

BRAIDWOOD STATION
PRESERVICE INSPECTION

(PSI)

Program Plan for Snubbers

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INFORMATION
ONLY

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1.1 Snubber Preservice Inspection Program

The Snubber Preservice Inspection (PSI) Program is implemented in accordance with the requirements of Section XI of the ASME Boiler and Pressure Vessel Code, 1977 edition, through the summer of 1978 addenda. The augmented preservice inspections, reflected in Commonwealth Edison's response to FSAR question 110.63, are also addressed in this preservice inspection program. That response takes guidance from EXAMINATION AND PERFORMANCE TESTING OF NUCLEAR POWER PLANT DYNAMIC RESTRAINTS (SNUBBERS) O&M-4.

The following items are verified during snubber installation:

- 1) Installation is as identified on the design drawings for component supports. If installation cannot be made per these drawings, component support installation guidelines and tolerances will be used.
- 2) Snubbers are not seized, frozen or jammed.

A documented visual examination will be performed on all safety related snubbers within 6 months prior to snubber preoperational or startup testing. This visual examination will verify the following:

- 3) No visible indications of damage or potential degraded operability due to the storage, handling, or installation of the snubbers.
- 4) No visible interference with the snubber from other components or structures.
- 5) Snubber attachments are in place and appear secure.
- 6) Hydraulic Snubber leak rates are less than or equal to design.

To satisfy items 1 through 6, credit will be taken for field examinations performed under the jurisdiction of Commonwealth Edison Construction Department, as allowed by ASME Section XI. All such inspections will be performed by ANSI certified inspectors. If the testing schedule slips such that the visual examination (items 3 through 6) falls outside the six month time interval, the examination will be repeated by ANSI or VT certified inspectors. If during the initial examination or subsequent examinations, snubber assemblies fail to meet the aforementioned criteria, they will be repaired or replaced, and the affected portions of the assembly will be reexamined.

Per response to FSAR Question 110.37, snubber movement will be recorded and clearances observed during Hot Functional Testing.

Since component support design is in a state of flux, new snubber locations may be added or changed in the plant design. This small percentage of snubbers will be examined as newly installed snubbers. Testing of these snubbers, and other retesting, will be performed during startup as identified by engineering.

1.2 Relief Requests

Relief Requests shall be necessary for the Snubber Inservice Program Plan and will be identified during the performance of the Preservice Inspections.

Relief requests will be included where specific requirements of Section XI are determined to be impracticable. All relief requests will include the following information:

1. An identification of the component(s) for which relief is requested.
2. The number of items associated with the requested relief.
3. An identification of the specific ASME code requirement that has been determined to be impractical.
4. The information to support the determination that the requirement is impractical; i.e., statement and explanation of the basis for requesting relief.
5. An identification of the alternate examinations that are proposed:
 - a. In lieu of the requirements of Section XI; or
 - b. To supplement examinations performed partially in compliance with the requirements of Section XI.
6. A description and justification of any changes expected in the overall level of plant safety by performing the proposed alternative examination in lieu of the examination required by Section XI. If it is not possible to perform alternative examinations, a discussion of the impact on the overall level of plant quality and safety will be presented.
7. A statement when the request for relief would apply during the inspection period or interval (i.e. whether the request is to defer an examination).
8. A statement explaining when the proposed alternate examinations will be implemented and performed.
9. A statement identifying the time period for which the requested relief is needed.

NOTE

Technical justification or data will be submitted to support the relief request. Statements regarding changes in quality levels will be technically supported. If the relief is requested for inaccessibility, a detailed description or drawing which depicts the inaccessibility will accompany the request. Relief requests will be presented following the snubber tables.

SECTION 1.3.1

TABLES FOR PRESERVICE SNUBBER TESTING PROGRAM

BRAIDWOOD UNIT 1

The following information is included in the Program Tables:

Snubber Assembly No.

The snubber number identifies a specific snubber by its unique number. Its number references the unit and the system which contains the pipe or component that the snubber supports.

Elevation and Location

Snubber locations are designated by a rectangular coordinate system using column numbers for all areas of the plant. The column numbers listed for the snubbers in containment are based on a rectangular coordinate system that is unique to the containment building.

Design Load (Normal and Upset)

The design load listed for the snubber is the sum of the normal and upset loading for that snubber in units of kips. This entry does not reflect the maximum capacity of the snubber since the snubbers were chosen to have greater maximum design capacities than their expected loading.

