1SI01PB	SAFETY INJECTION PUMP 1B	F/L-2702	AUX.	13Y	364	A13c
2SI01PA	SAFETY INJECTION PUMP 2A	F/L-2702	AUX.	21Q	364	A13c
2SI01PB	SAFETY INJECTION PUMP 2B	F/L-2702	AUX.	23Z	364	A13c
OAB8473	2.00 CHECK	F/L-2702	AUX.	17N	401	A8
1AB8487	2.00 CHECK	F/L-2702	AUX.	16N	401	A8
2AB8487	2.00 CHECK	F/L-2702	AUX.	17N	401	A8
OCC9432	0.75 X 1 RELIEF	F/L-2702	AUX.	18Q	378	A8
OCC9464	12.00 CHECK	F/L-2702	AUX.	18L	366	A8
2CC9416	6.00 GATE ISO MO	F/L-2702	CNT.	26S	390	C6
2CC9422A	2 X 1 RELIEF	F/L-2702	AUX.	19S	377	A13c
2CC9422B	2 X 1 RELIEF	F/L-2702	AUX.	19V	378	A13e
2CC9437A	3.00 GLOBE ISO AO	F/L-2702	AUX.	21V	383	A13c
2CC9437B	3.00 GLOBE ISO AO	F/L-2702	AUX.	24U	383	A13c
2CC9438	4.00 GATE ISO MO	F/L-2702	CNT.	24V	390	C6
2CC9486	6.00 CHECK ISO -	F/L-2702	CNT.	24V	395	C6
2CC9518	0.75 CHECK ISO -	F/L-2702	CNT.	24V	395	C6
2CC9534	0.75 CHECK ISO -	F/L-2702	CNT.	24V	395	C6
2CC9463A	12.00 CHECK	F/L-2702	AUX.	19L	366	A8
2CC9463B	12.00 CHECK	F/L-2702	AUX.	20L	366	A8
2CC9473A	16.00 GATE MO	F/L-2702	AUX.	19M	364	A8
2CC9473B	16.00 GATE MO	F/L-2702	AUX.	18L	364	A8
1CV112B	4.00 GATE MO	F/L-2702	AUX.	17Q	426	A13h
1CV112C	4.00 GATE MO	F/L-2702	AUX.	17Q	426	A13h
1CV112D	8.00 GATE MO	F/L-2702	AUX.	14U	380	A13c
1CV112E	8.00 GATE MO	F/L-2702	AUX.	14U	375	A13c

BYRON/BRAIDWOOD MECHANICAL EQUIPMENT QUALIFICATION LIST

<u>EQUIPMENT NUMBER</u>	<u>EQUIPMENT NAME</u>	<u>SPEC.</u>	<u>BLDG.</u>	<u>COL. - ROW</u>	<u>EL.</u>	<u>ENV ZONE</u>
1CV8100	2.00 GLOBE ISO MO	F/L-2702	AUX.	13X	383	A13c
1CV8104	2.00 GLOBE MO	F/L-2702	AUX.	16Q	427	A13h
1CV8105	3.00 GATE MO	F/L-2702	AUX.	13W	381	A13c
1CC0685	4.00 GATE ISO MO	F/L-2702	AUX.	13V	383	A13c
1CC9412A	12.00 GATE MO	F/L-2702	AUX.	17S	364	A13c
1CC9412B	12.00 GATE MO	F/L-2702	AUX.	19V	364	A13e
1CC9413A	6.00 GATE MO	F/L-2702	AUX.	13V	383	A13c
1CC9413B	6.00 GATE ISO MO	F/L-2702	AUX.	13V	383	A13c
1CC9414	6.00 GATE ISO MO	F/L-2702	AUX.	12U	383	A13c
1CC9416	6.00 GATE ISO MO	F/L-2702	CNT.	10S	390	C6
1CC9422A	2 X 1 RELIEF	F/L-2702	AUX.	16S	377	A13c
1CC9422B	2 X 1 RELIEF	F/L-2702	AUX.	17V	378	A13e
1CC9437A	3.00 GLOBE ISO AO	F/L-2702	AUX.	12V	383	A13c
1CC9437B	3.00 GLOBE ISO AO	F/L-2702	AUX.	12U	383	A13c
1CC9438	4.00 GATE ISO MO	F/L-2702	CNT.	12U	390	C6
1CC9486	6.00 CHECK ISO -	F/L-2702	CNT	12V	395	C6
1CC9518	0.75 CHECK ISO -	F/L-2702	CNT	12V	395	C6
1CC9534	0.75 CHECK ISO -	F/L-2702	CNT	12V	398	C6
1CC9463A	12.00 CHECK	F/L-2702	AUX	17L	366	A8
1CC9463B	12.00 CHECK	F/L-2702	AUX	17L	366	A8
1CC9473A	16.00 GATE MO	F/L-2702	AUX	17M	364	A8
1CC9473B	16.00 GATE MO	F/L-2702	AUX	18M	364	A8
2CC0685	4.00 GATE ISO MO	F/L-2702	AUX.	23V	383	A13c
2CC9412A	12.00 GATE MO	F/L-2702	AUX.	19S	364	A13c
2CC9412B	12.00 GATE MO	F/L-2702	AUX	18V	364	A13e
2CC9413A	6.00 GATE MO	F/L-2702	AUX.	23V	383	A13c
2CC9413B	6.00 GATE ISO MO	F/L-2702	AUX.	23V	383	A13c
2CC9414	6.00 GATE ISO MO	F/L-2702	AUX.	24U	383	A13c
1CV8106	3.00 GATE ISO MO	F/L-2702	AUX.	13W	381	A13c
1CV8110	2.00 GLOBE MO	F/L-2702	AUX.	15S	370	A13c
1CV8111	2.00 GLOBE MO	F/L-2702	AUX.	13S	370	A13c
1CV8112	2.00 GLOBE ISO MO	F/L-2702	CNT	12X	390	C6
1CV8113	0.75 CHECK ISO	F/L-2702	CNT	5R	395	C6
1CV8152	3.00 GLOBE ISO AO	F/L-2702	AUX.	12X	383	A13c
1CV8160	3.00 GLOBE ISO AO	F/L-2702	CNT.	12X	390	C6

BYRON/BRAIDWOOD MECHANICAL EQUIPMENT QUALIFICATION LIST

<u>EQUIPMENT NUMBER</u>	<u>EQUIPMENT NAME</u>	<u>SPEC.</u>	<u>BLDG.</u>	<u>COL. - ROW</u>	<u>EL.</u>	<u>ENV. ZONE</u>
1CV8348	2.00 CHECK ISO -	F/L-2702	CNT.	12V	391	C6
1CV8355A	2.00 GLOBE ISO MO	F/L-2702	AUX.	13U	391	A13c
1CV8355B	2.00 GLOBE ISO MO	F/L-2702	AUX.	13Y	387	A13c
1CV8355C	2.00 GLOBE ISO MO	F/L-2702	AUX.	13Y	387	A13c
1CV8355D	2.00 GLOBE ISO MO	F/L-2702	AUX.	13U	391	A13c
1CV8368A	2.00 CHECK ISO -	F/L-2702	CNT.	8U	386	C6
1CV8368B	2.00 CHECK ISO -	F/L-2702	CNT.	10Y	388	C6
1CV8368C	2.00 CHECK ISO -	F/L-2702	CNT.	12X	391	C6
1CV8368D	2.00 CHECK ISO -	F/L-2702	CNT.	12V	392	C6
1CV8378A	3.00 CHECK -	F/L-2702	CNT.	8X	379	C2
1CV8378B	3.00 CHECK -	F/L-2702	CNT.	8X	379	C2
1CV8379A	3.00 CHECK -	F/L-2702	CNT.	8V	379	C2
1CV8379B	3.00 CHECK -	F/L-2702	CNT.	8V	379	C2
1CV8381	3.00 CHECK ISO -	F/L-2702	CNT.	11Y	413	C6
1CV8442	2.00 CHECK	F/L-2702	AUX.	17S	428	A13h
1CV8481A	4.00 CHECK -	F/L-2702	AUX.	15V	369	A13g
1CV8481B	4.00 CHECK -	F/L-2702	AUX.	15Z	370	A13g
1CV8546	8.00 CHECK -	F/L-2702	AUX.	15U	373	A13c
1CV8804A	8.00 GATE MO	F/L-2702	AUX.	13S	375	A13c
2CV8100	2.00 GLOBE ISO MO	F/L-2702	AUX.	23X	391	A13c
2CV8104	2.00 GLOBE MO	F/L-2702	AUX.	19S	427	A13h
2CV8105	3.00 GATE MO	F/L-2702	AUX.	23W	364	A13c
2CV112B	4.00 GATE MO	F/L-2702	AUX.	19Q	426	A13h
2CV112C	4.00 GATE MO	F/L-2702	AUX.	19Q	426	A13h
2CV112D	8.00 GATE MO	F/L-2702	AUX.	22U	364	A13c
2CV112E	8.00 GATE MO	F/L-2702	AUX.	22U	364	A13c
2CV8106	3.00 GATE ISO MO	F/L-2702	AUX.	23W	364	A13c
2CV8110	2.00 GLOBE MO	F/L-2702	AUX.	22S	364	A13c
2CV8111	2.00 GLOBE MO	F/L-2702	AUX.	22S	364	A13c
2CV8112	2.00 GLOBE ISO MO	F/L-2702	CNT.	24X	390	C6
2CV8113	0.75 CHECK ISO	F/L-2702	CNT.	28R	395	C6
2CV8152	3.00 GLOBE ISO AO	F/L-2702	AUX.	24X	383	A13c
2CV8160	3.00 GLOBE ISO AO	F/L-2702	CNT.	24X	390	C6
2CV8348	2.00 CHECK ISO -	F/L-2702	CNT.	24V	391	C6

