

DEC 08 1983

DISTRIBUTION:
Docket File 50-424
Docket File 50-425 (w/o encl)
~~Administrative Files~~
METB Reading File
WPGammill

Docket Nos. 50-424/425

MEMORANDUM FOR: G. Ted Ankrum, Chief
Quality Assurance Branch,
Division of Quality Assurance, Safeguards and
Inspection Programs, IE

FROM: William P. Gammill, Chief
Meteorology and Effluent Treatment Branch
Division of Systems Integration, NRR

SUBJECT: O-LIST FOR VOGTLE ELECTRIC GENERATING PLANT, UNIT NOS. 1
AND 2

In response to the Partlow/Miller memorandum dated November 29, 1983, we have reviewed Table 3.2.2-1 of the FSAR for the Vogtle Electric Generating Plant, Unit Nos. 1 and 2, with respect to those safety related structures, systems, and components within METB area of review for which a Quality Assurance program is recommended to satisfy 10 CFR Part 50, Appendix B.

Enclosed are appropriate pages from Table 3.2.2-1 of the FSAR for the Vogtle Electric Generating Plant with our comments. We found no major omissions or exceptions except as follows. The accident-related meteorological data collection equipment should be covered by the Quality Assurance program in accordance with the guidelines of Regulatory Guide 1.33, Appendix A, to be consistent with past practice on other operating license applications such as Perry and Hope Creek. In addition, for completeness, the turbine steam sealing system should be included in the table under Power Conversion System (sheet 31). It would not be a O-List item, however.

This review was performed by J. Fairbent (x29427), Meteorology Section, and C. Nichols (27634), Effluent Treatment Systems Section. Any questions or comments should be directed to the respective reviewer.

Original signed by:
William P. Gammill

William P. Gammill, Chief
Meteorology and Effluent Treatment Branch
Division of Systems Integration
Office of Nuclear Reactor Regulation

Enclosure:
As stated

cc: See next page

| | | | | | | | |
|--------|-------------|-------------|-------------|-------------|-------------|--|----|
| OFFICE | DSI:RP:METB | DSI:RP:METB | DSI:RP:METB | DSI:RP:METB | DSI:RP:METB | | |
| NAME | CNichols:dj | JFairbent | CAWillis | ISpicer | WPGammill | | 14 |
| DATE | 12/08/83 | 12/9/83 | 12/9/83 | 12/7/83 | 12/9/83 | | |

G. T. Ankrum

- 2 -

DEC 09 1983

cc: R. Mattson
D. Muller
J. Partlow
M. Miller
J. Spraul
I. Spickler
C. Willis
J. Fairbent
C. Nichols

TABLE 3.2.2-1 (SHEET 18 OF 97)

| Principal System and Components | (a) Location | | (b) Source of Supply | (c) Quality Group | (d) VEGP Safety Class | (e) Seismic Category | (f) Codes and Standards Designator | (g) Principal Construc- tion Code | (h) Q-List | (i) Safety Related | (j) Environ- mental Designator | (k) Comments |
|--|-----------------|---------|----------------------------|-------------------------|--------------------------------|----------------------------|---|--|---------------|--------------------------|---|--|
| | Unit 1 | Unit 2 | | | | | | | | | | |
| 2. Makeup pump motors | AB-B22 | AB-B114 | B | NA | 6 | 2 | E | NEMA MG1 | N | N | | Note m |
| 3. Degasifier vacuum pumps | 0 | 0 | B | D | 4 | 2 | 4 | mfg | N | N | | |
| 4. Degasifier feed pump | 0 | 0 | B | D | 4 | 2 | 4 | mfg | N | N | | |
| 5. Degasifier feed/transfer pump | 0 | 0 | B | D | 4 | 2 | 4 | mfg | N | N | | |
| 6. Degasifier transfer pump | 0 | 0 | B | D | 4 | 2 | 4 | mfg | N | N | | |
| 7. Vacuum degasifier | 0 | 0 | B | D | 4 | 2 | 4 | mfg | N | N | | |
| 8. Makeup water process piping and valves to SFP | | | B | D | 4 | 1 | 5 | III-3 | N | N | | Note r |
| 9. Degasifier piping and valves | | | B | D | 4 | 2 | 4 | B31.1 | N | N | | |
| 10. Instrumentation | | | B | NA | 6 | 2 | J | mfg | N | N | | |
| 11. Degasifier pump motors | 0 | 0 | B | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 12. All other piping | | | B | D | 4 | 2 | 4 | B31.1 | N | N | | |
| WASTE PROCESSING SYSTEM - LIQUID | | | | | | | | | | | | Note w |
| 1. Waste holdup tank | AB-D63 | AB-D13 | W | D | 4 | 1 | 7 | III-3 | N | N | | Note r |
| 2. Waste evapo- rator feed pump | AB-D62 | AB-D14 | W | D | 4 | 1 | 7 | III-3 | N | N | | for all |
| 3. Waste evapo- rator feed pump motor | AB-D62 | AB-D14 | W | NA | 6 | 2 | E | NEMA MG1 | N | N | | 417 and |
| 4. Waste evapo- rator feed backflushable filter housing | AB-B | AB-B | B | D | 4 | 1 | 7 | III-3 | N | N | | 427 com- ponents desig- nated as III-3 |
| 5. Waste evapo- rator | AB-C67 | AB-C43 | W | D | 4 | 1 | 7 | III-3 | N | N | | |

VEGP-FSAR-3

TABLE 3.2.2-1 (SHEET 19 OF 97)

| Principal System and Components | (a) Location | | (b) Source of Supply | (c) Quality Group | (d) VEGP Safety Class | (e) Seismic Category | (f) Codes and Standards Designator | (g) Principal Construc- tion Code | (h) Q-List | (i) Safety Related | (j) Environ- mental Designator | (k) Comments |
|---|-----------------|---------|----------------------------|-------------------------|--------------------------------|----------------------------|---|--|---------------|--------------------------|---|-----------------|
| | Unit 1 | Unit 2 | | | | | | | | | | |
| 6. Waste evapo- rator concen- trates holdup tank | AB-A32 | shared | B | D | 4 | 2 | 7 | API-650 | N | N | | |
| 7. Waste evapo- rator concen- trates holdup tank pump | AB-A37 | shared | B | D | 4 | 2 | 7 | mfg | N | N | | |
| 8. Waste evapo- rator concen- trates holdup tank pump motor | AB-A37 | shared | B | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 9. Waste evapo- rator reagent tank | AB-C63 | AB-C40 | W | D | 4 | 2 | 4 | VIII | N | N | | |
| 10. Waste evapo- rator conden- sate demin- eralizer | AB-C146 | AB-C149 | W | D | 4 | 2 | 7 | III-3 | N | N | | |
| 11. Waste evapo- rator conden- sate filter | AB-D91 | AB-D86 | W | D | 4 | 2 | 7 | III-3 | N | N | | |
| 12. Waste evapo- rator conden- sate pump | AB-D64 | AB-D12 | W | D | 4 | 2 | 7 | III-3 | N | N | | |
| 13. Waste evapo- rator conden- sate pump motor | AB-D64 | AB-D12 | W | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 14. Waste evapo- rator conden- sate tank | AB-C80 | AB-C33 | W | D | 4 | 2 | 7 | III-3 | N | N | | |
| 15. Chemical drain tank | AB-D45 | shared | W | D | 4 | 2 | 4 | VIII | N | N | | |
| 16. Chemical drain tank pump | AB-D47 | shared | W | D | 4 | 2 | 4 | VIII | N | N | | |
| 17. Chemical drain tank pump motor | AB-D47 | shared | W | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 18. Spent resin storage tank | AB-D36 | AB-D37 | W | D | 4 | 1 | 7 | III-3 | N | N | | |
| 19. Spent resin sluice pump | AB-D39 | AB-D40 | W | D | 4 | 1 | 7 | III-3 | N | N | | |