Accessible or Inaccessible

This column refers to the feasibility of reaching a snubber for visual inspections during plant operation or to take data on its position setting. This information will be accumulated as the PSI progresses.

High Radiation Zone

This entry reflects ALARA concerns in that it defines snubbers whose inspection or testing will require excessive exposure of personnel. This will not present any problems during the PSI, since it will be executed prior to loading fuel. Snubbers in possible high radiation areas will be identified prior to the first inservice examination.

Especially Difficult To Remove

This entry will identify snubbers which have limited access, making their removal difficult, though they may be accessible for visual examination. This information will be collected during execution of the PSI.

The tables are organized first according to system and then according to mechanical or hydraulic. Only the steam generators employ hydraulic snubbers.

NOTE: The snubbers listed on the following tables represent the most up-to-date information available to the station through design drawings, as of the date on the table. Since the component support designs are in a state of flux, these tables will be updated at least once prior to Hot Functionals and again prior to start-up.

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SYSTEM	AF	MECHANICAL SNUBBERS	REVISION 1	DATE 6-1-85	PAGE 2	OF 29
Snubber Assembly No.	Elevation And Location	Design Load (Normal & Upset) (Kips)	Accessible Or Inaccessible (A or I)	High Radiation Zone (Yes or No)	Especially Difficult To Remove (Yes or No)	
1AF05066S	401 T UN					
1AF06004S	377 T UN					
1AF06042S	401 T UN					

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SYSTEM	CC	MECHANICAL SNUBBERS	REVISION 0	DATE 4-1-84	PAGE 3	OF 29
Snubber Assembly No.	Elevation And Location	Design Load (Normal & Upset) (Kips)	Accessible Or Inaccessible (A or I)	High Radiation Zone (Yes or No)	Especially Difficult To Remove (Yes or No)	
1CC19017S	426 RA R7					
1CC19018S	418 RB R7					
1CC20012S	401 RD R2					
1CC20024S	418 RD R2					
1CC20025S	401 RD R2					
1CC22004S	426 RC R1					
1CC24013S	418 RM R7					
1CC24028S	426 RL R7					
1CC24029S	426 RM R7					
1CC24030S	426 RM R4					

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Snubber Assembly No.	Elevation And Location	Design Load (Normal & Upset) (Kips)	Accessible Or Inaccessible (A or I)	High Radiation Zone (Yes or No)	Especially Difficult To Remove (Yes or No)
1CS03012S	401 U 13				
1CS03018S	364 X 14				
1CS03022S	383 Y 12				
1CS03062S	383 Y 13				
1CS04002S	418 RE R1				
1CS04010S	418 RD R2				
1CS05005S	451 RH R1				
1CS08015S	346 X 13				

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Snubber Assembly No.	Elevation And Location	Design Load (Normal & Upset) (Kips)	Accessible Or Inaccessible (A or I)	High Radiation Zone (Yes or No)	Especially Difficult To Remove (Yes or No)	
1CV01006S	383 Z 13					
1CV01030S	383 U 13					
1CV01040S	383 Z 13					
1CV01083S	383 U 15					
1CV02002S	383 RH R8					
1CV02003S	401 RH R8					
1CV02004S	426 RH R8					
1CV02005S	418 RH R8					
1CV02007S	426 RH R9					
1CV02010S	383 RH R8					
1CV02011S	426 RG R9					
1CV03002S	383 RE R8					
1CV03003S	383 RE R8					
1CV03004S	401 RE R8					
1CV03007S	401 RE R9					
1CV03009S	426 RF R9					
1CV03013S	401 RE R8					
1CV03015S	401 RF R9					
1CV04005S	418 RG R9					
1CV04013S	426 RK R6					
1CV04015S	426 RK R6					
1CV04018S	418 RJ R4					
1CV04025S	426 RK R2					
1CV04030S	418 RK R2					
1CV04033S	426 RG R9					
1CV04035S	426 RJ R9					
1CV04036S	426 RJ R9					
1CV04038S	426 RK R6					
1CV04039S	418 RK R5					
1CV04040S	426 RK R5					
1CV04047S	426 RK R3					
1CV06003S	401 RH R3					
1CV06008S	401 RH R2					
1CV06010S						