BYRON/BRAIDWOOD MECHANICAL EQUIPMENT QUALIFICATION LIST

<u>EQUIPMENT NUMBER</u>	<u>EQUIPMENT NAME</u>	<u>SPEC.</u>	<u>BLDG.</u>	<u>COL. - ROW</u>	<u>EL.</u>	<u>ENV ZONE</u>
2CV8355A	2.00 GLOBE ISO MO	F/L-2702	AUX.	23U	391	A13c
2CV8355B	2.00 GLOBE ISO MO	F/L-2702	AUX.	23Y	387	A13c
2CV8355C	2.00 GLOBE ISO MO	F/L-2702	AUX.	23Y	387	A13c
2CV8355D	2.00 GLOBE ISO MO	F/L-2702	AUX.	23U	391	A13c
2CV8368A	2.00 CHECK ISO -	F/L-2702	CNT.	28U	386	C6
2CV8368B	2.00 CHECK ISO -	F/L-2702	CNT.	26Y	388	C6
2CV8368C	2.00 CHECK ISO -	F/L-2702	CNT.	24X	391	C6
2CV8368D	2.00 CHECK ISO -	F/L-2702	CNT.	24V	392	C6
2CV8378A	3.00 CHECK -	F/L-2702	CNT.	28X	379	C2
2CV8378B	3.00 CHECK -	F/L-2702	CNT.	28X	379	C2
2CV8379A	3.00 CHECK -	F/L-2702	CNT.	28V	379	C2
2CV8379B	3.00 CHECK -	F/L-2702	CNT.	28V	379	C2
2CV8381	3.00 CHECK ISO -	F/L-2702	CNT.	25Y	413	C6
2CV8442	2.00 CHECK	F/L-2702	AUX	19S	428	A13h
2CV8481A	4.00 CHECK	F/L-2702	AUX	21V	364	A13g
2CV8481B	4.00 CHECK	F/L-2702	AUX	21Z	364	A13g
2CV8546	8.00 CHECK	F/L-2702	AUX	21U	373	A13c
2CV8804A	8.00 GATE MO	F/L-2702	AUX	21S	364	A13c
1PR066	1.00 GLOBE AO	F/L-2702	AUX.	13X	387	A13c
2PR066	1.00 GLOBE AO	F/L-2702	AUX.	24X	387	A13c
1PS9354A	0.375 GLOBE ISO AO	F/L-2702	CNT.	12V	377	C6
1PS9354B	0.375 GLOBE ISO AO	F/L-2702	AUX.	13V	379	A13c
1PS9355A	0.375 GLOBE ISO AO	F/L-2702	CNT.	12V	377	C6
1PS9355B	0.375 GLOBE ISO AO	F/L-2702	AUX.	13V	379	A13c
1PS9356A	0.375 GLOBE ISO AO	F/L-2702	CNT.	12V	377	C6
1PS9356B	0.375 GLOBE ISO AO	F/L-2702	AUX.	13V	379	A13c
1PS9357A	0.375 GLOBE ISO AO	F/L-2702	CNT.	12V	377	C6
1PS9357B	0.375 GLOBE ISO AO	F/L-2702	AUX.	13V	379	A13c
2PS9354A	0.375 GLOBE ISO AO	F/L-2702	CNT.	24V	377	C6
2PS9354B	0.375 GLOBE ISO AO	F/L-2702	AUX.	23V	379	A13c
2PS9355A	0.375 GLOBE ISO AO	F/L-2702	CNT.	24V	377	C6
2PS9355B	0.375 GLOBE ISO AO	F/L-2702	AUX.	23V	379	A13c
2PS9356A	0.375 GLOBE ISO AO	F/L-2702	CNT.	24V	377	C6
2PS9356B	0.375 GLOBE ISO AO	F/L-2702	AUX.	23V	379	A13c
2PS9357A	0.375 GLOBE ISO AO	F/L-2702	CNT.	24V	377	C6
2PS9357B	0.375 GLOBE ISO AO	F/L-2702	AUX.	23V	379	A13c

BYRON/BRAIDWOOD MECHANICAL EQUIPMENT QUALIFICATION LIST

<u>EQUIPMENT NUMBER</u>	<u>EQUIPMENT NAME</u>	<u>SPEC.</u>	<u>BLDG.</u>	<u>COL. - ROW</u>	<u>EL.</u>	<u>ENV ZONE</u>
1RE1003	3.00 DIAPH. ISO AO	F/L-2702	CNT.	8U	377	C6
1RE9157	1.00 DIAPH. SEAT AO	F/L-2702	AUX.	12U	364	A13c
1RE9159A	0.75 DIAPH. ISO AO	F/L-2702	CNT.	12U	377	C6
1RE9159B	0.75 DIAPH. ISO AO	F/L-2702	AUX.	12U	379	A13c
1RE9160A	1.00 DIAPH. ISO AO	F/L-2702	CNT.	12U	377	C6
1RE9160B	1.00 DIAPH. ISO AO	F/L-2702	AUX.	12U	379	A13c
1RE9170	3.00 DIAPH. ISO	F/L-2702	AUX.	13W	401	A13c
2RE1003	3.00 DIAPH. ISO AO	F/L-2702	CNT.	28U	388	C6
2RE9157	1.00 DIAPH. SEAT AO	F/L-2702	AUX.	24U	379	A13c
2RE9159A	0.75 DIAPH. ISO AO	F/L-2702	CNT.	25V	377	C6
2RE9159B	0.75 DIAPH. ISO AO	F/L-2702	AUX.	24U	364	A13c
2RE9160A	1.00 DIAPH. ISO AO	F/L-2702	CNT.	25V	377	C6
2RE9160B	1.00 DIAPH. ISO AO	F/L-2702	AUX.	24U	364	A13c
2RE9170	3.00 DIAPH. ISO	F/L-2702	AUX.	24W	363	A13c
1RH8701A	12.00 GATE ISO MO	F/L-2702	CNT.	10V	377	C6
1RH8701B	12.00 GATE MO	F/L-2702	CNT.	10V	390	C2
1RH8702A	12.00 GATE ISO MO	F/L-2702	CNT.	12X	377	C6
1RH8702B	12.00 GATE MO	F/L-2702	CNT.	10W	390	C2
1RH8716A	8.00 GATE MO	F/L-2702	AUX.	14U	378	A13c
1RH8716B	8.00 GATE MO	F/L-2702	AUX.	14U	377	A13c
1RH8730A	8.00 CHECK	F/L-2702	AUX.	13U	359	A13c
1RH8730B	8.00 CHECK -	F/L-2702	AUX.	13Y	352	A13c
2RH8701A	12.00 GATE ISO MO	F/L-2702	CNT.	26V	377	C6
2RH8701B	12.00 GATE MO	F/L-2702	CNT.	26V	377	C2
2RH8702A	12.00 GATE ISO MO	F/L-2702	CNT.	24X	377	C6
2RH8702B	12.00 GATE MO	F/L-2702	CNT.	26W	390	C2
2RH8716A	8.00 GATE MO	F/L-2702	AUX.	21U	364	A13c
2RH8716B	8.00 GATE MO	F/L-2702	AUX.	21U	364	A13c
2RH8730A	8.00 CHECK -	F/L-2702	AUX.	23U	349	A13c
2RH8730B	8.00 CHECK -	F/L-2702	AUX.	23Y	347	A13c
1RY8000A	3.00 GATE MO	F/L-2702	CNT.	11V	465	C5
1RY8000B	3.00 GATE MO	F/L-2702	CNT.	11V	465	C5
1RY8025	0.375 GLOBE ISO AO	F/L-2702	AUX.	13W	394	A13c
1RY8026	0.375 GLOBE ISO AO	F/L-2702	CNT.	12W	401	C6
1RY8028	3.00 DIAPH. ISO AO	F/L-2702	AUX.	12U	383	A13c
1RY8033	0.75 DIAPH. ISO AO	F/L-2702	AUX.	13V	394	A13c
1RY8046	3.00 CHECK ISO -	F/L-2702	CNT.	12W	395	C6

BYRON/BRAIDWOOD MECHANICAL EQUIPMENT QUALIFICATION LIST

<u>EQUIPMENT NUMBER</u>	<u>EQUIPMENT NAME</u>	<u>SPEC.</u>	<u>BLDG.</u>	<u>COL. - ROW</u>	<u>EL.</u>	<u>ENV.</u>
1RY8047	0.75 CHECK ISO -	F/L-2702	CNT.	11U	395	C6
2RY8000A	3.00 GATE MO	F/L-2702	CNT.	25V	465	C5
2RY8000B	3.00 GATE MO	F/L-2702	CNT.	25V	465	C5
2RY8025	0.375 GLOBE ISO AO	F/L-2702	AUX.	23W	393	A13c
2RH8026	0.375 GLOBE ISO AO	F/L-2702	CNT.	24W	401	C6
2RH8028	3.00 DIAPH. ISO AO	F/L-2702	AUX.	24U	383	A13c
2RY8033	0.75 DIAPH. ISO AO	F/L-2702	AUX.	23V	394	A13c
2RY8046	3.00 CHECK ISO -	F/L-2702	CNT.	24V	395	C6
2RH8047	0.75 CHECK ISO -	F/L-2702	CNT.	25U	395	C6
1SI8801A	4.00 GATE ISO MO	F/L-2702	AUX.	13V	383	A13c
1SI8801B	4.00 GATE ISO MO	F/L-2702	AUX.	13V	383	A13c
1SI8802A	4.00 GATE ISO MO	F/L-2702	AUX.	13V	383	A13c
1SI8802B	4.00 GATE ISO MO	F/L-2702	AUX.	12X	364	A13c
1SI8804B	8.00 GATE MO	F/L-2702	AUX.	13Y	364	A13c
1SI8806	8.00 GATE MO	F/L-2702	AUX.	13Z	364	A13c
1SI8807A	6.00 GATE MO	F/L-2702	AUX.	15Q	364	A13c
1SI8807B	6.00 GATE MO	F/L-2702	AUX.	15Q	364	A13c
1SI8809A	8.00 GATE ISO MO	F/L-2702	AUX.	13W	383	A13c
1SI8809B	8.00 GATE ISO MO	F/L-2702	AUX.	13X	383	A13c
1SI8812A	12.00 GATE ISO MO	F/L-2702	AUX.	15V	346	A13c
1SI8812B	12.00 GATE ISO MO	F/L-2702	AUX.	14Y	343	A13c
1SI8814	1.50 GLOBE MO	F/L-2702	AUX.	15S	364	A13c
1SI8815	3.00 CHECK ISO -	F/L-2702	CNT.	12V	395	C6
1SI8818A	6.00 CHECK ISO -	F/L-2702	CNT.	7V	422	C6
1SI8818B	6.00 CHECK ISO -	F/L-2702	CNT.	7X	417	C6
1SI8818C	6.00 CHECK ISO -	F/L-2702	CNT.	12X	385	C6
1SI8818D	6.00 CHECK ISO -	F/L-2702	CNT.	12V	390	C6
1SI8819A	2.00 CHECK ISO -	F/L-2702	CNT.	7V	415	C6
1SI8819B	2.00 CHECK ISO -	F/L-2702	CNT.	7X	415	C6
1SI8819C	2.00 CHECK ISO -	F/L-2702	CNT.	12X	381	C6
1SI8819D	2.00 CHECK ISO -	F/L-2702	CNT.	12V	387	C6
1SI8821A	4.00 GATE MO	F/L-2702	AUX.	15U	380	A13c
1SI8821B	4.00 GATE MO	F/L-2702	AUX.	15U	380	A13c