VEGP-FSAR-3

TABLE 3.2.2-1 (SHEET 20 OF 97)

| Principal System and Components | (a) Location | | (b) Source of Supply | (c) Quality Group | (d) VEGP Safety Class | (e) Seismic Category | (f) Codes and Standards Designator | (g) Principal Construc- tion Code | (h) Q-List | (i) Safety Related | (j) Environ- mental Designator | (k) Comments |
|--|-----------------|-----------------|----------------------------|-------------------------|--------------------------------|----------------------------|---|--|---------------|--------------------------|---|-----------------|
| | Unit 1 | Unit 2 | | | | | | | | | | |
| 20. Spent resin sluice pump motor | AB-D37 | AB-D40 | W | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 21. Sample vessels | AB-C63 | AB-C40 | B | D | 4 | 2 | 7 | VIII | N | N | | |
| 22. Solidification strainer | | | W | D | 4 | 2 | 7 | mfg | N | N | | |
| 23. Spent resin sluice back- flushable filter housing | AB-B | AB-B | B | D | 4 | 1 | 7 | III-3 | N | N | | |
| 24. Floor drain tank | AB-D46 | AB-D24 | W | D | 4 | 2 | 7 | III-3 | N | N | | |
| 25. Floor drain tank pump | AB-D50 | AB-D29 | W | D | 4 | 2 | 7 | III-3 | N | N | | |
| 26. Floor drain tank pump motor | AB-D50 | AB-D29 | W | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 27. Floor drain tank strainer | AB-D | AB-D | W | D | 4 | 2 | 7 | mfg | N | N | | |
| 28. Floor drain tank back- flushable filter housing | AB-B | AB-B | B | D | 4 | 2 | 7 | III-3 | N | N | | |
| 29. Waste monitor tank | AB-C81 & C82 | AB-C34 & C35 | W | D | 4 | 2 | 7 | III-3 | N | N | | |
| 30. Waste monitor tank pump | AB-D58 & D59 | AB-D17 & D18 | W | D | 4 | 2 | 7 | III-3 | N | N | | |
| 31. Waste monitor tank pump motor | AB-D58 & D59 | AB-D17 & D18 | W | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 32. Waste monitor tank back- flushable filter housing | AB-B | AB-B | B | D | 4 | 2 | 7 | III-3 | N | N | | |
| 33. Waste monitor tank demin- eralizer | AB-C143 | AB-C139 | W | D | 4 | 2 | 7 | III-3 | N | N | | |
| 34. Laundry and hot shower tank | AB-D25 | shared | W | D | 4 | 2 | 7 | VIII | N | N | | |
| 35. Laundry and hot shower tank pump | AB-D26 | shared | W | D | 4 | 2 | 7 | mfg | N | N | | |

VEGP-FSAR-3

TABLE 3.2.2-1 (SHEET 21 OF 97)

| Principal System and Components | (a) Location | | (b) Source of Supply | (c) Quality Group | (d) VEGP Safety Class | (e) Seismic Category | (f) Codes and Standards Designator | (g) Principal Construc- tion Code | (h) Q-List | (i) Safety Related | (j) Environ- mental Designator | (k) Comments |
|--|-----------------|--------|----------------------------|-------------------------|--------------------------------|----------------------------|---|--|---------------|--------------------------|---|-----------------|
| | Unit 1 | Unit 2 | | | | | | | | | | |
| 36. Laundry and hot shower tank pump motor | AB-D26 | shared | W | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 37. Laundry and hot shower tank strainer | AB-D26 | shared | W | D | 4 | 2 | 7 | B31.1 | N | N | | |
| 38. Laundry and hot shower tank filter | AB-D88 | shared | W | D | 4 | 2 | 7 | B31.1 | N | N | | |
| 39. Reactor cool-ant drain tank | C-171' | C-171' | W | D | 4 | 2 | 7 | III-3 | N | N | | |
| 40. Reactor cool-ant drain tank pump | C-171' | C-171' | W | D | 4 | 2 | 7 | III-3 | N | N | | |
| 41. Reactor cool-ant drain tank pump motor | C-171' | C-171' | W | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 42. Reactor cool-ant drain tank HX: | | | W | | | | | | | | | |
| Tube side | C-171' | C-171' | | D | 4 | 2 | 7 | III-3, TEMA-R | N | N | | |
| Shell side, ACCW | C-171' | C-171' | | D | 4 | 1 | 5 | III-2, TEMA-R | N | N | | Note t |
| 43. Piping and valves from waste evaporator and evaporator condensate demineralizer through evaporator condensate pump discharge valve 119 | | | B | D | 4 | 2 | 7 | B31.1 | N | N | | |
| 44. Piping and valves from waste holdup tank to waste evaporator | | | B | D | 4 | 1 | 7 | III-3 | N | N | | |

VEGP-FSAR-3

TABLE 3.2.2-1 (SHEET 22 OF 97)

| Principal System and Components | (a) Location | | (b) Source of Supply | (c) Quality Group | (d) VEGP Safety Class | (e) Seismic Category | (f) Codes and Standards Designator | (g) Principal Construc- tion Code | (h) Q-List | (i) Safety Related | (j) Environ- mental Designator | (k) Comments |
|---|-----------------|--------|----------------------------|-------------------------|--------------------------------|----------------------------|---|--|---------------|--------------------------|---|-----------------|
| | Unit 1 | Unit 2 | | | | | | | | | | |
| 45. Piping and valves from spent resin storage tank to valves HV-7325 and 143 and from valves HV-7305 and 058 to spent resin storage tank | | | W,B | D | 4 | 1 | 7 | 111-3 | N | N | | |
| 46. Process piping and valves down-stream of spent resin tank valves HV-7325 and 143 | | | W,B | D | 4 | 2 | 7 | B31.1 | N | N | | |
| 47. Piping and valves from chemical drain tank to radwaste solidification system | | | B | D | 4 | 2 | 7 | B31.1 | N | N | | |
| 48. Process piping and valves from laundry and hot shower tank to waste monitor tank, from floor drain tank to waste monitor tank and demineralizer, from demineralizer to waste monitor tank, and discharge from waste monitor tanks | | | W,B | D | 4 | 2 | 7 | B31.1 | N | N | | |
| 49. Reactor coolant drain tank inlet and discharge piping and valves to valve LV-1003 | | | W,B | D | 4 | 2 | 7 | B31.1 | N | N | | |

VEGP-FSAR-3

TABLE 3.2.2-1 (SHEET 23 OF 97)

| Principal System and Components | (a) Location Unit 1 Unit 2 | (b) Source of Supply | (c) Quality Group | (d) VEGP Safety Class | (e) Seismic Category | (f) Codes and Standards Designator | (g) Principal Construc- tion Code | (h) Q-List | (i) Safety Related | (j) Environ- mental Designator | (k) Comments |
|--|--|----------------------------|-------------------------|--------------------------------|----------------------------|---|--|---------------|--------------------------|---|-----------------|
| 50. Waste evapo- rator package coolers: | | | | | | | | | | | |
| Evaporator condenser | AB-C66 AB-C41 | W | D | 4 | 1 | 7 | III-3 | N | N | | |
| Vent condenser | AB-C66 AB-C41 | W | D | 4 | 1 | 7 | III-3 | N | N | | |
| Distillate cooler | AB-C66 AB-C41 | W | D | 4 | 1 | 7 | III-3 | N | N | | |
| 51. Instrumentation | | W,B | NA | 6 | 2 | J | mfg | N | N | | Note s |
| WASTE PROCESSING SYSTEM - GASEOUS | | | | | | | | | | | |
| 1. Gas decay tanks | AB-B33 AB-B78 B36,B38 B82,B83 B42,B43 B88,B90 B40,B41 B84,B85 | W | C | 3 | 1 | 3 | III-3 | Y | Y | VIII | |
| 2. Gas decay tank drain pump | AB-B35 AB-B89 | W | D | 4 | 2 | 4 | mfg | N | N | | |
| 3. Gas decay tank drain pump motor | AB-B35 AB-B89 | W | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 4. Waste gas drain filter | AB-D95 AB-D82 | W | D | 4 | 2 | 4 | VIII | N | N | | |
| 5. Sample vessel | AB-B45 AB-B79 | B | D | 4 | 2 | 4 | VIII | N | N | | |
| 6. Waste gas com- pressor package & B68 & B101 | AB-B64 AB-B100 | W | C | 3 | 1 | 3 | III-3 | Y | Y | VIII | |
| 7. Catalytic H ₂ recombiner and gas analyzer package | AB-B58 AB-B74 & B59 & B76 | W | C | 3 | 1 | 3 | III-3 | Y | Y | VIII | |
| 8. Waste gas decay shutdown tank & B47 | AB-B46 shared | W | C | 3 | 1 | 3 | III-3 | Y | Y | VIII | |
| 9. Process piping and valves | | W,B | C | 3 | 1 | 3 | III-3 | Y | Y | | |
| 10. Drain piping and valves | | D | D | 4 | 2 | 4 | B31.1 | N | N | | |
| 11. Safety-related valve operators | | W | NA | 1 | 1 | E | NEMA MG1 | Y | Y | | |
| 12. Safety-related Instrumentation | | W | NA | 1 | 1 | J | mfg | Y | Y | | Note s |