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Snubber Assembly No.	Elevation And Location	Design Load (Normal & Upset) (Kips)	Accessible Or Inaccessible (A or I)	High Radiation Zone (Yes or No)	Especially Difficult To Remove (Yes or No)	
1CV06014S	401 RH R3					
1CV06016S	401 RH R3					
1CV06017S	401 RH R2					
1CV06019S	401 RH R4					
1CV06022S	401 RH R2					
1CV07001S	418 RK R3					
1CV07008S	426 RJ R2					
1CV07021S	426 RK R2					
1CV07024S	426 RJ R2					
1CV07031S	426 RJ R1					
1CV07032S	426 RJ R2					
1CV07033S	401 RH R1					
1CV07042S	426 RJ R2					
1CV07049S	418 RJ R1					
1CV07064S	418 RJ R1					
1CV07066S	418 RJ R2					
1CV07067S	426 RJ R1					
1CV07068S						
1CV08006S	383 Z 13					
1CV08010S	383 Z 13					
1CV08013S	383 Z 13					
1CV08021S	383 V 13					
1CV08027S	383 V 14					
1CV09003S	401 RK R3					
1CV09005S	401 RJ R4					
1CV09006S	401 RJ R4					
1CV09007S	401 RJ R4					
1CV09018S	401 RH R2					

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Snubber Assembly No.	Elevation And Location	Design Load (Normal & Upset) (Kips)	Accessible Or Inaccessible (A or I)	High Radiation Zone (Yes or No)	Especially Difficult To Remove (Yes or No)		
1CV09029S	383 RJ R3						
1CV09030S	383 RJ R3						
1CV09034S	426 RJ R4						
1CV09038S	383 RJ R4						
1CV09046S	426 RJ R3						
1CV09049S	401 RH R2						
1CV09050S	401 RH R2						
1CV09051S	401 RH R2						
1CV09053S	401 RJ R3						
1CV09054S	401 RJ R3						
1CV09055S	418 RJ R4						
1CV09056S	418 RJ R4						
1CV09057S	426 RJ R4						
1CV09060S	383 RJ R3						
1CV09061S	383 RJ R4						
1CV09062S	383 RJ R4						
1CV09063S	383 RJ R4						
1CV09066S	383 RJ R4						
1CV09068S	383 RJ R4						
1CV09069S	383 RJ R4						
1CV11007S	383 RC R7						
1CV11009S	383 RD R8						
1CV11010S	383 RD R8						
1CV11011S	383 RD R8						
1CV11013S	383 RD R8						
1CV11015S	383 RD R8						
1CV11019S	383 RD R7						
1CV11023S	383 RD R8						
1CV11024S	383 RD R8						
1CV11025S	383 RD R8						

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Snubber Assembly No.	Elevation And Location	Design Load (Normal & Upset) (Kips)	Accessible Or Inaccessible (A or I)	High Radiation Zone (Yes or No)	Especially Difficult To Remove (Yes or No)		
1CV12002S	401 RD R8						
1CV12003S	401 RD R8						
1CV12005S	401 RD R8						
1CV12006S	401 RD R8						
1CV12007S	401 RD R8						
1CV12017S	401 RD R9						
1CV13051S	401 RJ R4						
1CV13054S	401 RJ R4						
1CV14001S							
1CV14004S							
1CV14039S	401 RD R4						
1CV15002S	401 RJ R7						
1CV15006S	401 RJ R6						
1CV15013S	383 RJ R7						
1CV15014S	383 RJ R7						
1CV15015S	383 RJ R8						
1CV15019S	401 RJ R8						
1CV15020S	401 RJ R8						
1CV15021S	401 RK R7						
1CV15023S	401 RK R7						
1CV15030S	401 RK R6						
1CV15032S	401 RK R6						
1CV15039S	383 RJ R8						
1CV15040S	383 RJ R8						
1CV15046S	401 RJ R5						
1CV15104S	401 RJ R5						
1CV15109S	383 RJ R8						
1CV15110S	383 RJ R8						
1CV15111S	383 RJ R7						
1CV16008S	401 RD R6						
1CV16009S	401 RD R5						

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Snubber Assembly No.	Elevation And Location	Design Load (Normal & Upset) (Kips)	Accessible Or Inaccessible (A or I)	High Radiation Zone (Yes or No)	Especially Difficult To Remove (Yes or No)
LCV18041S	401 W 15				
LCV18077S	401 V 15				
LCV18097S	401 V 15				
LCV18098S	401 V 15				
LCV22018S	426 RF R10				
LCV24021S	401 RJ R8				
LCV24023S	401 RJ R8				
LCV24024S	401 RJ R8				
LCV24026S	401 RJ R8				
LCV24027S	401 RJ R8				
LCV24028S					
LCV24039S	401 RJ R8				
LCV25001S	383 RD R4				
LCV25002S	383 RD R4				
LCV25004S					