BYRON/BRAIDWOOD MECHANICAL EQUIPMENT QUALIFICATION LIST

<u>EQUIPMENT NUMBER</u>	<u>EQUIPMENT NAME</u>	<u>SPEC.</u>	<u>BLDG.</u>	<u>COL. - ROW</u>	<u>EL.</u>	<u>ZONE</u>
1SI8835	4.00 GATE ISO MO	F/L-2702	AUX.	13W	383	A13c
1SI8840	12.00 GATE ISO MO	F/L-2702	AUX.	12U	385	A13c
1SI8841A	8.00 CHECK ISO -	F/L-2702	CNT.	12V	384	C6
1SI8841B	8.00 CHECK ISO -	F/L-2702	CNT.	12W	379	C6
1SI8871	0.75 GLOBE ISO AO	F/L-2702	CNT.	12V	383	C6
1SI8880	1.00 GLOBE AO	F/L-2702	AUX.	12U	364	A13c
1SI8888	0.75 GLOBE ISO AO	F/L-2702	AUX.	13V	386	A13c
1SI8900A	1.50 CHECK -	F/L-2702	CNT.	8D	393	C2
1SI8900B	1.50 CHECK -	F/L-2702	CNT.	8F	393	C2
1SI8900C	1.50 CHECK -	F/L-2702	CNT.	10F	393	C2
1SI8900D	1.50 CHECK -	F/L-2702	CNT.	12W	393	C2
1SI8905A	2.00 CHECK ISO -	F/L-2702	CNT.	12V	381	C6
1SI8905B	2.00 CHECK ISO -	F/L-2702	CNT.	12X	378	C6
1SI8905C	2.00 CHECK ISO -	F/L-2702	CNT.	12X	378	C6
1SI8905D	2.00 CHECK ISO -	F/L-2702	CNT.	12V	378	C6
1SI8920	1.50 GLOBE MO	F/L-2702	AUX.	13Z	364	A13c
1SI8922A	4.00 CHECK -	F/L-2702	AUX.	15S	367	A13c
1SI8922B	4.00 CHECK	F/L-2702	AUX.	13Z	367	A13c
1SI8923A	6.00 GATE MO	F/L-2702	AUX.	15Q	364	A13C
1SI8923B	6.00 GATE MO	F/L-2702	AUX.	13Z	364	A13c
1SI8924	6.00 GATE MO	F/L-2702	AUX.	15Q	366	A13c
1SI8926	8.00 CHECK -	F/L-2702	AUX.	13Z	376	A13c
1SI8948A	10.00 CHECK -	F/L-2702	CNT.	8W	394	C2
1SI8948B	10.00 CHECK -	F/L-2702	CNT.	8X	394	C2
1SI8948C	10.00 CHECK -	F/L-2702	CNT.	10X	394	C2
1SI8948D	10.00 CHECK -	F/L-2702	CNT.	10V	394	C2
1SI8949A	6.00 CHECK -	F/L-2702	CNT.	10V	385	C2
1SI8949B	6.00 CHECK -	F/L-2702	CNT.	8W	396	C2
1SI8949C	6.00 CHECK -	F/L-2702	CNT.	10X	385	C2
1SI8949D	6.00 CHECK -	F/L-2702	CNT.	10V	396	C2
1SI8956A	10.00 CHECK -	F/L-2702	CNT.	8V	385	C2
1SI8956B	10.00 CHECK -	F/L-2702	CNT.	7W	386	C2
1SI8956C	10.00 CHECK -	F/L-2702	CNT.	11X	386	C2
1SI8956D	10.00 CHECK -	F/L-2702	CNT.	11V	396	C2

BYRON/BRAIDWOOD MECHANICAL EQUIPMENT QUALIFICATION LIST

EQUIPMENT NUMBER	EQUIPMENT NAME	SPEC.	BLDG.	COL. - ROW	EL.	ENV ZONE
2SI8801A	4.00 GATE ISO MO	F/L-2702	AUX.	23V	383	A13c
2SI8801B	4.00 GATE ISO MO	F/L-2702	AUX.	23V	383	A13c
2SI8802A	4.00 GATE ISO MO	F/L-2702	AUX.	23V	383	A13c
2SI8802B	4.00 GATE ISO MO	F/L-2702	AUX.	24X	364	A13c
2SI8804B	8.00 GATE MO	F/L-2702	AUX.	23Y	364	A13c
2SI8806	8.00 GATE MO	F/L-2702	AUX.	23Z	364	A13c
2SI8807A	6.00 GATE MO	F/L-2702	AUX.	21Q	364	A13c
2SI8807B	6.00 GATE MO	F/L-2702	AUX.	21Q	364	A13c
2SI8809A	8.00 GATE ISO MO	F/L-2702	AUX.	23V	383	A13c
2SI8809B	8.00 GATE ISO MO	F/L-2702	AUX.	23X	383	A13c
2SI8812A	12.00 GATE ISO MO	F/L-2702	AUX.	23V	346	A13c
2SI8812B	12.00 GATE ISO MO	F/L-2702	AUX.	21Y	343	A13c
2SI8814	1.50 GLOBE MO	F/L-2702	AUX.	21Q	364	A13c
2SI8815	3.00 GLOBE ISO -	F/L-2702	CNT.	24V	395	C6
2SI8818A	6.00 CHECK ISO -	F/L-2702	CNT.	29V	422	C6
2SI8818B	6.00 CHECK ISO -	F/L-2702	CNT.	29X	417	C6
2SI8818C	6.00 CHECK ISO -	F/L-2702	CNT.	24X	385	C6
2SI8818D	6.00 CHECK ISO -	F/L-2702	CNT.	24V	390	C6
2SI8819A	2.00 CHECK ISO -	F/L-2702	CNT.	29V	415	C6
2SI8819B	2.00 CHECK ISO -	F/L-2702	CNT.	29X	415	C6
2SI8819C	2.00 CHECK ISO -	F/L-2702	CNT.	24X	381	C6
2SI8819D	2.00 CHECK ISO -	F/L-2702	CNT.	24V	387	C6
2SI8821A	4.00 GATE MO	F/L-2702	AUX.	21U	364	A13c
2SI8821B	4.00 GATE MO	F/L-2702	AUX.	21U	364	A13c
2SI8835	4.00 GATE ISO MO	F/L-2702	AUX.	21W	383	A13c
2SI8840	12.00 GATE ISO MO	F/L-2702	AUX.	21U	364	A13c
2SI8841A	8.00 CHECK ISO -	F/L-2702	CNT.	24V	384	C6
2SI8841B	8.00 CHECK ISO -	F/L-2702	CNT.	24W	379	C6
2SI8880	1.00 GLOBE AO	F/L-2702	AUX.	24U	364	A13c
2SI8871	0.75 GLOBE ISO AO	F/L-2702	CNT.	24U	383	C6
2SI8888	0.75 GLOBE ISO AO	F/L-2702	AUX.	23V	386	A13c
2SI8900A	1.50 CHECK -	F/L-2702	CNT.	28D	393	C2
2SI8900B	1.50 CHECK -	F/L-2702	CNT.	28F	393	C2
2SI8900C	1.50 CHECK -	F/L-2702	CNT.	26F	393	C2
2SI8900D	1.50 CHECK -	F/L-2702	CNT.	25W	393	C2
2SI8905A	2.00 CHECK -	F/L-2702	CNT.	24V	381	C6
2SI8905B	2.00 CHECK -	F/L-2702	CNT.	24X	378	C6
2SI8905C	2.00 CHECK -	F/L-2702	CNT.	24X	378	C6
2SI8905D	2.00 CHECK -	F/L-2702	CNT.	24V	378	C6

BYRON/BRAIDWOOD MECHANICAL EQUIPMENT QUALIFICATION LIST

EQUIPMENT NUMBER	EQUIPMENT NAME	SPEC.	BLDG.	COL. - ROW	EL.	
2SI8920	1.50 GLOBE MO	F/L-2702	AUX.	23Z	364	A13c
2SI8922A	4.00 CHECK -	F/L-2702	AUX.	21Q	367	A13c
2SI8922B	4.00 CHECK	F/L-2702	AUX.	23Z	367	A13c
2SI8923A	6.00 GATE MO	F/L-2702	AUX.	21Q	364	A13c
2SI8923B	6.00 GATE MO	F/L-2702	AUX.	23Z	364	A13c
2SI8924	6.00 GATE MO	F/L-2702	AUX.	21Q	364	A13c
2SI8926	8.00 CHECK -	F/L-2702	AUX.	23Z	376	A13c
2SI8948A	10.00 CHECK -	F/L-2702	CNT.	28W	394	C2
2SI8948B	10.00 CHECK -	F/L-2702	CNT.	28X	394	C2
2SI8948C	10.00 CHECK -	F/L-2702	CNT.	26X	394	C2
2SI8948D	10.00 CHECK -	F/L-2702	CNT.	26V	394	C2
2SI8949A	6.00 CHECK -	F/L-2702	CNT.	26V	385	C2
2SI8949B	6.00 CHECK -	F/L-2702	CNT.	28W	396	C2
2SI8949C	6.00 CHECK -	F/L-2702	CNT.	26X	385	C2
2SI8949D	6.00 CHECK -	F/L-2702	CNT.	26V	396	C2
2SI8956A	10.00 CHECK -	F/L-2702	CNT.	28V	385	C2
2SI8956B	10.00 CHECK -	F/L-2702	CNT.	29W	386	C2
2SI8956C	10.00 CHECK -	F/L-2702	CNT.	25X	386	C2
2SI8956D	10.00 CHECK -	F/L-2702	CNT.	25V	396	C2
2SI8958A	12.00 CHECK -	F/L-2702	AUX	21V	350	A13c
2SI8958B	12.00 CHECK -	F/L-2702	AUX	21X	350	A13c
1RY455A	3.00 GLOBE AO	F/L-2702	CNT.	11V	462	C5
1RY456	3.00 GLOBE AO	F/L-2702	CNT.	11V	457	C5
2RY455A	3.00 GLOBE AO	F/L-2702	CNT.	25V	462	C5
2RH456	3.00 GLOBE AO	F/L-2702	CNT.	25V	457	C5