VEGP-FSAR-3

TABLE 3.2.2-1 (SHEET 24 OF 97)

| Principal System and Components | (a) Location | | (b) Source of Supply | (c) Quality Group | (d) VEGP Safety Class | (e) Seismic Category | (f) Codes and Standards Designator | (g) Principal Construc- tion Code | (h) Q-List | (i) Safety Related | (j) Environ- mental Designator | (k) Comments |
|--|-----------------|--------|-------------------------|----------------------|-----------------------------|----------------------------|---|--|---------------|--------------------------|---|--------------------------------------|
| | Unit 1 | Unit 2 | | | | | | | | | | |
| RADWASTE VOLUME REDUCTION AND SOLIDIFICATION SYSTEM | | | | | | | | | | | | Note w for 427 compo- nents |
| 1. Evaporator concentrates waste feed tank | RSB | shared | B | D | 4 | 2 | 7 | API 650 | N | N | | |
| 2. Evaporator concentrates waste recirculating pumps | RSB | shared | B | D | 4 | 2 | 7 | mfg | N | N | | |
| 3. Feed pump skid | RSB | shared | B | D | 4 | 2 | 7 | mfg | N | N | | |
| 4. Spent resin waste feed tanks | RSB | | B | D | 4 | 2 | 7 | API 650 | N | N | | |
| 5. Spent resin waste feed pumps | RSB | shared | B | D | 4 | 2 | 7 | mfg | N | N | | |
| 6. Solids feed skid | RSB | shared | B | D | 4 | 2 | 7 | mfg | N | N | | |
| 7. Contaminated oil skid | RSB | shared | B | D | 4 | 2 | 7 | mfg | N | N | | |
| 8. Metal detector | RSB | shared | B | NA | 6 | 2 | E | mfg | N | N | | |
| 9. Trash shredder | RSB | shared | B | NA | 6 | 2 | 6 | mfg | N | N | | |
| 10. Trash hoppers | RSB | shared | B | NA | 6 | 2 | 6 | mfg | N | N | | |
| 11. Screw conveyor system | RSB | shared | B | NA | 6 | 2 | 6 | mfg | N | N | | |
| 12. Fluid bed dryer | RSB | shared | B | D | 4 | 2 | 7 | VIII | N | N | | |
| 13. Dryer bed storage hopper | RSB | shared | B | D | 4 | 2 | 7 | VIII | N | N | | |
| 14. Incinerator | RSB | shared | B | D | 4 | 2 | 7 | VIII | N | N | | |
| 15. Incinerator bed storage hopper | RSB | shared | B | D | 4 | 2 | 7 | VIII | N | N | | |
| 16. Product hopper | RSB | shared | B | D | 4 | 2 | 7 | VIII | N | N | | |
| 17. Gas/solids separator | RSB | shared | B | D | 4 | 2 | 7 | VIII | N | N | | |
| 18. Scrubber preconcentrator | RSB | shared | B | D | 4 | 2 | 7 | VIII | N | N | | |
| 19. Secondary scrubber | RSB | shared | B | D | 4 | 2 | 7 | VIII | N | N | | |
| 20. Condenser | RSB | shared | B | D | 4 | 2 | 7 | VIII | N | N | | |

VEGP-FSAR-3

TABLE 3.2.2-1 (SHEET 25 OF 97)

| Principal System and Components | (a) Location | | (b) Source of Supply | (c) Quality Group | (d) VEGP Safety Class | (e) Seismic Category | (f) Codes and Standards Designator | (g) Principal Construc- tion Code | (h) Q-List | (i) Safety Related | (j) Environ- mental Designator | (k) Comments |
|--|-----------------|--------|----------------------------|-------------------------|--------------------------------|----------------------------|---|--|---------------|--------------------------|---|-------------------|
| | Unit 1 | Unit 2 | | | | | | | | | | |
| 21. Gas heater | RSB | shared | B | NA | 6 | 2 | E | mfg/ VIII | N | N | | Housing Is 427 |
| 22. Gas filter assemblies | RSB | shared | B | D | 4 | 2 | 7 | VIII | N | N | | |
| 23. Dryer air heater | RSB | shared | B | NA | 6 | 2 | E | mfg | N | N | | |
| 24. Startup heater | RSB | shared | B | NA | 6 | 2 | E | mfg | N | N | | |
| 25. Dryer bed heater | RSB | shared | B | NA | 6 | 2 | E | mfg | N | N | | |
| 26. Dryer/ inclinerator blower | RSB | shared | B | NA | 6 | 2 | 6 | mfg | N | N | | |
| 27. Dryer/ inclinerator blower motor | RSB | shared | B | NA | 6 | 2 | E | mfg | N | N | | |
| 28. Decontamination skid | RSB | shared | B | NA | 6 | 2 | 6 | mfg | N | N | | |
| 29. Cement drumming station | RSB | shared | B | NA | 6 | 2 | 6 | mfg | N | N | | |
| 30. Cement fill station | RSB | shared | B | NA | 6 | 2 | 6 | mfg | N | N | | |
| 31. Polymer drumming station | RSB | shared | B | NA | 6 | 2 | 6 | mfg | N | N | | |
| 32. Polymer fill station | RSB | shared | B | NA | 6 | 2 | 6 | mfg | N | N | | |
| 33. Conveyors | RSB | shared | B | NA | 6 | 2 | 6 | mfg | N | N | | |
| 34. Decanting tank | RSB | shared | B | D | 4 | 2 | 7 | API 650 | N | N | | |
| 35. Polymer storage tank | RSB | shared | B | NA | 6 | 2 | 6 | mfg | N | N | | |
| 36. Drum inspection station | RSB | shared | B | NA | 6 | 2 | 6 | mfg | N | N | | |
| 37. Crud transfer pump | RTB | shared | B | D | 4 | 2 | 7 | mfg | N | N | | |
| 38. Spent resin transfer pumps | RSB | shared | B | D | 4 | 2 | 7 | mfg | N | N | | |
| 39. Crud transfer tank | RTB | shared | B | D | 4 | 2 | 7 | API 650 | N | N | | |
| 40. Spent resin transfer tanks | RTB | shared | B | D | 4 | 2 | 7 | VIII | N | N | | |
| 41. Bridge crane | RSB | shared | B | NA | 6 | 2 | 6 | CMAA | N | N | | |
| 42. Caustic skid | RSB | shared | B | NA | 6 | 2 | 6 | mfg | N | N | | |
| 43. Cement storage silo | RSB | shared | B | NA | 6 | 2 | 6 | mfg | N | N | | |

VEGP-FSAR-3

TABLE 3.2.2-1 (SHEET 26 OF 97)

| Principal System and Components | (a) Location Unit 1 Unit 2 | | (b) Source of Supply | (c) Quality Group | (d) VEGP Safety Class | (e) Seismic Category | (f) Codes and Standards Designator | (g) Principal Construc- tion Code | (h) Q-List | (i) Safety Related | (j) Environ- mental Designator | (k) Comments |
|---|----------------------------------|---------|----------------------------|-------------------------|--------------------------------|----------------------------|---|--|---------------|--------------------------|---|-----------------|
| 44. Radwaste piping and valves | RSB | shared | B | D | 4 | 2 | 7 | B31.1 | N | N | | |
| 45. Other piping and valves | RSB | shared | B | NA | 6 | 2 | 6 | mfg | N | N | | |
| 46. Instrumentation and controls | | | B | NA | 6 | 2 | J | mfg | N | N | | |
| STEAM GENERATOR BLOWDOWN SYSTEM | | | | | | | | | | | | |
| 1. Blowdown HXs | AB-C108 | AB-C02 | W | D | 4 | 2 | 7 | VIII, TEMA-C | N | N | | |
| 2. Steam gener- ator drain pump | AB-C108 | AB-C02 | W | D | 4 | 2 | 7 | mfg | N | N | | |
| 3. Blowdown back- flushable filters | AB-B | AB-B | B | D | 4 | 2 | 7 | VIII | N | N | | |
| 4. Demineralizers | AB-A | AB-A | W | D | 4 | 2 | 7 | VIII | N | N | | |
| 5. Spent resin storage tank | AB-C75 | AB-C54 | W | D | 4 | 2 | 7 | VIII | N | N | | |
| 6. Spent resin sluice pump | AB-C74 | AB-C55 | W | D | 4 | 2 | 7 | mfg | N | N | | |
| 7. Spent resin sluice pump motor | AB-C74 | AB-C55 | W | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 8. Spent resin sluice filter | AB-A58 | AB-A58 | W | D | 4 | 2 | 7 | VIII | N | N | | |
| 9. Process valves and piping >2 in. outside containment | | | W,B | D | 4 | 2 | 7 | B31.1 | N | N | | |
| 10. Process valves and piping <2 in. | | | B | D | 4 | 2 | 7 | B31.1 | N | N | | |
| 11. Process valves and piping in- side containment through outer isolation valves | | | W,B | B | 2 | 1 | 2 | III-2 | Y | Y | VIII | |
| 12. Blowdown trim HX | AB-B03 | AB-B124 | W | D | 4 | 2 | 7 | VIII, TEMA-C | N | N | | |
| 13. Steam gener- ator drain pump motor | AB-C108 | AB-C02 | W | NA | 6 | 2 | E | NEMA MG1 | N | N | | |