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Snubber Assembly No.	Elevation And Location	Design Load (Normal & Upset) (Kips)	Accessible Or Inaccessible (A or I)	High Radiation Zone (Yes or No)	Especially Difficult To Remove (Yes or No)		
1CV25009S	383 RD R4						
1CV25011S	383 RD R4						
1CV25014S	401 RD R4						
1CV25021S	401 RD R2						
1CV25023S	401 RE R2						
1CV25024S	401 RE R2						
1CV25026S	383 RE R2						
1CV25027S	383 RF R2						
1CV25034S							
1CV25051S	383 RD R4						
1CV25052S	383 RF R2						
1CV27001S	401 RD R8						
1CV27003S	401 RD R8						
1CV27005S	401 RD R8						
1CV28002S	401 RJ R9						
1CV28003S	401 RJ R9						
1CV28005S	401 RJ R9						
1CV28041S	401 RH R9						
1CV29005S	401 RJ R3						
1CV29036S	401 RJ R3						
1CV30002S	401 RD R3						
1CV30004S	401 RD R3						
1CV31007S	401 RA R8						
1CV31011S	401 RA R8						
1CV31020S	401 RC R1						

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Snubber Assembly No.	Elevation And Location	Design Load (Normal & Upset) (Kips)	Accessible Or Inaccessible (A or I)	High Radiation Zone (Yes or No)	Especially Difficult To Remove (Yes or No)	
1CV34008S	401 RD R9					
1CV36004S	401 RJ R8					
1CV36006S	401 RJ R8					
1CV36007S	401 RJ R8					
1CV40002S	401 RJ R2					
1CV40005S	401 RJ R2					
1CV40007S	401 RJ R3					
1CV40008S	401 RJ R3					
1CV40010S	401 RJ R2					
1CV41025S	401 RD R1					
1CV41026S	401 RD R1					
1CV41031S	401 RD R3					
1CV41034S	401 RD R3					
1CV41035S	401 RD R3					
1CV41036S	401 RD R4					
1CV50001S						
1CV50005S						
1CV50016S						
1CV50023S						
1CV51002S	401 RH R8					
1CV51005S	401 RJ R8					
1CV51033S	401 RH R8					
1CV52002S	401 RJ R4					
1CV52006S	401 RJ R4					
1CV52022S	401 RH R4					
1CV62007S	426 RL R3					
1CV62020S	426 RK R3					
1CV62031S	426 RL R7					
1CV62037S	426 RM R7					
1CV63029S	426 RL R6					
1CV64037S	401 RE R4					
1CV64038S	401 RE R4					
1CV99022S	383 V 15					

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Snubber Assembly No.	Elevation And Location	Design Load (Normal & Upset) (Kips)	Accessible Or Inaccessible (A or I)	High Radiation Zone (Yes or No)	Especially Difficult To Remove (Yes or No)	
1FW02003S	401 RD R8					
1FW02012S	418 RE R7					
1FW02013S	401 RD R8					
1FW02016S	401 RD R8					
1FW03010S	418 RK R7					
1FW03012S	418 RJ R7					
1FW03013S	426 RJ R6					
1FW03014S	418 RJ R7					
1FW03015S	401 RJ R7					
1FW03016S	401 RJ R8					
1FW03017S	401 RJ R8					
1FW03019S	401 RJ R8					
1FW04005S	401 RK R6					
1FW04011S	401 RL R7					
1FW04013S	418 RK R6					
1FW04015S	451 RJ R4					
1FW04017S	401 L S					
1FW05011S	401 RB R7					
1FW05013S	401 RC R6					
1FW05014S	401 RC R6					
1FW05016S	418 RD R5					
1FW05017S	426 RD R5					
1FW05019S	426 RE R5					
1FW05020S	418 RC R6					
1FW05021S	401 RC R6					
1FW05022S	401 RC R6					
1FW06002S	451 RD A7					
1FW06003S	451 RD R7					
1FW06004S	426 RD R7					
1FW06005S	426 RD R7					
1FW06006S	426 RE R7					
1FW06008S	426 RD R7					
1FW06013S	426 RC R9					