IMS01074S	HYDRAULIC SNUBBER	F/L-2771	TUN		364	T3
IMS01079S	HYDRAULIC SNUBBER	F/L-2771	TUN		364	T3
IMS01083S	HYDRAULIC SNUBBER	F/L-2771	TUN		364	T3
IMS01088S	HYDRAULIC SNUBBER	F/L-2771	TUN		364	T3
IMS01092S	HYDRAULIC SNUBBER	F/L-2771	TUN		364	T3
IMS01097S	HYDRAULIC SNUBBER	F/L-2771	TUN		364	T3
IMS01101S	HYDRAULIC SNUBBER	F/L-2771	TUN		364	T3
IMS01106S	HYDRAULIC SNUBBER	F/L-2771	TUN		364	T3
1PS228A	VALVE	F/L-2928-2	AUX	13X	403	A13c
1PS228B	VALVE	F/L-2928-2	AUX	13X	395	A13c
1PS229A	VALVE	F/L-2928-2	AUX	13X	403	A13c
1PS229B	VALVE	F/L-2928-2	AUX	13X	395	A13c

BYRON/BRAIDWOOD MECHANICAL EQUIPMENT QUALIFICATION LIST

EQUIPMENT NUMBER	EQUIPMENT NAME	SPEC.	BLDG.	COL. - ROW	EL.	ENV ZONE
1PS230A	VALVE	F/L-2928-1	AUX.	13X	403	A13c
1PS230B	VALVE	F/L-2928-1	AUX.	13X	395	A13c
2PS230A	VALVE	F/L-2928-1	AUX.	23X	403	A13c
2PS230B	VALVE	F/L-2928-1	AUX.	23X	395	A13c
2PS228A	VALVE	F/L-2928-2	AUX.	23X	403	A13c
2PS228B	VALVE	F/L-2928-2	AUX.	23X	395	A13c
2PS229A	VALVE	F/L-2928-2	AUX.	23X	403	A13c
2PS229B	VALVE	F/L-2928-2	AUX.	23X	395	A13c
1PR032	VALVE	F/L-2794-1	CNT.	12X	387	C6
1PS231A	VALVE	F/L-2794-1	CNT.	13X	403	C6
1PS231B	VALVE	F/L-2794-1	CNT.	13X	395	C6
2PR032	VALVE	F/L-2794-1	CNT.	24X	387	C6
2PS231A	VALVE	F/L-2794-1	CNT.	23X	403	C6
2PS231B	VALVE	F/L-2794-1	CNT.	23X	495	C6
1AF003A	CHECK VALVE	F/L-2718-1	AUX	17L	383	A11
1AF003B	CHECK VALVE	F/L-2718-1	AUX	15L	383	A11
2AF003A	CHECK VALVE	F/L-2718-1	AUX	18L	383	A11
2AF003B	CHECK VALVE	F/L-2718-1	AUX	19L	363	A11
1AF014A	CHECK VALVE	F/L-2718-1	TUN	7Q	368	T3a
1AF014B	CHECK VALVE	F/L-2718-1	TUN	6Z	363	T3a
1AF014C	CHECK VALVE	F/L-2718-1	TUN	7Z	363	T3a
1AF014D	CHECK VALVE	F/L-2718-1	TUN	7Q	368	T3a
1AF014E	CHECK VALVE	F/L-2718-1	TUN	7Q	368	T3a
1AF014F	CHECK VALVE	F/L-2718-1	TUN	6Z	363	T3a
1AF014G	CHECK VALVE	F/L-2718-1	TUN	7Z	363	T3a
1AF014H	CHECK VALVE	F/L-2718-1	TUN	7Q	368	T3a
2AF014A	CHECK VALVE	F/L-2718-1	TUN	29Q	368	T3a
2AF014B	CHECK VALVE	F/L-2718-1	TUN	29Z	363	T3a
2AF014C	CHECK VALVE	F/L-2718-1	TUN	29Z	363	T3a
2AF014D	CHECK VALVE	F/L-2718-1	TUN	29Q	368	T3a
2AF014E	CHECK VALVE	F/L-2718-1	TUN	29Q	368	T3a
2AF014F	CHECK VALVE	F/L-2718-1	TUN	29Z	363	T3a
2AF014G	CHECK VALVE	F/L-2718-1	TUN	29Z	363	T3a
2AF014H	CHECK VALVE	F/L-2718-1	TUN	29Q	368	T3a

BYRON/BRAIDWOOD MECHANICAL EQUIPMENT QUALIFICATION LIST

<u>EQUIPMENT NUMBER</u>	<u>EQUIPMENT NAME</u>	<u>SPEC.</u>	<u>BLDG.</u>	<u>COL. - ROW</u>	<u>EL.</u>	<u>ENV ZONE</u>
1W0007A	CHECK ISO VALVE - 10"	F/L-2718-1	CNT	11X	407	C6
1W0007B	CHECK ISO VALVE - 10"	F/L-2718-1	CNT	11X	407	C6
2W0007A	CHECK ISO VALVE - 10"	F/L-2718-1	CNT	25X	407	C6
2W0007B	CHECK ISO VALVE - 10"	F/L-2718-1	CNT	25X	403	C6
1FW036A	CHECK VALVE	F/L-2718-1	TUN	6S	385	T3
1FW036B	CHECK VALVE	F/L-2718-1	TUN	6S	387	T3
1FW036C	CHECK VALVE	F/L-2718-1	TUN	7Z	387	T3
1FW036D	CHECK VALVE	F/L-2718-1	TUN	7Z	387	T3
2FW036A	CHECK VALVE	F/L-2718-1	TUN	30S	385	T3
2FW036B	CHECK VALVE	F/L-2718-1	TUN	30S	387	T3
2FW036C	CHECK VALVE	F/L-2718-1	TUN	29X	387	T3
2FW036D	CHECK VALVE	F/L-2718-1	TUN	29X	387	T3
1AF006A	GATE VALVE	F/L-2718-2	AUX	16N	383	A8
1AF006B	GATE VALVE	F/L-2718-2	AUX	16L	383	A8
2AF006A	GATE VALVE	F/L-2718-2	AUX	18L	383	A8
2AF006B	GATE VALVE	F/L-2718-2	AUX	19L	383	A8
1AF017A	GATE VALVE	F/L-2718-2	AUX	16N	383	A8
1AF017B	GATE VALVE	F/L-2718-2	AUX	16L	383	A8
2AF017A	GATE VALVE	F/L-2718-2	AUX	19L	383	A8
2AF017B	GATE VALVE	F/L-2718-2	AUX	19L	392	A11
1W0006A	GATE ISO VALVE - 10"	F/L-2718-2	AUX	12X	383	A13c
1W0006B	GATE ISO VALVE - 10"	F/L-2718-2	AUX	13W	401	A13c
1W0020A	GATE ISO VALVE - 10"	F/L-2718-2	AUX	12X	383	A13c
1W0020B	GATE ISO VALVE - 10"	F/L-2718-2	AUX	12V	401	A13c
2W0006A	GATE ISO VALVE - 10"	F/L-2718-2	AUX	22Y	383	A13c
2W0006B	GATE ISO VALVE - 10"	F/L-2718-2	AUX.	23W	401	A13c
2W0020A	GATE ISO VALVE - 10"	F/L-2718-2	AUX.	24Y	383	A13c
2W0020B	GATE ISO VALVE - 10"	F/L-2718-2	AUX	24Y	383	A13c
1W0056A	GATE VALVE - 10"	F/L-2718-2	CNT	5R	407	C6
1W0056B	GATE VALVE - 10"	F/L-2718-2	CNT	7R	403	C6
2W0056A	GATE VALVE - 10"	F/L-2718-2	CNT	28R	407	C6
2W0056B	GATE VALVE - 10"	F/L-2718-2	CNT	26R	403	C6
1SX173	GATE VALVE - 6"	F/L-2718-2	AUX	16M	391	A11
2SX173	GATE VALVE - 6"	F/L-2718-2	AUX	19M	391	A11
1SX178	GATE VALVE - 6"	F/L-2718-2	AUX	16M	389	A11
2SX178	GATE VALVE - 6"	F/L-2718-2	AUX	19M	391	A11