VEGP-FSAR-3

TABLE 3.2.2-1 (SHEET 31 OF 97)

| Principal System and Components | (a) Location | | (b) Source of Supply | (c) Quality Group | (d) VEGP Safety Class | (e) Seismic Category | (f) Codes and Standards Designator | (g) Principal Construc- tion Code | (h) Q-List | (i) Safety Related | (j) Environ- mental Designator | (k) Comments |
|---|---------------------------|---------------------------|----------------------------|-------------------------|--------------------------------|----------------------------|---|--|---------------|--------------------------|---|-----------------|
| | Unit 1 | Unit 2 | | | | | | | | | | |
| 15. Other instru- mentation and controls | | | S | NA | 6 | 2 | J | mfg | N | N | | |
| 16. Safety-related valve motors | | | B | NA | 1 | 1 | E | NEMA MG1 | Y | Y | | |
| POWER CONVERSION SYSTEM | | | | | | | | | | | | |
| 1. Main turbines | TB-270' | TB-270' | S | D | 4 | 2 | 4 | mfg | N | N | | |
| 2. Generator | TB-270' | TB-270' | S | D | 4 | 2 | 4 | mfg | N | N | | |
| 3. Main condensers | TB-195' | TB-195' | S | D | 4 | 2 | 4 | VIII | N | N | | |
| 4. Feedwater heaters | TB-220' 245' & 290' | TB-220' 245' & 290' | S | D | 4 | 2 | 4 | VIII | N | N | | |
| 5. Moisture sepa- rator reheaters | TB-270' | TB-270' | S | D | 4 | 2 | 4 | VIII | N | N | | |
| 6. Moisture sepa- rator drain tanks | TB-245' | TB-245' | S | D | 4 | 2 | 4 | API-650 | N | N | | |
| 7. Heater drain tanks | TB-220' | TB-220' | S | D | 4 | 2 | 4 | API-650 | N | N | | |
| 8. Reheater drain tanks | TB-245' | TB-245' | S | D | 4 | 2 | 4 | API-650 | N | N | | |
| 9. Heater drain pumps | TB-195' | TB-195' | S | D | 4 | 2 | 4 | mfg | N | N | | |
| 10. Heater drain pump motors | TB-195' | TB-195' | S | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 11. Extraction steam valves and piping | | | S | D | 4 | 2 | 4 | B31.1 | N | N | | |
| 12. Other valves and piping | | | S | D | 4 | 2 | 4 | B31.1 | N | N | | |
| 13. Instrumentation | | | S | NA | 6 | 2 | J | mfg | N | N | | |
| 14. Generator H ₂ cooler | TB-270' | TB-270' | S | D | 4 | 2 | 4 | VIII | N | N | | |
| 15. Generator stator cool- ant pump | TB-220' | TB-220' | S | D | 4 | 2 | 4 | mfg | N | N | | |
| 16. Generator stator cool- ant pump motor | TB-220' | TB-220' | S | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 17. Generator stator cooler | TB-220' | TB-220' | S | D | 4 | 2 | 4 | VIII | N | N | | |

18. Turbine steam sealing system

ME7B/ETSS

VEGP-FSAR-3

TABLE 3.2.2-1 (SHEET 32 OF 97)

| Principal System and Components | (a) Location | | (b) Source of Supply | (c) Quality Group | (d) VEGP Safety Class | (e) Seismic Category | (f) Codes and Standards Designator | (g) Principal Construc- tion Code | (h) Q-List | (i) Safety Related | (j) Environ- mental Designator | (k) Comments |
|--|-----------------|---------|----------------------------|-------------------------|--------------------------------|----------------------------|---|--|---------------|--------------------------|---|-----------------|
| | Unit 1 | Unit 2 | | | | | | | | | | |
| CONDENSER AIR EJECTOR SYSTEM | | | | | | | | | | | | |
| 1. Air ejectors | TB-220' | TB-220' | S | D | 4 | 2 | 4 | VIII | N | N | | |
| 2. Air ejector condensers | TB-220' | TB-220' | S | D | 4 | 2 | 4 | VIII, TEMA-C | N | N | | |
| 3. Vacuum pumps | TB-195' | TB-195' | S | D | 4 | 2 | 4 | mfg | N | N | | |
| 4. Vacuum pump motors | TB-195' | TB-195' | S | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 5. Vacuum pump exhaust silencers | TB-195' | TB-195' | S | D | 4 | 2 | 4 | mfg | N | N | | |
| 6. Vacuum pump seal water HXs | TB-195' | TB-195' | S | D | 4 | 2 | 4 | VIII, TEMA-C | N | N | | |
| 7. Seal water pumps | TB-195' | TB-195' | S | D | 4 | 2 | 4 | mfg | N | N | | |
| 8. Valves and piping | | | S | D | 4 | 2 | 4 | B31.1 | N | N | | |
| 9. Seal water pump motors | TB-195' | TB-195' | S | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 10. Instrumentation | | | S | NA | 6 | 2 | J | mfg | N | N | | |
| CIRCULATING WATER SYSTEM | | | | | | | | | | | | |
| 1. Circulating water pumps | 0 | 0 | S | D | 4 | 2 | 4 | mfg | N | N | | |
| 2. Circulating water pump motors | 0 | 0 | S | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 3. Condenser water box drain pump | TB-195' | TB-195' | S | D | 4 | 2 | 4 | mfg | N | N | | |
| 4. Condenser water box drain pump motor | TB-195' | TB-195' | S | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 5. Piping | | | S | NA | 6 | 2 | C | mfg | N | N | | |
| 6. Valves | | | S | NA | 6 | 2 | 6 | B31.1 | N | N | | |
| 7. Instrumentation | | | S | NA | 6 | 2 | J | mfg | N | N | | |
| RIVER INTAKE STRUCTURE SYSTEMS | | | | | | | | | | | | |
| 1. Mixing chamber | VB | shared | S | NA | 6 | 2 | C | mfg | N | N | | |
| 2. River makeup and dilution pumps | 0 | shared | S | NA | 6 | 2 | 6 | mfg | N | N | | |

VEGP-FSAR-3

TABLE 3.2.2-1 (SHEET 43 OF 97)

| Principal System and Components | (a) Location | | (b) Source of Supply | (c) Quality Group | (d) VEGP Safety Class | (e) Seismic Category | (f) Codes and Standards Designator | (g) Principal Construc- tion Code | (h) Q-List | (i) Safety Related | (j) Environ- mental Designator | (k) Comments |
|--|-----------------|---------|----------------------------|-------------------------|--------------------------------|----------------------------|---|--|---------------|--------------------------|---|-----------------|
| | Unit 1 | Unit 2 | | | | | | | | | | |
| 8. Condenser cir- culating water sample pump motor | TB-195' | TB-195' | S | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 9. Instrumentation | | | S | NA | 6 | 2 | J | mfg | N | N | | |
| CONTROL BUILDING DRAIN SYSTEM | | | | | | | | | | | | |
| 1. Sump pumps | CB-C | CB-C | B | D | 4 | 2 | 4 | mfg | N | N | | |
| 2. Sump pump motors | CB-C | CB-C | B | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 3. Piping, valves, and floor drain boxes | | | B | D | 4 | 1 | 4 | B31.1, API 650 | N | N | | |
| 4. Instrumentation | | | B | NA | 6 | 2 | J | mfg | N | N | | |
| AUXILIARY BUILDING FLOOD RETAINING ROOMS, ALARMS, AND DRAINS | | | | | | | | | | | | |
| 1. ESf pump room: Alarm units | | | B | NA | 1 | 1 | J | mfg | Y | Y | | |
| Piping to room isolation valve | | | B | D | 4 | 1 | 4 | B31.1 | N | N | | |
| Isolation valves | | | B | C | 3 | 1 | 3 | III-3 | Y | Y | | |
| 2. Penetration rooms: Alarm units | | | B | NA | 6 | 2 | J | mfg | N | N | | |
| Valves and piping | | | B | D | 4 | 1 | 4 | B31.1 | N | N | | |
| 3. Instrumentation | | | B | NA | 6 | 2 | J | mfg | N | N | | |
| CONTAINMENT, AUXILIARY BUILDING, AND MISCELLANEOUS DRAIN SYSTEMS | | | | | | | | | | | | |
| 1. Radioactive drain sump pumps | AB-D55 | AB-D20 | B | D | 4 | 2 | 4 | mfg | N | N | | |
| 2. Reactor cav- ity sump pumps | C-171' | C-171' | B | D | 4 | 1 | 4 | mfg | N | N | | |
| 3. Containment sump pumps | C-171' | C-171' | B | D | 4 | 1 | 4 | mfg | N | N | | |
| 4. Penetration room sump pumps | AB-D73 | AB-D107 | B | D | 4 | 1 | 4 | mfg | N | N | | |