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Snubber Assembly No.	Elevation And Location	Design Load (Normal & Upset) (Kips)	Accessible Or Inaccessible (A or I)	High Radiation Zone (Yes or No)	Especially Difficult To Remove (Yes or No)	
1FW06014S	401 RC R8					
1FW06017S	401 RB R9					
1FW07002S	451 RJ R6					
1FW07003S	451 RJ R6					
1FW07004S	451 RJ R6					
1FW07005S	426 RJ R6					
1FW07006S	426 RJ R6					
1FW07012S	418 RK R8					
1FW07014S	401 RK R8					
1FW07017S	401 RL R9					
1FW07019S	426 RJ R8					
1FW08002S	451 RJ R5					
1FW08003S	451 RJ R5					
1FW08005S	451 RK R5					
1FW08006S	451 RK R5					
1FW08007S	426 RK R5					
1FW08008S	426 RK R5					
1FW08015S	426 RK R8					
1FW08016S	401 RK R8					
1FW08018S	401 RL R8					
1FW08019S	401 RL R8					
1FW09003S	451 RD R5					
1FW09004S	426 RD R5					
1FW09006S	426 RC R6					
1FW09007S	426 RC R6					
1FW09010S	426 RC R7					
1FW09013S	426 RB R7					
1FW09014S	426 RB R7					
1FW09015S	401 RB R7					
1FW09017S	401 RB R8					
1FW09020S	401 RB R8					
1FW09021S	451 RD R5					
1FW09022S	451 RD R5					
1FW09023S	401 RB R8					
1FW10001S	401 T UN					
1FW10004S	401 T UN					
1FW12025S	401 T UN					
1FW14002S	401 T UN					

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SYSTEM MS	MECHANICAL SNUBBERS		REVISION 1	DATE 6-1-85	PAGE 14 OF 29
Snubber Assembly No.	Elevation And Location	Design Load (Normal & Upset) (Kips)	Accessible Or Inaccessible (A or I)	High Radiation Zone (Yes or No)	Especially Difficult To Remove (Yes or No)
1MS01074S	418 T UN				
1MS01079S	416 T UN				
1MS01083S	418 T UN				
1MS01088S	416 T UN				
1MS01092S	418 T UN				
1MS01097S	418 T UN				
1MS01101S	418 T UN				
1MS01106S	418 RR R20				
1MS05003S	426 RC R9				
1MS05004S	426 RC R9				
1MS05005S	476 RC R9				
1MS05007S	426 RC R9				
1MS05008S	476 RC R8				
1MS06003S	426 RK R8				
1MS06004S	426 RK R8				
1MS06005S	476 RK R8				
1MS06007S	418 RK R8				
1MS07003S	426 RK R8				
1MS07004S	476 RK R8				
1MS07006S	426 RK R8				
1MS07007S	476 RK R8				
1MS07008S	476 RK R8				
1MS08004S	476 RC R8				
1MS08007S	426 RC R8				

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SYSTEM RC	HYDRAULIC SNUBBERS		REVISION 1	DATE 6-1-85	PAGE 15 OF 29	
Snubber Assembly No.	Elevation And Location	Design Load (Normal & Upset) (Kips)	Accessible Or Inaccessible (A or I)	High Radiation Zone (Yes or No)	Especially Difficult To Remove (Yes or No)	
1RC01BA-A	444 7C					
1RC01BA-B	444 7C					
1RC01BB-A	444 7J					
1RC01BB-B	444 7J					
1RC01BC-A	444 5J					
1RC01BC-B	444 5J					
1RC01BD-A	444 5C					
1RC01BD-B	444 5C					

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Snubber Assembly No.	Elevation And Location	Design Load (Normal & Upset) (Kips)	Accessible Or Inaccessible (A or I)	High Radiation Zone (Yes or No)	Especially Difficult To Remove (Yes or No)	
1RC01006S	401 RE R7					
1RC01007S	401 RE R7					
1RC02006S	401 RJ R7					
1RC02007S	401 RJ R7					
1RC02008S	401 RH R7					
1RC03005S	401 RH R4					
1RC03006S	401 RH R4					
1RC03007S	401 RJ R4					
1RC03008S	401 RJ R4					
1RC04005S						
1RC10001S						
1RC10004S	401 RD R6					
1RC10011S	401 RE R7					
1RC10013S	401 RE R7					
1RC10026S						
1RC10030S	401 RE R7					
1RC10031S	401 RE R7					
1RC10032S	418 RE R7					
1RC10034S						
1RC10035S	418 RE R7					
1RC10037S						
1RC10039S	418 RE R8					
1RC10040S	401 RE R8					
1RC10041S	401 RE R8					
1RC10043S	401 RD R8					
1RC10044S	401 RD R8					
1RC10049S	401 RE R8					
1RC10051S						
1RC10052S						
1RC10054S	401 RE R7					
1RC10055S	401 RE R7					
1RC10056S	401 RD R6					