BYRON/BRAIDWOOD MECHANICAL EQUIPMENT QUALIFICATION LIST

<u>EQUIPMENT NUMBER</u>	<u>EQUIPMENT NAME</u>	<u>SPEC.</u>	<u>LDG.</u>	<u>COL. - ROW</u>	<u>EL.</u>	<u>ZONE</u>
VP01CA	Primary Cnt. Vent System RCFC Fan	F/L-2733	CNT	7V	390	C6
VP01CB	Primary Cnt. Vent System RCFC Fan	F/L-2733	CNT	7X	364	C6
VP01CC	Primary Cnt. Vent System RCFC Fan	F/L-2733	CNT	11X	387	C6
VP01CD	Primary Cnt. Vent System RCFC Fan	F/L-2733	CNT	11U	377	C6
2VP01CA	Primary Cnt. Vent System RCFC Fan	F/L-2733	CNT	29V	364	C6
2VP01CB	Primary Cnt. Vent System RCFC Fan	F/L-2733	CNT	29X	364	C6
2VP01CC	Primary Cnt. Vent System RCFC Fan	F/L-2733	CNT	25Y	364	C6
2VP01CD	Primary Cnt. Vent System RCFC Fan	F/L-2733	CNT	25U	364	C6
1MS001A	Gate ISO Valve	F/L-2756	TUN	6S	377	T3
1MS001B	Gate ISO Valve	F/L-2756	TUN	6Z	394	T3
1MS001C	Gate ISO Valve	F/L-2756	TUN	7Z	394	T3
1MS001D	Gate ISO Valve	F/L-2756	TUN	7S	377	T3
2MS001A	Gate ISO Valve	F/L-2756	TUN	30S	377	T3
2MS001B	Gate ISO Valve	F/L-2756	TUN	29Z	377	T3
2MS001C	Gate ISO Valve	F/L-2756	TUN	29Z	377	T3
2MS001D	Gate ISO Valve	F/L-2756	TUN	30S	377	T3
1CS01PA	Containment Spray Pump (Motor Driven)	F/L-2758	AUX	14V	346	A13C
1CS01PB	Containment Spray Pump (Motor Driven)	F/L-2758	AUX	14X	343	A13C
2CS01PA	Containment Spray Pump (Motor Driven)	F/L-2758	AUX	22V	346	A13C
2CS01PB	Containment Spray Pump (Motor Driven)	F/L-2758	AUX	22X	343	A13C
1MS013A	Relief ISO Valve	F/L-2761	TUN	6Q	405	T3
1MS013B	Relief ISO Valve	F/L-2761	TUN	6Y	405	T3
1MS013C	Relief ISO Valve	F/L-2761	TUN	6Y	405	T3
1MS013D	Relief ISO Valve	F/L-2761	TUN	6Q	405	T3
1MS014A	Relief ISO Valve	F/L-2761	TUN	6Q	405	T3
1MS014B	Relief ISO Valve	F/L-2761	TUN	6Y	405	T3
1MS014C	Relief ISO Valve	F/L-2761	TUN	6Y	405	T3
1MS014D	Relief ISO Valve	F/L-2761	TUN	6Q	405	T3
1MS015A	Relief ISO Valve	F/L-2761	TUN	6Q	405	T3
1MS015B	Relief ISO Valve	F/L-2761	TUN	6Y	405	T3
1MS015C	Relief ISO Valve	F/L-2761	TUN	6Y	405	T3
1MS015D	Relief ISO Valve	F/L-2761	TUN	6Q	405	T3
1MS016A	Relief ISO Valve	F/L-2761	TUN	6Q	405	T3
1MS016B	Relief ISO Valve	F/L-2761	TUN	6Y	405	T3
1MS016C	Relief ISO Valve	F/L-2761	TUN	6Y	405	T3
1MS016D	Relief ISO Valve	F/L-2761	TUN	6Q	405	T3

BYRON/BRAIDWOOD MECHANICAL EQUIPMENT QUALIFICATION LIST

<u>EQUIPMENT NUMBER</u>	<u>EQUIPMENT NAME</u>	<u>SPEC.</u>	<u>BLDG.</u>	<u>COL. - ROW</u>	<u>EL.</u>	
1MS017A	Relief ISO Valve	F/L-2761	TUN	6Q	405	T3
1MS017B	Relief ISO Valve	F/L-2761	TUN	6Y	405	T3
1MS017C	Relief ISO Valve	F/L-2761	TUN	6Y	405	T3
1MS017D	Relief ISO Valve	F/L-2761	TUN	6Q	405	T3
2MS013A	Relief ISO Valve	F/L-2761	TUN	30S	405	T3
2MS013B	Relief ISO Valve	F/L-2761	TUN	30Z	405	T3
2MS013C	Relief ISO Valve	F/L-2761	TUN	29Z	405	T3
2MS013D	Relief ISO Valve	F/L-2761	TUN	29S	405	T3
2MS014A	Relief ISO Valve	F/L-2761	TUN	30S	405	T3
2MS014B	Relief ISO Valve	F/L-2761	TUN	30Z	405	T3
2MS014C	Relief ISO Valve	F/L-2761	TUN	29Z	405	T3
2MS014D	Relief ISO Valve	F/L-2761	TUN	29S	405	T3
2MS015A	Relief ISO Valve	F/L-2761	TUN	30S	405	T3
2MS015B	Relief ISO Valve	F/L-2761	TUN	30Z	405	T3
2MS015C	Relief ISO Valve	F/L-2761	TUN	29Z	405	T3
2MS015D	Relief ISO Valve	F/L-2761	TUN	29S	405	T3
2MS016A	Relief ISO Valve	F/L-2761	TUN	30S	405	T3
2MS016B	Relief ISO Valve	F/L-2761	TUN	30Z	405	T3
2MS016C	Relief ISO Valve	F/L-2761	TUN	29Z	405	T3
2MS016D	Relief ISO Valve	F/L-2761	TUN	29S	405	T3
2MS017A	Relief ISO Valve	F/L-2761	TUN	30S	405	T3
2MS017B	Relief ISO Valve	F/L-2761	TUN	30Z	405	T3
2MS017C	Relief ISO Valve	F/L-2761	TUN	29Z	405	T3
2MS017D	Relief ISO Valve	F/L-2761	TUN	29S	405	T3
OVA01CA	Aux. Bldg. HVAC Fan	F/L-2774	AUX	15S	451	A13D
OVA01CB	Aux. Bldg. HVAC Fan	F/L-2774	AUX	15Q	451	A13D
OVA01CC	Aux. Bldg. HVAC Fan	F/L-2774	AUX	21S	451	A13D
OVA01CD	Aux. Bldg. HVAC Fan	F/L-2774	AUX	21Q	451	A13D
OVA02CA	Aux. Bldg. HVAC Fan	F/L-2774	AUX	16S	476	A13D
OVA02CB	Aux. Bldg. HVAC Fan	F/L-2774	AUX	17S	476	A13D
OVA02CC	Aux. Bldg. HVAC Fan	F/L-2774	AUX	19S	476	A13D
OVA02CD	Aux. Bldg. HVAC Fan	F/L-2774	AUX	20S	476	A13D
OVA03CA	Aux. Bldg. HVAC Fan	F/L-2774	AUX	15V	476	A13D
OVA03CB	Aux. Bldg. HVAC Fan	F/L-2774	AUX	15V	476	A13D
OVA03CC	Aux. Bldg. HVAC Fan	F/L-2774	AUX	17V	476	A13D
OVA03CD	Aux. Bldg. HVAC Fan	F/L-2774	AUX	18V	476	A13D
OVA03CE	Aux. Bldg. HVAC Fan	F/L-2774	AUX	19V	476	A13D
OVA03CF	Aux. Bldg. HVAC Fan	F/L-2774	AUX	21V	476	A13D

LYRON/BRAIDWOOD MECHANICAL EQUIPMENT QUALIFICATION LIST

<u>EQUIPMENT NUMBER</u>	<u>EQUIPMENT NAME</u>	<u>SPEC.</u>	<u>BLDG.</u>	<u>COL. - ROW</u>	<u>EL.</u>	
OVA04CA	Aux. Bldg. HVAC Fan	F/L-2774	AUX	18V	476	A13D
OVA04CB	Aux. Bldg. HVAC Fan	F/L-2774	AUX	19V	476	A13D
1MS018A	Angle ISO Valve	F/L-2785	TUN	6Q	405	T3
1MS018B	Angle ISO Valve	F/L-2785	TUN	6Y	405	T3
1MS018C	Angle ISO Valve	F/L-2785	TUN	6Y	405	T3
1MS018D	Angle ISO Valve	F/L-2785	TUN	6Q	405	T3
2MS018A	Angle ISO Valve	F/L-2785	TUN	30S	405	T3
2MS018B	Angle ISO Valve	F/L-2785	TUN	30Y	405	T3
2MS018C	Angle ISO Valve	F/L-2785	TUN	29Z	405	T3
2MS018D	Angle ISO Valve	F/L-2785	TUN	29S	405	T3
1FW043A	Control ISO Valve	F/L-2793	TUN	7S	377	T3
1FW043B	Control ISO Valve	F/L-2793	TUN	7Y	380	T3
1FW043C	Control ISO Valve	F/L-2793	TUN	8Z	390	T3
1FW043D	Control ISO Valve	F/L-2793	TUN	7S	377	T3
2FW043A	Control ISO Valve	F/L-2793	TUN	30S	377	T3
2FW043B	Control ISO Valve	F/L-2793	TUN	29Z	377	T3
2FW043C	Control ISO Valve	F/L-2793	TUN	29Z	377	T3
2FW043D	Control ISO Valve	F/L-2793	TUN	29Z	377	T3
1CS010A	Control Valve	F/L-2793	AUX	15W	346	A13C
1CS010B	Control Valve	F/L-2793	AUX	13X	343	A13C
1FW035A	Control Valve	F/L-2793	TUN	7S	377	T3
1FW035B	Control Valve	F/L-2793	TUN	7Z	387	T3
1FWC35C	Control Valve	F/L-2793	TUN	8Z	388	T3
1FW035D	Control Valve	F/L-2793	TUN	7Z	377	T3
1PR001A	Control Valve	F/L-2793	AUX	13X	383	A13C
1PR001B	Control Valve	F/L-2793	AUX	13X	383	A13C
2CS010A	Control Valve	F/L-2793	AUX	21V	343	A13C
2CS010B	Control Valve	F/L-2793	AUX	23X	343	A13C
2FW035A	Control Valve	F/L-2793	TUN	30S	377	T3
2FW035B	Control Valve	F/L-2793	TUN	29Z	377	T3
2FW035C	Control Valve	F/L-2793	TUN	29Z	377	T3
2FW035D	Control Valve	F/L-2793	TUN	29Q	377	T3
2PR001A	Control Valve	F/L-2793	AUX	24X	387	A13C
2PR001B	Control Valve	F/L-2793	AUX	24X	387	A13C