VEGP-FSAR-3

TABLE 3.2.2-1 (SHEET 44 OF 97)

| Principal System and Components | (a) Location | | (b) Source of Supply | (c) Quality Group | (d) VEGP Safety Class | (e) Seismic Category | (f) Codes and Standards Designator | (g) Principal Construc- tion Code | (h) Q-List | (i) Safety Related | (j) Environ- mental Designator | (k) Comments |
|--|-----------------|--------|----------------------------|-------------------------|--------------------------------|----------------------------|---|--|---------------|--------------------------|---|-----------------|
| | Unit 1 | Unit 2 | | | | | | | | | | |
| 5. Auxiliary building sump pumps | AB-D51 | AB-D28 | B | D | 4 | 2 | 4 | mfg | N | N | | |
| 6. Component cooling water drain tank | AB-D75 | AB-D06 | B | D | 4 | 2 | 4 | API 650 | N | N | | |
| 7. Component cooling water drain tank pump | AB-D75 | AB-D06 | B | D | 4 | 2 | 4 | mfg | N | N | | |
| 8. Clean water sump pumps | AB-D36 | AB-D32 | B | D | 4 | 2 | 4 | mfg | N | N | | |
| 9. NSCW pumphouse sump pumps | NSW | NSW | B | D | 4 | 2 | 4 | mfg | N | N | | |
| 10. Diesel elec- trical tunnel sump pumps | VB | VB | B | D | 4 | 2 | 4 | mfg | N | N | | |
| 11. Main steam and feedwater tunnel sump pumps | VB | VB | B | D | 4 | 2 | 4 | mfg | N | N | | |
| 12. Diesel building oily waste sump pumps | DB | DB | B | D | 4 | 2 | 4 | mfg | N | N | | |
| 13. Equipment drain tank | RB | shared | B | D | 4 | 2 | 4 | API 650 | N | N | | |
| 14. Floor drain tank | RB | shared | B | D | 4 | 2 | 4 | API 650 | N | N | | |
| 15. Containment, reactor cavity, and penetration room sump pump motors | | | B | NA | 6 | 1 | E | mfg | N | N | | |
| 16. All other pump motors | | | B | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 17. Instrumentation | | | B | NA | 6 | 2 | J | mfg | N | N | | |
| 18. Drain isolation valves for ESF pump, HX, and valve rooms | | | B | C | 3 | 1 | 3 | III-3 | Y | Y | | |

VEGP-FSAR-3

TABLE 3.2.2-1 (SHEET 45 OF 97)

| Principal System and Components | (a) Location | | (b) Source of Supply | (c) Quality Group | (d) VEGP Safety Class | (e) Seismic Category | (f) Codes and Standards Designator | (g) Principal Construc- tion Code | (h) Q-List | (i) Safety Related | (j) Environ- mental Designator | (k) Comments |
|---|-------------------|-------------------|----------------------------|-------------------------|--------------------------------|----------------------------|---|--|---------------|--------------------------|---|-----------------|
| | Unit 1 | Unit 2 | | | | | | | | | | |
| 19. All other valves and all piping | | | B | D | 4 | 1 | 4 | B31.1 | N | N | | |
| RADWASTE SOLIDIFICATION BUILDING DRAIN SYSTEM | | | | | | | | | | | | |
| 1. Equipment drain tank | RB | shared | B | D | 4 | 2 | 4 | API 650 | N | N | | |
| 2. Floor drain tank | RB | shared | B | D | 4 | 2 | 4 | API 650 | N | N | | |
| 3. Equipment drain tank pump | RB | shared | B | D | 4 | 2 | 4 | mfg | N | N | | |
| 4. Floor drain tank pump | RB | shared | B | D | 4 | 2 | 4 | mfg | N | N | | |
| 5. Equipment drain sump pumps | RB | shared | B | D | 4 | 2 | 4 | mfg | N | N | | |
| 6. Floor drain sump pumps | RB | shared | B | D | 4 | 2 | 4 | mfg | N | N | | |
| TURBINE BUILDING DRAIN SYSTEM | | | | | | | | | | | | |
| 1. Turbine build- ing drain tanks | TB-195' | TB-195' | S | D | 4 | 2 | 4 | API-650 | N | N | | |
| 2. Turbine build- ing drain transfer pumps | TB-195' | TB-195' | S | D | 4 | 2 | 4 | mfg | N | N | | |
| 3. Turbine build- ing drain transfer pump motors | TB-195' | TB-195' | S | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 4. Turbine build- ing sump pumps | TB-195' | TB-195' | S | D | 4 | 2 | 4 | API-610 | N | N | | |
| 5. Turbine build- ing sump pump motors | TB-195' | TB-195' | S | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 6. Turbine build- ing drain dis- charge filter | AB-D93 | AB-D84 | W | D | 4 | 2 | 4 | VIII | N | N | | |
| 7. Turbine build- ing mixed bed demineralizers | AB-C144 & C145 | AB-C147 & C148 | B | D | 4 | 2 | 4 | VIII | N | N | | |
| 8. Turbine build- ing drain feed filter | AB-D92 | AB-D85 | B | D | 4 | 2 | 4 | VIII | N | N | | |

VEGP-FSAR-3

TABLE 3.2.2-1 (SHEET 46 OF 97)

| Principal System and Components | (a) Location | | (b) Source of Supply | (c) Quality Group | (d) VEGP Safety Class | (e) Seismic Category | (f) Codes and Standards Designator | (g) Principal Construc- tion Code | (h) Q-List | (i) Safety Related | (j) Environ- mental Designator | (k) Comments |
|---|-----------------|---------|----------------------------|-------------------------|--------------------------------|----------------------------|---|--|---------------|--------------------------|---|-----------------|
| | Unit 1 | Unit 2 | | | | | | | | | | |
| 9. Turbine build- ing drain oil separator | AB-D89 | AB-D87 | W | D | 4 | 2 | 4 | VIII | N | N | | |
| 10. Valves and piping | | | S,B | D | 4 | 2 | 4 | B31.1 | N | N | | |
| 11. Instrumentation | | | S,B | NA | 6 | 2 | J | mfg | N | N | | |
| TURBINE LUBE OIL STORAGE AND FILTRATION SYSTEM | | | | | | | | | | | | |
| 1. Main lube oil reservoir package | TB-245' | TB-245' | S | NA | 6 | 2 | 6 | API 650 | N | N | | |
| 2. FW pump turbine lube oil reservoir packages | TB-220' | TB-220' | S | NA | 6 | 2 | 6 | API 650 | N | N | | |
| 3. Clean lube oil storage tank | 0 | shared | S | NA | 6 | 2 | 6 | API 650 | N | N | | |
| 4. Dirty lube oil storage tank | 0 | shared | S | NA | 6 | 2 | 6 | API 650 | N | N | | |
| 5. Lube oil stor- age tank trans- fer pump | 0 | shared | S | NA | 6 | 2 | 6 | mfg | N | N | | |
| 6. Vapor extractors | TB-220' | TB-220' | S | NA | 6 | 2 | 6 | mfg | N | N | | |
| 7. Lube oil filter pumps | TB-220' | TB-220' | S | NA | 6 | 2 | 6 | mfg | N | N | | |
| 8. Pump motors | | | S | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 9. Main lube oil conditioner package | TB-220' | TB-220' | S | NA | 6 | 2 | 6 | B31.1 | N | N | | |
| 10. FW pump lube oil conditioner package | TB-195' | TB-195' | S | NA | 6 | 2 | 6 | B31.1 | N | N | | |
| 11. Oil coolers | TB-270' | TB-270' | S | NA | 6 | 2 | 6 | VIII | N | N | | |
| 12. Main lube oil conditioner backflow tank | | | S | NA | 6 | 2 | 6 | API 650 | N | N | | |
| 13. Lube oil drain pump | TB-195' | TB-195' | S | NA | 6 | 2 | 6 | mfg | N | N | | |
| 14. Valves and piping | | | S | NA | 6 | 2 | 6 | B31.1 | N | N | | |
| 15. Instrumentation | | | S | NA | 6 | 2 | J | mfg | N | N | | |

VEGP-FSAR-3

TABLE 3.2.2-1 (SHEET 54 OF 97)

| Principal System and Components | (a) Location | | (b) Source of Supply | (c) Quality Group | (d) VEGP Safety Class | (e) Seismic Category | (f) Codes and Standards Designator | (g) Principal Construc- tion Code | (h) Q-List | (i) Safety Related | (j) Environ- mental Designator | (k) Comments |
|--|-----------------|--------|----------------------------|-------------------------|--------------------------------|----------------------------|---|--|---------------|--------------------------|---|-----------------|
| | Unit 1 | Unit 2 | | | | | | | | | | |
| 11. Potable water storage tank | 0 | shared | S | NA | 6 | 2 | 6 | API 650 | N | N | | |
| 12. Pump motors | VB | shared | S | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| REACTOR COOLANT SYSTEM LEAK DETECTION SYSTEM | | | | | | | | | | | | |
| 1. Radiation monitors | C | C | W | NA | 6 | 1 | J | mfg | N | N | | |
| 2. Condensate measuring instruments | C | C | B | NA | 6 | 2 | J | mfg | N | N | | |
| 3. Condensate measuring piping and valves | C | C | B | NA | 4 | 2 | 4 | B31.1 | N | N | | |
| 4. Humidity | C | C | B | NA | 6 | 2 | J | mfg | N | N | | |
| 5. Tank and sump level instruments | C | C | B | NA | 6 | 2 | J | mfg | N | N | | |
| MISCELLANEOUS LEAK DETECTION SYSTEM | | | | | | | | | | | | |
| 1. Piping and valves | | | B | D | 4 | 2 | 4 | B31.1 | N | N | | |
| FUEL HANDLING BUILDING DRAIN SYSTEM | | | | | | | | | | | | |
| 1. Sump pumps | FB-C09 | FB-C03 | B | D | 4 | 2 | 4 | mfg | N | N | | |
| 2. Sump pump motors | FB-C09 | FB-C03 | B | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 3. Piping and valves | | | B | D | 4 | 1 | 4 | B31.1 | N | N | | |
| 4. Instrumentation | | | B | NA | 6 | 2 | J | mfg | N | N | | |
| UTILITY WATER SYSTEM | | | | | | | | | | | | |
| 1. Utility water booster pumps | VB | shared | S | NA | 6 | 2 | 6 | mfg | N | N | | |
| 2. Utility water booster pump motors | VB | shared | S | NA | 6 | 2 | E | NEMA MG1 | N | N | | |