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Snubber Assembly No.	Elevation And Location	Design Load (Normal & Upset) (Kips)	Accessible Or Inaccessible (A or I)	High Radiation Zone (Yes or No)	Especially Difficult To Remove (Yes or No)	
1RC11061S	401 RH R7					
1RC11062S	401 RH R7					
1RC11096S	401 RH R7					
1RC11097S	401 RH R8					
1RC11098S	401 RH R8					
1RC11104S	401 RJ R6					
1RC11105S	418 RH R7					
1RC11106S	401 RH R8					
1RC11107S	401 RJ R6					
1RC11108S	401 RH R8					
1RC12039S	401 RH R4					
1RC12041S	418 RH R4					
1RC12048S	401 RH R4					
1RC12053S	401 RJ R4					
1RC12055S						
1RC12060S	401 RJ R5					
1RC12061S	401 RH R5					
1RC12072S	418 RH R5					
1RC12090S	401 RH R5					
1RC12091S	401 RH R5					
1RC12092S	401 RH R5					
1RC12095S	401 RJ R5					
1RC12097S	401 RJ R5					
1RC12099S	401 RH R5					
1RC12101S	401 RH R4					
1RC12102S	401 RH R4					
1RC12103S	401 RH R4					
1RC12104S	401 RH R4					
1RC13026S	401 RE R5					
1RC13038S	401 RE R4					
1RC13039S	418 RE R4					
1RC13040S	401 RE R5					
1RC13041S						
1RC13048S						
1RC13064S	401 RD R5					
1RC13069S	401 RE R4					
1RC13073S	401 RD R4					
1RC13074S						

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Snubber Assembly No.	Elevation And Location	Design Load (Normal & Upset) (Kips)	Accessible Or Inaccessible (A or I)	High Radiation Zone (Yes or No)	Especially Difficult To Remove (Yes or No)	
1RC13076S						
1RC13083S	401 RE R4					
1RC13084S	401 RE R4					
1RC13090S	418 RE R5					
1RC13091S	401 RD R4					
1RC13092S	418 RE R5					
1RC14003S						
1RC14004S						
1RC14005S	364 RG R6					
1RC14006S	364 RG R6					
1RC14009S						
1RC14010S						
1RC14011S	364 RG R6					
1RC14012S	364 RG R6					
1RC16114S	401 RE R7					
1RC16115S	401 RE R7					
1RC16119S	401 RE R7					
1RC17052S	401 RH R7					
1RC17058S	401 RH R7					
1RC17069S	401 RH R7					
1RC18034S	401 RH R4					
1RC18037S	401 RH R5					
1RC18045S	401 RH R4					
1RC19042S	401 RE R4					
1RC19049S	401 RE R5					
1RC19054S	401 RE R5					
1RC19060S	401 RE R4					

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Snubber Assembly No.	Elevation And Location	Design Load (Normal & Upset) (Kips)	Accessible Or Inaccessible (A or I)	High Radiation Zone (Yes or No)	Especially Difficult To Remove (Yes or No)		
1RE01007S	418 RB R4						
1RE01014S	418 RF R1						

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Snubber Assembly No.	Elevation And Location	Design Load (Normal & Upset) (Kips)	Accessible Or Inaccessible (A or I)	High Radiation Zone (Yes or No)	Especially Difficult To Remove (Yes or No)
1RH02002S					
1RH02003S	401 RG R4				
1RH02007S	383 RH R3				
1RH02008S	381 RH R4				
1RH02009S	383 RG R3				
1RH02012S	401 RH R2				
1RH02013S	401 RH R2				
1RH02018S	401 RG R4				
1RH02019S					
1RH02023S					
1RH02027S					
1RH02047S					
1RH02049S					
1RH02052S	401 RE R3				
1RH02054S	383 RE R4				
1RH02058S	401 RE R2				
1RH02059S	383 RE R2				
1RH02061S	401 RH R4				
1RH02066S					
1RH02067S	383 RH R1				
1RH02068S	383 RF R3				
1RH02069S					
1RH02078S	401 RF R4				
1RH02079S	401 RE R5				
1RH02080S	401 RG R1				
1RH02081S	401 RH R1				
1RH02082S					
1RH02083S	401 RE R4				
1RH02101S	401 RH R5				
1RH02114S	401 RE R5				
1RH02205S	401 RE R6				
1RH02206S	401 RE R1				
1RH02207S	401 RE R6				
1RH02208S	401 RE R6				
1RH02210S	401 RE R6				
1RH02212S	401 RE R5				
1RH02215S	401 RH R5				
1RH02217S	401 RH R5				
1RH04011S					
1RH04012S	383 W15				