BYRON/BRAIDWOOD MECHANICAL EQUIPMENT QUALIFICATION LIST

<u>EQUIPMENT NUMBER</u>	<u>EQUIPMENT NAME</u>	<u>SPEC.</u>	<u>BLDG.</u>	<u>COL. - ROW</u>	<u>EL.</u>	
1FP010	GLOBE ISO VALVE	F/L-2793	AUX	12V	391	A13c
1FP011	GLOBE ISO VALVE	F/L-2793	CNT	13V	391	C6
1SA032	GLOBE ISO VALVE	F/L-2793	AUX	12U	383	A14c
1SA033	GLOBE ISO VALVE	F/L-2793	CNT	12U	383	C6
1SD002A	GLOBE ISO VALVE	F/L-2793	TUN	6S	377	T3
1SD002B	GLOBE ISO VALVE	F/L-2793	TUN	6S	377	T3
1SD002C	GLOBE ISO VALVE	F/L-2793	TUN	6S	377	T3
1SD002D	GLOBE ISO VALVE	F/L-2793	TUN	6S	377	T3
1SD002E	GLOBE ISO VALVE	F/L-2793	TUN	6Z	380	T3
1SD002F	GLOBE ISO VALVE	F/L-2793	TUN	6Z	380	T3
1SD002G	GLOBE ISO VALVE	F/L-2793	TUN	6Z	380	T3
1SD002H	GLOBE ISO VALVE	F/L-2793	TUN	6Z	380	T3
1SD005A	GLOBE ISO VALVE	F/L-2793	TUN	6S	377	T3
1SD005B	GLOBE ISO VALVE	F/L-2793	TUN	6S	377	T3
1SD005C	GLOBE ISO VALVE	F/L-2793	TUN	6Z	383	T3
1SD005D	GLOBE ISO VALVE	F/L-2793	TUN	6Z	383	T3
2FP010	GLOBE ISO VALVE	F/L-2793	AUX	24V	391	A13c
2FP011	GLOBE ISO VALVE	F/L-2793	CNT	23V	391	C6
2SA032	GLOBE ISO VALVE	F/L-2793	AUX	24U	383	A13c
2SA033	GLOBE ISO VALVE	F/L-2793	CNT	24U	383	C6
2SD002A	GLOBE ISO VALVE	F/L-2793	TUN	30S	377	T3
2SD002B	GLOBE ISO VALVE	F/L-2793	TUN	30S	377	T3
2SD002C	GLOBE ISO VALVE	F/L-2793	TUN	29S	377	T3
2SD002D	GLOBE ISO VALVE	F/L-2793	TUN	29S	377	T3
2SD002E	GLOBE ISO VALVE	F/L-2793	TUN	29Z	377	T3
2SD002F	GLOBE ISO VALVE	F/L-2793	TUN	29Z	377	T3
2SD002G	GLOBE ISO VALVE	F/L-2793	TUN	29Z	377	T3
2SD002H	GLOBE ISO VALVE	F/L-2793	TUN	29Z	377	T3
2SD005A	GLOBE ISO VALVE	F/L-2793	TUN	30S	377	T3
2SD005B	GLOBE ISO VALVE	F/L-2793	TUN	29S	377	T3
2SD005C	GLOBE ISO VALVE	F/L-2793	TUN	29Z	377	T3
2SD005D	GLOBE ISO VALVE	F/L-2793	TUN	29Z	377	T3
1IA091	CHECK ISO VALVE	F/L-2794-1	CNT	12X	391	C6
2IA091	CHECK ISO VALVE	F/L-2794-1	CNT	24X	391	C6

BYRON/BRAIDWOOD MECHANICAL EQUIPMENT QUALIFICATION LIST

<u>EQUIPMENT NUMBER</u>	<u>EQUIPMENT NAME</u>	<u>SPEC.</u>	<u>BLDG.</u>	<u>COL. - ROW</u>	<u>EL.</u>	<u>ENV</u>
1CS019A	GATE ISO VALVE	F/L-2794-1	AUX	13W	346	A13c
1CS019B	GATE ISO VALVE	F/L-2794-1	AUX	15X	346	A13c
1SI8811A	GATE ISO VALVE	F/L-2794-1	AUX	13U	364	A13c
1SI8811B	GATE ISO VALVE	F/L-2794-1	AUX	13Y	364	A13c
2CS019A	GATE ISO VALVE	F/L-2794-1	AUX	21V	343	A13c
2CS019B	GATE ISO VALVE	F/L-2794-1	AUX	21X	343	A13c
2SI8811A	GATE ISO VALVE	F/L-2794-1	AUX	23U	364	A13c
2SI8811B	GATE ISO VALVE	F/L-2794-1	AUX	23Y	364	A13c
1IA065	GLOBE ISO VALVE	F/L-2794-1	AUX	13X	391	A13c
1IA066	GLOBE ISO VALVE	F/L-2794-1	CNT	12X	391	C6
1CS008A	CHECK ISO VALVE	F/L-2794-2	CNT	12W	410	C6
1CS008B	CHECK ISO VALVE	F/L-2794-2	CNT	12X	402	C6
2CS008A	CHECK ISO VALVE	F/L-2794-2	CNT	24W	410	C6
2CS008B	CHECK ISO VALVE	F/L-2794-2	CNT	24X	402	C6
1CS011A	CHECK VALVE	F/L-2794-2	AUX	15V	343	A13c
1CS011B	CHECK VALVE	F/L-2794-2	AUX	15X	343	A13c
2CS011A	CHECK VALVE	F/L-2794-2	AUX	21V	343	A13c
2CS011B	CHECK VALVE	F/L-2794-2	AUX	21X	343	A13c
1CS020A	CHECK VALVE	F/L-2794-2	AUX	15U	343	A13c
1CS020B	CHECK VALVE	F/L-2794-2	AUX	15X	343	A13c
2CS020A	CHECK VALVE	F/L-2794-2	AUX	21U	343	A13c
2CS020B	CHECK VALVE	F/L-2794-2	AUX	21X	343	A13c
1CS003A	NOSL. CHECK VALVE - 10"	F/L-2794-2	AUX	13V	343	A13c
1CS003B	NOSL. CHECK VALVE - 10"	F/L-2794-2	AUX	15X	343	A13c
2CS003A	NOSL. CHECK VALVE - 10"	F/L-2794-2	AUX	21V	343	A13c
2CS003B	NOSL. CHECK VALVE - 10"	F/L-2794-2	AUX	21X	343	A13c
1CS001A	GATE VALVE	F/L-2794-3	AUX	13V	364	A13c
1CS001B	GATE VALVE	F/L-2794-3	AUX	15X	364	A13c
1CS007A	GATE VALVE	F/L-2794-3	AUX	13W	401	A13c
1CS007B	GATE VALVE	F/L-2794-3	AUX	13X	383	A13c
1CS009A	GATE VALVE	F/L-2794-3	AUX	13V	346	A13c
1CS009B	GATE VALVE	F/L-2794-3	AUX	13X	346	A13c
2CS001A	GATE VALVE	F/L-2794-3	AUX	22X	364	A13c
2CS001B	GATE VALVE	F/L-2794-3	AUX	22X	364	A13c
2CS007A	GATE VALVE	F/L-2794-3	AUX	23W	401	A13c
2CS007B	GATE VALVE	F/L-2794-3	AUX	23X	383	A13c
2CS009A	GATE VALVE	F/L-2794-3	AUX	23V	343	A13c
2CS009B	GATE VALVE	F/L-2794-3	AUX	21X	343	A13c
2IA065	GLOBE ISO VALVE	F/L-2794-1	AUX	23X	391	A13c
2IA066	GLOBE ISO VALVE	F/L-2794-1	CNT	24X	391	C6
1RF027	PLUG ISO VALVE	F/L-2874	AUX	13V	383	A13c

BYRON/BRAIDWOOD MECHANICAL EQUIPMENT QUALIFICATION LIST

<u>EQUIPMENT NUMBER</u>	<u>EQUIPMENT NAME</u>	<u>SPEC.</u>	<u>BLDG.</u>	<u>COL. - ROW</u>	<u>EL.</u>	<u>ENV ZONE</u>
2RF027	PLUG ISO VALVE	F/L-2874	AUX	23V	383	A13c
1RF026	PLUG VALVE - 2"	F/L-2795	CNT	12V	390	C6
2RF026	PLUG VALVE - 2"	F/L-2795	CNT	26S	390	C6
1FW009A	GATE ISO VALVE - 16"	F/L-2874	TUN	6S	377	T3
1FW009B	GATE ISO VALVE - 16"	F/L-2874	TUN	7W	377	T3
1FW009C	GATE ISO VALVE - 16"	F/L-2874	TUN	6W	377	T3
1FW009D	GATE ISO VALVE - 16"	F/L-2874	TUN	7S	377	T3
2FW009A	GATE ISO VALVE - 16"	F/L-2874	TUN	30S	377	T3
2FW009B	GATE ISO VALVE - 16"	F/L-2874	TUN	29Z	377	T3
2FW009C	GATE ISO VALVE - 16"	F/L-2874	TUN	29Z	377	T3
2FW009D	GATE ISO VALVE - 16"	F/L-2874	TUN	29S	377	T3
0OG059	BUTTERFLY VALVE - 3"	F/L-2884	AUX	15U	401	A8
0OG060	BUTTERFLY VALVE - 3"	F/L-2884	AUX	15U	401	A8
0OG061	BUTTERFLY VALVE - 3"	F/L-2884	AUX	15U	401	A8
0OG062	BUTTERFLY VALVE - 3"	F/L-2884	AUX	15U	401	A8
0OG063	BUTTERFLY VALVE - 3"	F/L-2884	AUX	15U	401	A8
0OG064	BUTTERFLY VALVE - 3"	F/L-2884	AUX	21U	401	A8
1OG057A	BUTTERFLY ISO VALVE	F/L-2884	CNT	12V	384	C6
1VQ001A	BUTTERFLY ISO VALVE	F/L-2884	CNT	12U	462	C6
1VQ001B	BUTTERFLY ISO VALVE	F/L-2884	AUX	12X	451	A13d
1VQ002A	BUTTERFLY ISO VALVE	F/L-2884	CNT	12V	462	C6
1VQ002B	BUTTERFLY ISO VALVE	F/L-2884	AUX	12S	451	A13d
1VQ003	BUTTERFLY ISO VALVE	F/L-2884	AUX	13W	475	A13d
1VQ004A	BUTTERFLY ISO VALVE	F/L-2884	CNT	12U	462	C6
1VQ004B	BUTTERFLY ISO VALVE	F/L-2884	AUX	12U	451	A13d
1VQ005A	BUTTERFLY ISO VALVE	F/L-2884	CNT	12V	475	C6
1VQ005B	BUTTERFLY ISO VALVE	F/L-2884	AUX	13V	472	A13d
2OG057A	BUTTERFLY ISO VALVE	F/L-2884	CNT	24V	384	C6
1SX016A	BUTTERFLY ISO VALVE	F/L-2884	AUX	13Y	403	A13c
1SX016B	BUTTERFLY ISO VALVE	F/L-2884	AUX	13V	401	A13c
1SX027A	BUTTERFLY ISO VALVE	F/L-2884	AUX	13Y	403	A13c
1SX027B	BUTTERFLY ISO VALVE	F/L-2884	AUX	13V	403	A13c