VEGP-FSAR-3

TABLE 3.2.2-1 (SHEET 55 OF 97)

| Principal System and Components | (a) Location | | (b) Source of Supply | (c) Quality Group | (d) VEGP Safety Class | (e) Seismic Category | (f) Codes and Standards Designator | (g) Principal Construc- tion Code | (h) Q-List | (i) Safety Related | (j) Environ- mental Designator | (k) Comments |
|---|-----------------|---------|----------------------------|-------------------------|--------------------------------|----------------------------|---|--|---------------|--------------------------|---|-----------------|
| | Unit 1 | Unit 2 | | | | | | | | | | |
| 3. Utility water loop header | 0 | shared | S | NA | 6 | 2 | C | mfg | N | N | | |
| 4. Valves and all other piping | | | S,B | NA | 6 | 2 | 6 | mfg | N | N | | |
| 5. Instrumentation | | | S | NA | 6 | 2 | J | mfg | N | N | | |
| CONTAINMENT AIR COOLING SYSTEM | | | | | | | | | | | | |
| 1. Cooling fans | C-236' | C-236' | B | NA | 0 | 1 | 5 | AMCA | Y | Y | 1-B | |
| 2. Fan motors | C-236' | C-236' | B | NA | 1 | 1 | E | NEMA MG1 | Y | Y | 1-B | |
| 3. Coolers | C-236' | C-236' | B | B | 2 | 1 | 2 | III-2 | Y | Y | 1-B | |
| 4. Ductwork | C | C | B | NA | 0 | 1 | 5 | ANSI N509 | Y | Y | | |
| 5. Dampers | C | C | B | NA | 0 | 1 | 5 | ANSI N509 | Y | Y | 1-B | |
| 6. Damper motors | C | C | B | NA | 1 | 1 | E | NEMA MG1 | Y | Y | | |
| 7. Safety-related instrumentation | | | B | NA | 1 | 1 | J | mfg | Y | Y | | Note s |
| CONTAINMENT LOWER LEVEL AIR CIRCULATING SYSTEM | | | | | | | | | | | | |
| 1. Fans | C-171' | C-171' | B | NA | 6 | 2 | 6 | AMCA | N | N | | |
| 2. Fan motors | C-171' | C-171' | B | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 3. Ductwork | | | B | NA | 6 | 2 | 6 | SMACNA | N | N | | |
| 4. Instrumentation | | | B | NA | 6 | 2 | J | mfg | N | N | | Note p |
| CONTAINMENT PREACCESS FILTER SYSTEM | | | | | | | | | | | | |
| 1. Fans | C-259' | C-259' | B | NA | 6 | 2 | 6 | AMCA | N | N | | |
| 2. Fan motors | C-259' | C-259' | B | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 3. HEPA filters | C-259' | C-259' | B | NA | 6 | 2 | 6 | ANSI N509 | N | N | | |
| 4. Charcoal filters | C-259' | C-259' | B | NA | 6 | 2 | 6 | ANSI N509 | N | N | | |
| 5. Heaters | C-259' | C-259' | B | NA | 6 | 2 | E | UL | N | N | | |
| 6. Moisture eliminators | C-259' | C-259' | B | NA | 6 | 2 | 6 | ANSI N509 | N | N | | |
| 7. Instrumentation | | | B | NA | 6 | 2 | J | mfg | N | N | | |
| CONTAINMENT NORMAL PREACCESS PURGE EXHAUST SYSTEM | | | | | | | | | | | | |
| 1. Preaccess purge fan | EB-220' | EB-220' | B | NA | 6 | 2 | 6 | AMCA | N | N | | |
| 2. Preaccess purge fan motor | EB-220' | EB-220' | B | NA | 6 | 2 | E | NEMA MG1 | N | N | | |

VEGP-FSAR-3

TABLE 3.2.2-1 (SHEET 56 OF 97)

| Principal System and Components | (a) Location | | (b) Source of Supply | (c) Quality Group | (d) VEGP Safety Class | (e) Seismic Category | (f) Codes and Standards Designator | (g) Principal Construction Code | (h) Q-List | (i) Safety Related | (j) Environmental Designator | (k) Comments |
|---|--------------|---------|----------------------|-------------------|-----------------------|----------------------|------------------------------------|---------------------------------|------------|--------------------|------------------------------|--------------|
| | Unit 1 | Unit 2 | | | | | | | | | | |
| 3. Minipurge fan | EB-220' | EB-220' | B | NA | 6 | 2 | 6 | AMCA | N | N | | |
| 4. Minipurge fan motor | EB-220' | EB-220' | B | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 5. Moisture eliminators | EB-220' | EB-220' | B | NA | 6 | 2 | 6 | ANSI N509 | N | N | | |
| 6. Heaters | EB-220' | EB-220' | B | NA | 6 | 2 | E | UL | N | N | | |
| 7. HEPA filters | EB-220' | EB-220' | B | NA | 6 | 2 | 6 | ANSI N509 | N | N | | |
| 8. Charcoal filters | EB-220' | EB-220' | B | NA | 6 | 2 | 6 | ANSI N509 | N | N | | |
| 9. Preaccess purge exhaust unit housing | EB-220' | EB-220' | B | NA | 6 | 1 | 6 | ANSI N509 | N | N | | |
| 10. Containment penetration ducting | | | B | B | 2 | 1 | 2 | III-2/ AISI | Y | Y | | |
| 11. All other ductwork | | | B | NA | 6 | 2 | 6 | SMACNA | N | N | | |
| 12. Isolation dampers | | | B | B | 2 | 1 | 2 | III-2 | Y | Y | | |
| 13. Isolation damper motors | | | B | NA | 1 | 1 | E | NEMA MG1 | Y | Y | | |
| 14. Discharge dampers | | | B | NA | 6 | 2 | 6 | ANSI N509 | N | N | | |
| 15. Instrumentation for containment isolation | | | B | NA | 1 | 1 | J | mfg | Y | Y | | Note s |
| 16. All other instrumentation | | | B | NA | 6 | 2 | J | mfg | N | N | | |

CONTAINMENT NORMAL PREACCESS PURGE SUPPLY SYSTEM

| | | | | | | | | | | | | |
|------------------------------------|---------|---------|---|----|---|---|---|----------|---|---|--|--|
| 1. Preaccess purge fan | EB-220' | EB-220' | B | NA | 6 | 2 | 6 | AMCA | N | N | | |
| 2. Preaccess purge fan motor | EB-220' | EB-220' | B | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 3. Minipurge fan | EB-220' | EB-220' | B | NA | 6 | 2 | 6 | AMCA | N | N | | |
| 4. Minipurge fan motor | EB-220' | EB-220' | B | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 5. Prefilters | EB-220' | EB-220' | B | NA | 6 | 2 | 6 | ASHRAE | N | N | | |
| 6. Heaters | EB-220' | EB-220' | B | NA | 6 | 2 | E | UL | N | N | | |
| 7. Containment penetration ducting | | | B | B | 2 | 1 | 2 | III-2 | Y | Y | | |
| 8. All other ductwork | | | B | NA | 6 | 2 | 6 | SMACNA | N | N | | |

VEGP-FSAR-3

TABLE 3.2.2-1 (SHEET 57 OF 97)