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Snubber Assembly No.	Elevation And Location	Design Load (Normal & Upset) (Kips)	Accessible Or Inaccessible (A or I)	High Radiation Zone (Yes or No)	Especially Difficult To Remove (Yes or No)	
1RH05003S	364 X 13					
1RH07003S						
1RH07006S	364 U 13					
1RH07011S	364 V 12					
1RH07012S						
1RH07013S	364 V 12					
1RH07025S	364 V 13					
1RH08015S						

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Snubber Assembly No.	Elevation And Location	Design Load (Normal & Upset) (Kips)	Accessible Or Inaccessible (A or I)	High Radiation Zone (Yes or No)	Especially Difficult To Remove (Yes or No)		
1RY05003S	401 RC R6						
1RY05010S							
1RY06012S	401 RE R3						
1RY06017S	401 RE R4						
1RY06022S	418 RE R3						
1RY06026S	426 RE R3						
1RY06027S	426 RE R3						
1RY06029S	426 RD R3						
1RY06030S	426 RE R3						
1RY06031S	451 RE R3						
1RY06033S	451 RE R3						
1RY06034S	476 RE R3						
1RY06047S	418 RE R3						
1RY06057S	401 RE R4						
1RY06059S	401 RE R3						
1RY06068S	401 RE R3						
1RY06080S	401 RE R3						
1RY06082S	426 RE R3						
1RY06091S	401 RE R4						
1RY06096S	401 RE R4						
1RY06110S	401 RE R4						
1RY06118S	476 RE R3						

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Snubber Assembly No.	Elevation And Location	Design Load (Normal & Upset) (Kips)	Accessible Or Inaccessible (A or I)	High Radiation Zone (Yes or No)	Especially Difficult To Remove (Yes or No)	
1RY06121S	401 RE R4					
1RY06124S	418 RE R3					
1RY06126S	401 RE R3					
1RY06153S	401 RE R4					
1RY06154S	401 RE R4					
1RY06156S	401 RE R4					
1RY06157S	401 RE R3					
1RY09001S	476 RE R3					
1RY09005S	476 RD R3					
1RY09012S	476 RD R2					
1RY09060S	476 RE R3					
1RY09067S	476 RE R3					
1RY09077S						
1RY09078S						
1RY09100S	476 RD R3					
1RY09101S						
1RY27003S	476 RD R2					
1RY27005S	451 RE R2					
1RY27007S	451 RE R2					
1RY27009S	451 RD R2					
1RY27010S	451 RC R2					
1RY27012S	451 RD R2					
1RY27013S	451 RD R2					
1RY27015S	451 RD R2					
1RY27017S	451 RD R2					
1RY27018S	451 RD R2					
1RY27019S	451 RD R2					
1RY27024S	451 RE R2					
1RY27025S	451 RE R2					
1RY27026S						
1RY27027S	451 RD R2					

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Snubber Assembly No.	Elevation And Location	Design Load (Normal & Upset) (Kips)	Accessible Or Inaccessible (A or I)	High Radiation Zone (Yes or No)	Especially Difficult To Remove (Yes or No)	
1SD01002S	418 RD R6					
1SD01003S	418 RD R6					
1SD01009S	418 RC R8					
1SD01021S	401 RD R9					
1SD01033S	401 RB R7					
1SD01034S	401 RB R7					
1SD01035S	401 RB R7					
1SD01038S	401 RC R9					
1SD01041S						
1SD01042S	418 RD R8					
1SD02005S	418 RD R8					
1SD02011S	418 RC R6					
1SD02020S	401 RC R9					
1SD02022S	401 RC R9					
1SD02029S						
1SD02036S	401 RC R7					
1SD03013S						
1SD03016S	401 RL R7					
1SD03020S	418 RK R6					
1SD03025S	401 RK R8					
1SD03027S	418 RK R8					
1SD03029S	418 RK R8					
1SD03031S	401 RK R8					
1SD03034S	418 RK R7					
1SD03037S	418 RK R6					
1SD03038S	418 RK R6					
1SD04002S						
1SD04004S	418 RJ R6					
1SD04025S	400 RK R6					