BYRON/BRAIDWOOD MECHANICAL EQUIPMENT QUALIFICATION LIST

EQUIPMENT NUMBER	EQUIPMENT NAME	SPEC.	PLDG.	COL. - ROW	EL.	
1SX169A	BUTTERFLY VALVE	F/L-2884	AUX	8P	401	A6
1SX169B	BUTTERFLY VALVE	F/L-2884	AUX	6P	401	A6
2SX016A	BUTTERFLY ISO VALVE	F/L-2884	AUX	23Y	370	A13c
2SX016B	BUTTERFLY ISO VALVE	F/L-2884	AUX	23Y	403	A13c
2SX027A	BUTTERFLY ISO VALVE	F/L-2884	AUX	26V	403	A13c
2SX027B	BUTTERFLY ISO VALVE	F/L-2884	AUX	23X	403	A13c
2SX169A	BUTTERFLY VALVE	F/L-2884	AUX	26P	401	A6
2SX169B	BUTTERFLY VALVE	F/L-2884	AUX	29P	401	A6
2VQ001A	BUTTERFLY ISO VALVE	F/L-2884	CNT	24U	462	C6
2VQ001B	BUTTERFLY ISO VALVE	F/L-2884	AUX	24S	452	A13d
2VQ002A	BUTTERFLY ISO VALVE	F/L-2884	CNT	24V	462	C6
2VQ002B	BUTTERFLY ISO VALVE	F/L-2884	AUX	24U	451	A13d
2VQ003	BUTTERFLY ISO VALVE	F/L-2884	AUX	23V	467	A13d
2VQ004A	BUTTERFLY ISO VALVE	F/L-2884	CNT	24U	462	C6
2VQ004B	BUTTERFLY ISO VALVE	F/L-2884	AUX	24U	451	A13d
2VQ005A	BUTTERFLY ISO VALVE	F/L-2884	CNT	24V	475	C6
2VQ005B	BUTTERFLY ISO VALVE	F/L-2884	AUX	23V	467	A13d
1OG079	BUTTERFLY VALVE - 3"	F/L-2884	CNT	12X	403	C6
1OG080	BUTTERFLY VALVE - 3"	F/L-2884	CNT	12X	403	C6
1OG081	BUTTERFLY VALVE - 3"	F/L-2884	CNT	12V	395	C6
1OG082	BUTTERFLY VALVE - 3"	F/L-2884	AUX	13X	402	A13c
1OG083	BUTTERFLY VALVE - 3"	F/L-2884	AUX	13V	379	A13c
1OG084	BUTTERFLY VALVE - 3"	F/L-2884	AUX	13X	402	A13c
1OG085	BUTTERFLY VALVE - 3"	F/L-2884	AUX	13U	395	A13c
2OG079	BUTTERFLY VALVE - 3"	F/L-2884	CNT	24X	403	C6
2OG080	BUTTERFLY VALVE - 3"	F/L-2884	CNT	24X	403	C6
2OG081	BUTTERFLY VALVE - 3"	F/L-2884	CNT	24V	395	A13c
2OG082	BUTTERFLY VALVE - 3"	F/L-2884	AUX	23X	402	A13c
2OG083	BUTTERFLY VALVE - 3"	F/L-2884	AUX	23V	379	A13c
2OG084	BUTTERFLY VALVE - 3"	F/L-2884	AUX	23X	402	A13c
2OG085	BUTTERFLY VALVE - 3"	F/L-2884	AUX	23U	395	A13c
0WQ028A	RELIEF VALVE	F/L-2885	AUX	8N	390	A8
0WQ028B	RELIEF VALVE	F/L-2885	AUX	10N	390	A8
1VA02CA	AUX. BLDG. HVAC PHR PUMP CUB. COOLER FAN	F/L-2900	AUX	13U	346	A13c
1VA02CB	AUX. BLDG. HVAC RHR PUMP CUB. COOLER FAN	F/L-2900	AUX	13U	346	A13c
1VA02CC	AUX. BLDG. HVAC RHR PUMP CUB. COOLER FAN	F/L-2900	AUX	13X	346	A13c
1VA02CD	AUX. BLDG. HVAC RHR PUMP CUB. COOLER FAN	F/L-2900	AUX	13X	346	A13c

BYRON/BRAIDWOOD MECHANICAL EQUIPMENT QUALIFICATION LIST

IDENT NUMBER	EQUIPMENT NAME	SPEC.	BLDG.	COL. - ROW	EL.
1VA03CA	AUX. BLDG. HVAC CS PUMP CUB. COOLER FAN	F/L-2900	AUX	13W	346 A13C
1VA03CB	AUX. BLDG. HVAC CS PUMP CUB. COOLER FAN	F/L-2900	AUX	13W	346 A13C
1VA03CC	AUX. BLDG. HVAC CS PUMP CUB. COOLER FAN	F/L-2900	AUX	13W	346 A13C
1VA03CD	AUX. BLDG. HVAC CS PUMP CUB. COOLER FAN	F/L-2900	AUX	13W	346 A13C
1VA03CE	AUX. BLDG. HVAC CS PUMP CUB. COOLER FAN	F/L-2900	AUX	13X	346 A13C
1VA03CF	AUX. BLDG. HVAC CS PUMP CUB. COOLER FAN	F/L-2900	AUX	13X	346 A13C
1VA03CG	AUX. BLDG. HVAC CS PUMP CUB. COOLER FAN	F/L-2900	AUX	13X	346 A13C
1VA03CH	AUX. BLDG. HVAC CS PUMP CUB. COOLER FAN	F/L-2900	AUX	13X	346 A13C
1VA04CA	AUX. BLDG. HVAC SI PUMP CUB. COOLER FAN	F/L-2900	AUX	17Q	346 A13C
1VA04CB	AUX. BLDG. HVAC SI PUMP CUB. COOLER FAN	F/L-2900	AUX	17Q	346 A13C
1VA04CC	AUX. BLDG. HVAC SI PUMP CUB. COOLER FAN	F/L-2900	AUX	13Y	346 A13C
1VA04CD	AUX. BLDG. HVAC SI PUMP CUB. COOLER FAN	F/L-2900	AUX	13Y	346 A13C
1VA06CA	AUX. BLDG. HVAC CC PUMP CUB. COOLER FAN	F/L-2900	AUX	16U	346 A13G
1VA06CB	AUX. BLDG. HVAC CC PUMP CUB. COOLER FAN	F/L-2900	AUX	16U	346 A13G
1VA06CC	AUX. BLDG. HVAC CC PUMP CUB. COOLER FAN	F/L-2900	AUX	15Z	346 A13G
1VA06CD	AUX. BLDG. HVAC CC PUMP CUB. COOLER FAN	F/L-2900	AUX	15Z	346 A13G
1VA07CA	AUX. BLDG. HVAC FC PUMP CUB. COOLER FAN	F/L-2900	FB	18Z	401 A12
1VA07CB	AUX. BLDG. HVAC FC PUMP CUB. COOLER FAN	F/L-2900	FB	18Z	401 A12
2VA02CA	AUX. BLDG. HVAC RH PUMP CUB. COOLER FAN	F/L-2900	AUX	23U	346 A13C
2VA02CB	AUX. BLDG. HVAC RH PUMP CUB. COOLER FAN	F/L-2900	AUX	23U	346 A13C
2VA02CC	AUX. BLDG. HVAC RH PUMP CUB. COOLER FAN	F/L-2900	AUX	23Y	346 A13C
2VA02CD	AUX. BLDG. HVAC RH PUMP CUB. COOLER FAN	F/L-2900	AUX	23Y	346 A13C
2VA03CA	AUX. BLDG. HVAC CS PUMP CUB. COOLER FAN	F/L-2900	AUX	23W	346 A13C
2VA03CB	AUX. BLDG. HVAC CS PUMP CUB. COOLER FAN	F/L-2900	AUX	23W	346 A13C
2VA03CC	AUX. BLDG. HVAC CS PUMP CUB. COOLER FAN	F/L-2900	AUX	23W	346 A13C
2VA03CD	AUX. BLDG. HVAC CS PUMP CUB. COOLER FAN	F/L-2900	AUX	23W	346 A13C
2VA03CE	AUX. BLDG. HVAC CS PUMP CUB. COOLER FAN	F/L-2900	AUX	23X	346 A13C
2VA03CF	AUX. BLDG. HVAC CS PUMP CUB. COOLER FAN	F/L-2900	AUX	23X	346 A13C
2VA03CG	AUX. BLDG. HVAC CS PUMP CUB. COOLER FAN	F/L-2900	AUX	23X	346 A13C
2VA03CH	AUX. BLDG. HVAC CS PUMP CUB. COOLER FAN	F/L-2900	AUX	23X	346 A13C
2VA04CA	AUX. BLDG. HVAC SI PUMP CUB. COOLER FAN	F/L-2900	AUX	19Q	364 A13C
2VA04CB	AUX. BLDG. HVAC SI PUMP CUB. COOLER FAN	F/L-2900	AUX	19Q	364 A13C
2VA04CC	AUX. BLDG. HVAC SI PUMP CUB. COOLER FAN	F/L-2900	AUX	23Y	364 A13C
2VA04CD	AUX. BLDG. HVAC SI PUMP CUB. COOLER FAN	F/L-2900	AUX	23Y	364 A13C
2VA06CA	AUX. BLDG. HVAC CC PUMP CUB. COOLER FAN	F/L-2900	AUX	19V	364 A13G
2VA06CB	AUX. BLDG. HVAC CC PUMP CUB. COOLER FAN	F/L-2900	AUX	19V	364 A13G
2VA06CC	AUX. BLDG. HVAC CC PUMP CUB. COOLER FAN	F/L-2900	AUX	23Y	364 A13G
2VA06CD	AUX. BLDG. HVAC CC PUMP CUB. COOLER FAN	F/L-2900	AUX	23Y	364 A13G
2VA07CA	AUX. BLDG. HVAC FC PUMP CUB. COOLER FAN	F/L-2900	AUX	19V	401 A12
2VA07CB	AUX. BLDG. HVAC FC PUMP CUB. COOLER FAN	F/L-2900	AUX.	19V	401 A13