| Principal System and Components | (a) Location | | (b) Source of Supply | (c) Quality Group | (d) VEGP Safety Class | (e) Seismic Category | (f) Codes and Standards Designator | (g) Principal Construc- tion Code | (h) Q-List | (i) Safety Related | (j) Environ- mental Designator | (k) Comments |
|---|-----------------|---------|----------------------------|-------------------------|--------------------------------|----------------------------|---|--|---------------|--------------------------|---|-----------------|
| | Unit 1 | Unit 2 | | | | | | | | | | |
| 9. Isolation dampers | | | B | B | 2 | 1 | 2 | III-2 | Y | Y | | |
| 10. Isolation damper motors | | | B | NA | 1 | 1 | E | NEMA MG1 | Y | Y | | |
| 11. Inlet damper | | | B | NA | 6 | 2 | 6 | ANSI N509 | N | N | | |
| 12. Instrumentation for containment isolation | | | B | NA | 1 | 1 | J | mfg | Y | Y | | Note s |
| 13. All other instrumentation | | | B | NA | 6 | 2 | J | mfg | N | N | | |
| CONTAINMENT POST-LOCA PURGE EXHAUST SYSTEM | | | | | | | | | | | | |
| 1. Containment penetration ducting | | | B | B | 2 | 1 | 2 | III-2 | Y | Y | | |
| 2. Welded ductwork | | | B | NA | 6 | 1 | 6 | SMACNA | N | N | | |
| 3. All other ductwork | | | B | NA | 6 | 2 | 6 | ANSI N509 | N | N | | |
| 4. Isolation dampers | | | B | B | 2 | 1 | 2 | III-2 | Y | Y | | |
| 5. Isolation damper motors | | | B | NA | 1 | 1 | E | NEMA MG1 | Y | Y | | |
| 6. Heaters | EB-220' | EB-220' | B | NA | 6 | 2 | E | UL | N | N | | |
| 7. Moisture eliminators | EB-220' | EB-220' | B | NA | 6 | 2 | 6 | ANSI N509 | N | N | | |
| 8. HEPA filters | EB-220' | EB-220' | B | NA | 6 | 2 | 6 | ANSI N509 | N | N | | |
| 9. Charcoal filters | EB-220' | EB-220' | B | NA | 6 | 2 | 6 | ANSI N509 | N | N | | |
| 10. Post-LOCA purge exhaust unit housing | EB-220' | EB-220' | B | NA | 6 | 1 | 6 | ANSI N509 | N | N | | |
| 11. Inlet globe valve and discharge check valve | | | B | NA | 6 | 2 | 6 | B31.1 | N | N | | |
| 12. Instrumentation | | | B | NA | 6 | 2 | J | mfg | N | N | | |
| CONTAINMENT CRDM COOLING SYSTEM | | | | | | | | | | | | |
| 1. Fans | C-240' | C-240' | W | NA | 6 | 2 | 6 | AMCA | N | N | | |
| 2. Fan motors | C-240' | C-240' | W | NA | 6 | 2 | E | NEMA MG1 | N | N | | Note m |
| 3. Ductwork | C | C | W | NA | 6 | 2 | 6 | SMACNA | N | N | | |
| 4. Instrumentation | | | W | NA | 6 | 2 | J | mfg | N | N | | |

VEGP-FSAR-3

TABLE 3.2.2-1 (SHEET 59 OF 97)

| Principal System and Components | (a) Location | | (b) Source of Supply | (c) Quality Group | (d) VEGP Safety Class | (e) Seismic Category | (f) Codes and Standards Designator | (g) Principal Construc- tion Code | (h) Q-List | (i) Safety Related | (j) Environ- mental Designator | (k) Comments |
|--|-----------------|--------------|----------------------------|-------------------------|--------------------------------|----------------------------|---|--|---------------|--------------------------|---|-----------------|
| | Unit 1 | Unit 2 | | | | | | | | | | |
| 4. All other ductwork | | | B | B | 2 | 1 | 2 | III-2 | Y | Y | | |
| 5. Safety-related instrumentation | | | B | NA | 1 | 1 | J | mfg | Y | Y | | Note s |
| EQUIPMENT BUILDING HVAC SYSTEM | | | | | | | | | | | | |
| 1. Equipment building ventilation fans | EB | EB | B | NA | 6 | 2 | 6 | AMCA | N | N | | |
| 2. Equipment building ventilation fan motors | EB | EB | B | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 3. Tendon gallery ventilation fans | EB | EB | B | NA | 6 | 2 | 6 | AMCA | N | N | | |
| 4. Tendon gallery ventilation fan motors | EB | EB | B | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 5. Ductwork | | | B | NA | 6 | 2 | 6 | ANSI N509 | N | N | | |
| 6. Dampers | | | B | NA | 6 | 2 | 6 | ANSI N509 | N | N | | |
| 7. Damper motors | | | B | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 8. Instrumentation | | | B | NA | 6 | 2 | J | mfg | N | N | | |
| CONTROL ROOM HVAC SYSTEM (ESSENTIAL PORTION) | | | | | | | | | | | | |
| 1. Filter unit fans | CB-312 & 321 | CB-305 & 311 | B | NA | 0 | 1 | 5 | AMCA | Y | Y | IX | |
| 2. Filter unit fans motors | CB-312 & 321 | CB-305 & 311 | B | NA | 1 | 1 | E | NEMA MG1 | Y | Y | IX | |
| 3. Return air fans | CB-312 & 321 | CB-305 & 311 | B | NA | 0 | 1 | 5 | AMCA | Y | Y | IX | |
| 4. Return air fans motor | CB-312 & 321 | CB-305 & 311 | B | NA | 1 | 1 | E | NEMA MG1 | Y | Y | IX | |
| 5. Moisture eliminators | CB-312 & 321 | CB-305 & 311 | B | NA | 0 | 1 | 5 | ANSI N509 | Y | Y | IX | |
| 6. Heaters | CB-312 & 321 | CB-305 & 311 | B | NA | 1 | 1 | E | UL | Y | Y | IX | |
| 7. HEPA filters | CB-312 & 321 | CB-305 & 311 | B | NA | 0 | 1 | 5 | ANSI N509 | Y | Y | IX | |
| 8. Charcoal filters | CB-312 & 321 | CB-305 & 311 | B | NA | 0 | 1 | 5 | ANSI N509 | Y | Y | IX | |
| 9. Cooling coils | CB-312 & 321 | CB-305 & 311 | B | C | 3 | 1 | 3 | III-3 | Y | Y | IX | |
| 10. Dampers | | | B | NA | 0 | 1 | 5 | ANSI N509 | Y | Y | | |

VEGP-FSAR-3

TABLE 3.2.2-1 (SHEET 67 OF 97)

| Principal System and Components | (a) Location | | (b) Source of Supply | (c) Quality Group | (d) VEGP Safety Class | (e) Seismic Category | (f) Codes and Standards Designator | (g) Principal Construction Code | (h) Q-List | (i) Safety Related | (j) Environmental Designator | (k) Comments |
|---|-----------------|--------|-------------------------|----------------------|--------------------------|-------------------------|---------------------------------------|------------------------------------|---------------|-----------------------|---------------------------------|-----------------|
| | Unit 1 | Unit 2 | | | | | | | | | | |
| 8. Railroad corridor infrared heaters | AB-127 | shared | B | NA | 6 | 2 | E | UL | N | N | | |
| 9. FHB normal A/C fan | CB-403 | shared | B | NA | 6 | 2 | 6 | AMCA | N | N | | |
| 10. FHB normal A/C fan motor | CB-403 | shared | B | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 11. FHB normal A/C prefilters | CB-403 | shared | B | NA | 6 | 2 | 6 | ASHRAE | N | N | | |
| 12. FHB normal A/C heaters | CB-403 | shared | B | NA | 6 | 2 | E | UL | N | N | | |
| 13. FHB normal A/C coolers | CB-403 | shared | B | NA | 6 | 2 | 6 | ARI | N | N | | |
| 14. FHB exhaust A/C fan | FB-301 | shared | B | NA | 6 | 2 | 6 | AMCA | N | N | | |
| 15. FHB exhaust A/C fan motor | FB-301 | shared | B | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 16. FHB exhaust A/C HEPA filters | FB-301 | shared | B | NA | 6 | 2 | 6 | ANSI N509 | N | N | | |
| 17. FHB exhaust A/C heaters | FB-301 | shared | B | NA | 6 | 2 | E | UL | N | N | | |
| 18. FHB exhaust A/C moisture eliminators | FB-301 | shared | B | NA | 6 | 2 | 6 | ANSI N509 | N | N | | |
| 19. FHB exhaust A/C charcoal filters | FB-301 | shared | B | NA | 6 | 2 | 6 | ANSI N509 | N | N | | |
| 20. HEPA filters | FB-301 | shared | B | NA | 6 | 2 | 6 | ANSI N509 | N | N | | |
| 21. Process ductwork and dampers | | | B | NA | 6 | 2 | 6 | SMACNA/ANSI N509 | N | N | | |
| 22. Damper motors | | | B | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 23. Negative pressure boundary penetration ductwork and dampers | | | B | NA | 0 | 1 | 5 | ANSI N509 | Y | Y | | |
| 24. Instrumentation | | | B | NA | 6 | 2 | J | mfg | N | N | | |
| 25. FHB normal equipment reheat coil | FB-301 | shared | B | NA | 6 | 2 | E | UL | N | N | | |