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Snubber Assembly No.	Elevation And Location	Design Load (Normal & Upset) (Kips)	Accessible Or Inaccessible (A or I)	High Radiation Zone (Yes or No)	Especially Difficult To Remove (Yes or No)
1SD05046S	403 4H	0.100			
1SD06027S	418 RK R7				
1SD06029S	418 RJ R5				
1SD06030S	418 RJ R4				
1SD06032S					
1SD06037S	418 RK R7				
1SD06040S					
1SD06051S	401 RM R8				
1SD11066S	418 RD R5				
1SD12002S	418 RD R5				
1SD12016S	401 RB R8				
1SD12017S	401 RB R7				
1SD12048S	418 RD R4				
1SD21033S	400 T UN				

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Snubber Assembly No.	Elevation And Location	Design Load (Normal & Upset) (Kips)	Accessible Or Inaccessible (A or I)	High Radiation Zone (Yes or No)	Especially Difficult To Remove (Yes or No)	
1SI01002S	401 RE R8					
1SI01003S	401 RE R8					
1SI01004S	401 RE R8					
1SI01006S	401 RE R9					
1SI01007S	401 RE R10					
1SI01009S						
1SI01011S						
1SI01018S	401 RE R8					
1SI01020S	401 RE R8					
1SI01021S	401 RE R10					
1SI01025S	426 RE R10					
1SI01029S	401 RF R7					
1SI01030S	401 RF R7					
1SI01031S	418 RE R9					
1SI01032S	418 RD R9					
1SI01034S	401 RE R9					
1SI01035S	426 RD R9					
1SI02003S	418 RB R7					
1SI03003S	426 RD R1					
1SI03006S						
1SI03007S	426 RE R1					
1SI03009S	418 RF R1					
1SI03016S						
1SI03018S						
1SI03020S						
1Si03021S	401 RE R4					
1SI03023S						
1SI03024S	401 RE R5					
1SI03025S	401 RE R4					
1SI03028S	418 RD R4					
1SI03029S	401 RD R4					
1SI03038S	418 RC R5					
1SI03042S	401 RF R1					
1SI03046S	401 RE R3					
1SI04003S	401 RH R8					
1SI04004S	401 RH R8					

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Snubber Assembly No.	Elevation And Location	Design Load (Normal & Upset) (Kips)	Accessible Or Inaccessible (A or I)	High Radiation Zone (Yes or No)	Especially Difficult To Remove (Yes or No)	
1SI04005S	401 RH R8					
1SI04007S	401 RH R9					
1SI04016S	401 RG R8					
1SI04017S	401 RG R8					
1SI04019S	401 RH R9					
1SI04020S	418 RH R9					
1SI04022S	426 RH R10					
1SI04024S	418 RH R9					
1SI04026S						
1SI04030S	426 RH R10					
1SI05002S						
1SI05003S	383 S 14					
1SI05013S	383 W 13					
1SI05036S	383 Y 12					
1SI06008S	383 Y 14					
1SI06013S	383 Y 14					
1SI06027S	364 Y 13					
1SI06028S	364 Y 13					
1SI06030S	364 Y 13					
1SI06034S	346 Y 14					
1SI06035S	364 Y 13					
1SI06038S						
1SI06044S	383 Y 13					
1SI06061S						
1SI06076S						
1SI06086S	364 Y 13					
1SI06088S	383 V 13					
1SI06091S	364 V 13					
1SI06123S						
1SI06202S	364 Y 13					
1SI09002S	426 RK R1					
1SI09004S	426 RK R1					
1SI09006S	418 RH R1					

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Snubber Assembly No.	Elevation And Location	Design Load (Normal & Upset) (Kips)	Accessible Or Inaccessible (A or I)	High Radiation Zone (Yes or No)	Especially Difficult To Remove (Yes or No)	
1SI09009S	426 RH R1					
1SI09013S	401 RG R3					
1SI09015S						
1SI09020S						
1SI09021S	401 RH R4					
1SI09024S	401 RH R2					
1SI09025S	418 RH R2					
1SI09037S	401 RH R2					
1SI09038S						
1SI09039S	401 RH R4					
1SI09043S	426 RH R1					
1SI10031S	401 RE R5					
1SI10036S	401 RE R2					
1SI15014S						
1SI16010S	418 RF R1					
1SI16029S	383 RH R1					
1SI16037S						
1SI16038S						
1SI18003S	383 U 12					
1SI18008S	383 W 13					
1SI18026S	383 V 12					
1SI18030S	383 U 12					
1SI18049S	383 Y 13					
1SI19007S	418 RH R9					
1SI19011S	401 RH R7					
1SI19012S						

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1SX07032S
1SX09029S
1SX09038S
1SX09045S
1SX09053S

401 RL R9