BYRON/BRAIDWOOD MECHANICAL EQUIPMENT QUALIFICATION LIST

<u>EQUIPMENT NUMBER</u>	<u>EQUIPMENT NAME</u>	<u>SPEC.</u>	<u>BLDG.</u>	<u>COL. - ROW</u>	<u>EL.</u>	<u>ED. ZONE</u>
1VA05CA	Fan	F/L-2900	AUX	17U	364	A13C
1VA05CB	Fan	F/L-2900	AUX	17U	364	A13C
2VA05CA	Fan	F/L-2900	AUX	19U	364	A13C
2VA05CB	Fan	F/L-2900	AUX	19U	364	A13C
OVA022YA	Damper	F/L-2903	AUX	15V	476	A13D
OVA022YB	Damper	F/L-2903	AUX	15V	476	A13D
OVA023YA	Damper	F/L-2903	AUX	17V	476	A13D
OVA023YB	Damper	F/L-2903	AUX	17V	476	A13D
OVA024YA	Damper	F/L-2903	AUX	17V	476	A13D
OVA024YB	Damper	F/L-2903	AUX	17V	476	A13D
OVA025YA	Damper	F/L-2903	AUX	18V	476	A13D
OVA025YB	Damper	F/L-2903	AUX	18V	476	A13D
OVA053YA	Damper	F/L-2903	AUX	18U	451	A13D
OVA053YB	Damper	F/L-2903	AUX	18U	451	A13D
OVA053YC	Damper	F/L-2903	AUX	19U	451	A13D
OVA054YA	Damper	F/L-2903	AUX	18V	451	A13D
OVA054YB	Damper	F/L-2903	AUX	19V	451	A13D
OVA057Y	Damper	F/L-2903	AUX	18V	476	A13D
OVA058YA	Damper	F/L-2903	AUX	18U	451	A13D
OVA058YB	Damper	F/L-2903	AUX	19U	451	A13D
OVA058YC	Damper	F/L-2903	AUX	19U	451	A13D
OVA059YA	Damper	F/L-2903	AUX	18V	451	A13D
OVA059YB	Damper	F/L-2903	AUX	19V	451	A13D
OVA062Y	Damper	F/L-2903	AUX	19V	476	A13D
OVA067YA	Damper	F/L-2903	AUX	19V	476	A13D
OVA067YB	Damper	F/L-2903	AUX	19V	476	A13D
OVA072YA	Damper	F/L-2903	AUX	21V	476	A13D
OVA072YB	Damper	F/L-2903	AUX	21V	476	A13D
OVA079YA	Damper	F/L-2903	AUX	19U	476	A13D
OVA079YB	Damper	F/L-2903	AUX	19U	476	A13D
OVA084YA	Damper	F/L-2903	AUX	15U	451	A13D
OVA084YB	Damper	F/L-2903	AUX	15U	451	A13D
OVA085YA	Damper	F/L-2903	AUX	18U	451	A13D
OVA085YB	Damper	F/L-2903	AUX	18U	451	A13D
OVA086YA	Damper	F/L-2903	AUX	21U	451	A13D
OVA086YB	Damper	F/L-2903	AUX	21U	451	A13D
OVA087YA	Damper	F/L-2903	AUX	15S	451	A13D
OVA087YB	Damper	F/L-2903	AUX	15S	451	A13D

BYRON/BRAIDWOOD MECHANICAL EQUIPMENT QUALIFICATION LIST

<u>EQUIPMENT NUMBER</u>	<u>EQUIPMENT NAME</u>	<u>SPEC.</u>	<u>BLDG.</u>	<u>COL. - ROW</u>	<u>EL.</u>	<u>2</u>
OVA088YA	Damper	F/L-2903	AUX	18S	451	A13D
OVA088YB	Damper	F/L-2903	AUX	18S	451	A13D
OVA089YA	Damper	F/L-2903	AUX	18S	451	A13D
OVA089YB	Damper	F/L-2903	AUX	18S	451	A13D
OVA099YA	Damper	F/L-2903	AUX	21S	451	A13D
OVA099YB	Damper	F/L-2903	AUX	21S	476	A13D
OVA100YA	Damper	F/L-2903	AUX	17Q	476	A13D
OVA100YB	Damper	F/L-2903	AUX	17Q	476	A13D
OVA424YA	Damper	F/L-2903	AUX	15U	476	A13D
OVA424YB	Damper	F/L-2903	AUX	17U	476	A13D
OVA425YA	Damper	F/L-2903	AUX	17U	476	A13D
OVA425YB	Damper	F/L-2903	AUX	18U	476	A13D
OVA427YA	Damper	F/L-2903	AUX	19U	476	A13D
OVA427YB	Damper	F/L-2903	AUX	21U	476	A13D
1RC014A	Globe Valve - 1"	F/L-2928	CNT	10X	429	C3
1RC014B	Globe Valve - 1"	F/L-2928	CNT	10X	429	C3
1RC014C	Globe Valve - 1"	F/L-2928	CNT	10X	429	C3
1RC014D	Globe Valve - 1"	F/L-2928	CNT	10X	429	C3
2RC014A	Globe Valve - 1"	F/L-2928	CNT	26W	429	C3
2RC014B	Globe Valve - 1"	F/L-2928	CNT	26W	429	C3
2RC014C	Globe Valve - 1"	F/L-2928	CNT	26W	429	C3
2RC014D	Globe Valve - 1"	F/L-2928	CNT	26W	429	C3
1SX101A	Globe Valve	F/L-2928	AUX	18M	383	A11
2SX191A	Globe Valve	F/L-2928	AUX	18M	384	A11

Attachment 2

Results of Environmental Qualification Review for BOP Mechanical Equipment

A list of 441 pieces of BOP mechanical equipment has been generated for Byron Units 1 and 2. This equipment is active safety related equipment. A thorough review of the specification, the environmental conditions, and the equipment design has been made.

171 of the 441 components have specification requirements which equal or exceed the applicable environmental conditions in FSAR Table 3.11-2. Of the remainder, 93 are valves which were specified to experience temperatures of 122°F, but are in areas with predicted maximum temperatures of 130°F to 133°F. 48 valves in the steam tunnel have specification requirements of 280°F for the first three hours after an accident. The peak temperature in the tunnel after an accident is calculated to be 325°F. However, the calculations also show that the temperature will be reduced to less than 280°F in less than ten minutes and to about 120°F in 30 minutes. The effect of high temperature on material deterioration is dependent upon both the temperature reached and the time spent at elevated temperature. The steam tunnel temperature profile is calculated using many conservative assumptions. Because of the limitations of heat transfer from steam to a cold surface (especially non-metallic materials), temperature sensitive components will not reach temperatures above 280°F during the predicted transient. As a result, the specification of 280°F for three hours is conservative. We do not feel these differences are significant to the operation of these 141 valves.

72 HVAC fans have lower radiation levels specified than the current predicted accident radiation environment. 16 of these fans also have a 104°F temperature requirement rather than the predicted 122°F environment. These fans have been investigated and it has been determined that the fans contain no non-metallic components and are not sensitive to the elevated radiation and temperature levels.

The four containment spray pumps were originally specified to experience a post-accident radiation level below the current predicted level. To insure that the pumps will operate reliably under design conditions, a detailed analysis of the design and materials of the pumps was completed. The conclusion of this analysis was that the pumps are qualified for the design conditions.

53 valves inside containment were specified to withstand 280°F for three hours after the accident. The current design temperatures are 320°F for three minutes decreasing to 270°F for 5 to 20 minutes after the accident. The specification requirement for radiation was 4×10^7 rads instead of the current 2×10^8 rads. These valves are being investigated to determine the effects of the latest environmental conditions. Currently, 45 of the 53 valves have been determined to be acceptable. The remaining eight are still under investigation.

In summary, the active safety related mechanical equipment has been shown to be adequately designed for the predicted environmental conditions. All but eight of the 441 components have been found acceptable without modification. These eight valves will be qualified or a justification for interim operation will be prepared prior to fuel load.

Attachment 3

Environmental Qualification of NSSS Mechanical Equipment

A list of 307 pieces of NSSS mechanical equipment has been generated for Byron Units 1 and 2. All NSSS equipment was procured under specification F/L-2702 (see attachment 1). This equipment is active safety related mechanical equipment.

The safety related mechanical equipment at Byron/Braidwood has been designed to withstand environmental effects as required by GDC 4 and Appendix B of 10CFR50. The components' system design requirements are contained in design specifications and procurement documents. Soft parts in these components were selected based upon vendor experience, good engineering practice, and industry data. The above design practices are supplemented by the Byron/Braidwood pump and valve operability program and the Byron/Braidwood maintenance and surveillance programs.

Westinghouse is in the process of re-verifying the acceptability of the soft parts used in the NSSS mechanical equipment at Byron/Braidwood. Based on previous experience, it is anticipated that the results of this review will be acceptable. It is expected that the results of this review will be completed by January 31, 1984.