VEGP-FSAR-3

TABLE 3.2.2-1 (SHEET 68 OF 97)

| Principal System and Components | (a) Location Unit 1 Unit 2 | | (b) Source of Supply | (c) Quality Group | (d) VEGP Safety Class | (e) Seismic Category | (f) Codes and Standards Designator | (g) Principal Construction Code | (h) Q-List | (i) Safety Related | (j) Environmental Designator | (k) Comments |
|--|-------------------------------|--------|----------------------|-------------------|-----------------------|----------------------|------------------------------------|---------------------------------|------------|--------------------|------------------------------|--------------|
| 26. FHB accident equipment reheat coil | FB-260 ¹ shared | | B | NA | 6 | 2 | E | UL | N | N | | |
| FUEL HANDLING BUILDING POST-ACCIDENT EXHAUST SYSTEM | | | | | | | | | | | | |
| 1. Fans | FB-303, shared 304 | | B | NA | 0 | 1 | 5 | AMCA | Y | Y | VII | |
| 2. Fan motors | FB-303, shared 304 | | B | NA | 1 | 1 | E | NEMA MG1 | Y | Y | VII | |
| 3. Moisture eliminators | FB-303, shared 304 | | B | NA | 0 | 1 | 5 | ANSI N509 | Y | Y | VII | |
| 4. Heaters | FB-303, shared 304 | | B | NA | 1 | 1 | E | UL | Y | Y | VII | |
| 5. HEPA filters | FB-303, shared 304 | | B | NA | 0 | 1 | 5 | ANSI N509 | Y | Y | VII | |
| 6. Charcoal filters | FB-303, shared 304 | | B | NA | 0 | 1 | 5 | ANSI N509 | Y | Y | VII | |
| 7. Ductwork | | | B | NA | 0 | 1 | 5 | ANSI N509 | Y | Y | VII | |
| 8. Dampers | | | B | NA | 0 | 1 | 5 | ANSI N509 | Y | Y | VII | |
| 9. Dampers motors | | | B | NA | 1 | 1 | E | NEMA MG1 | Y | Y | VII | |
| 10. Safety-related instrumentation | | | B | NA | 1 | 1 | J | mfg | Y | Y | VII | Note s |
| AUXILIARY BUILDING OUTSIDE AIR SUPPLY, NORMAL HVAC, RADIOACTIVE FILTER EXHAUST, AND CONTINUOUS EXHAUST SYSTEMS | | | | | | | | | | | | |
| 1. Exhaust unit fans | AB-210 | AB-204 | B | NA | 6 | 2 | 6 | AMCA | N | N | | |
| 2. Exhaust unit fan motors | AB-210 | AB-204 | B | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 3. A/C fans | AB-210 | AB-204 | B | NA | 6 | 2 | 6 | AMCA | N | N | | |
| 4. A/C fan motors | AB-210 | AB-204 | B | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 5. HEPA filters | AB-210 | AB-204 | B | NA | 6 | 2 | 6 | ANSI N509 | N | N | | |
| 6. Charcoal filters | AB-210 | AB-204 | B | NA | 6 | 2 | 6 | ANSI N509 | N | N | | |
| 7. Moisture eliminators | AB-210 | AB-204 | B | NA | 6 | 2 | 6 | mfg | N | N | | |
| 8. Electric heaters | AB-210 | AB-204 | B | NA | 6 | 2 | E | UL | N | N | | |
| 9. Cooling coils | AB-210 | AB-204 | B | NA | 6 | 2 | 6 | ARI | N | N | | |
| 10. Ductwork | | | B | NA | 6 | 2 | 6 | SHACNA | N | N | | |
| 11. Dampers | | | B | NA | 6 | 2 | 6 | ANSI N509 | N | N | | |
| 12. Damper motors | | | B | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 13. Instrumentation | | | B | NA | 6 | 2 | J | mfg | N | N | | |

VEGP-FSAR-3

TABLE 3.2.2-1 (SHEET 73 OF 97)

| Principal System and Components | (a) Location | | (b) Source of Supply | (c) Quality Group | (d) VEGP Safety Class | (e) Seismic Category | (f) Codes and Standards Designator | (g) Principal Construc- tion Code | (h) Q-List | (i) Safety Related | (j) Environ- mental Designator | (k) Comments |
|--|-----------------|--------|----------------------------|-------------------------|--------------------------------|----------------------------|---|--|---------------|--------------------------|---|-----------------|
| | Unit 1 | Unit 2 | | | | | | | | | | |
| 18. SFP pump and HX room cooler B: | | | | | | | | | | | | |
| Fan | FB-A07 | FB-A04 | B | NA | 0 | 1 | 5 | AMCA | Y | Y | VIII | |
| Fan motor | FB-A07 | FB-A04 | B | NA | 1 | 1 | E | NEMA MG1 | Y | Y | VIII | |
| Normal chilled water cooling coils | FB-A07 | FB-A04 | B | C | 3 | 1 | 3 | III-3 | Y | Y | VIII | |
| ESF chilled water cooling coils | FB-A07 | FB-A04 | B | C | 3 | 1 | 3 | III-3 | Y | Y | VIII | |
| 19. Safety-related instrumentation | | | B | NA | 1 | 1 | J | mfg | Y | Y | | |
| PIPING PENETRATION VENTILATION SYSTEM | | | | | | | | | | | | |
| 1. Restraint cooling fans | VB | VB | B | NA | 6 | 2 | 6 | AMCA | N | N | | |
| 2. Restraint cooling fan motors | VB | VB | B | NA | 6 | 2 | E | NEMA MG1 | N | N | | Note m |
| 3. Ductwork | | | B | NA | 6 | 2 | 6 | SMACNA | N | N | | |
| 4. Backdraft dampers | | | B | NA | 6 | 2 | 6 | ANSI N509 | N | N | | |
| 5. Instrumentation | | | B | NA | 6 | 2 | J | mfg | N | N | | |
| PIPING PENETRATION FILTER EXHAUST SYSTEM | | | | | | | | | | | | |
| 1. Fans | AB-209 | AB-206 | B | NA | 0 | 1 | 5 | AMCA | Y | Y | VIII | |
| 2. Fan motors | AB-209 | AB-206 | B | NA | 1 | 1 | E | NEMA MG1 | Y | Y | VIII | |
| 3. Moisture eliminators | AB-209 | AB-206 | B | NA | 0 | 1 | 5 | ANSI N509 | Y | Y | VIII | |
| 4. Electrical heaters | AB-209 | AB-206 | B | NA | 1 | 1 | E | UL | Y | Y | VIII | |
| 5. Infrared heaters | AB-209 | AB-206 | B | NA | 6 | 2 | E | UL | N | N | | |
| 6. HEPA filters | AB-209 | AB-206 | B | NA | 0 | 1 | 5 | ANSI N509 | Y | Y | VIII | |
| 7. Charcoal filters | AB-209 | AB-206 | B | NA | 0 | 1 | 5 | ANSI N509 | Y | Y | VIII | |
| 8. Dampers | | | B | NA | 0 | 1 | 5 | ANSI N509 | Y | Y | | |
| 9. Damper motors | | | B | NA | 1 | 1 | E | NEMA MG1 | Y | Y | | |
| 10. Ductwork | | | B | NA | 0 | 1 | 5 | ANSI N509 | Y | Y | | |
| 11. Area coolers | AB209 | AB-206 | B | C | 3 | 1 | 3 | III-3 | Y | Y | VIII | |
| 12. Safety-related instrumentation | | | B | NA | 1 | 1 | J | mfg | Y | Y | | Note s |

VEGP-FSAR-3

TABLE 3.2.2-1 (SHEET 74 OF 97)

| Principal System and Components | (a) Location | | (b) Source of Supply | (c) Quality Group | (d) VEGP Safety Class | (e) Seismic Category | (f) Codes and Standards Designator | (g) Principal Construc- tion Code | (h) Q-List | (i) Safety Related | (j) Environ- mental Designator | (k) Comments |
|--|-----------------|---------------|----------------------------|-------------------------|--------------------------------|----------------------------|---|--|---------------|--------------------------|---|-----------------|
| | Unit 1 | Unit 2 | | | | | | | | | | |
| ELECTRICAL PENETRATION FILTER EXHAUST SYSTEM | | | | | | | | | | | | |
| 1. Fans | CB-A60 & A61 | CB-A3 & A6 | B | NA | 0 | 1 | 5 | AMCA | Y | Y | IX | |
| 2. Fan motors | CB-A60 & A61 | CB-A3 & A6 | B | NA | 1 | 1 | E | NEMA MG1 | Y | Y | IX | |
| 3. Moisture eliminators | CB-A60 & A61 | CB-A3 & A6 | B | NA | 0 | 1 | 5 | ANSI N509 | Y | Y | IX | |
| 4. Heaters | CB-A60 & A61 | CB-A3 & A6 | B | NA | 1 | 1 | E | NEMA MG1 | Y | Y | IX | |
| 5. HEPA Filters | CB-A60 & A61 | CB-A3 & A6 | B | NA | 0 | 1 | 5 | ANSI N509 | Y | Y | IX | |
| 6. Charcoal filters | CB-A60 & A61 | CB-A3 & A6 | B | NA | 0 | 1 | 5 | ANSI N509 | Y | Y | IX | |
| 7. Ductwork | | | B | NA | 0 | 1 | 5 | ANSI N509 | Y | Y | | |
| 8. Dampers | | | B | NA | 0 | 1 | 5 | ANSI N509 | Y | Y | | |
| 9. Damper motors | | | B | NA | 1 | 1 | E | NEMA MG1 | Y | Y | | |
| 10. Safety-related instrumentation | | | B | NA | 1 | 1 | J | mfg | Y | Y | | Note s |
| DIESEL GENERATOR BUILDING HVAC SYSTEM | | | | | | | | | | | | |
| 1. ESF exhaust fans | DB | DB | B | NA | 0 | 1 | 5 | AMCA | Y | Y | IV | |
| 2. ESF exhaust fan motors | DB | DB | B | NA | 1 | 1 | E | NEMA MG1 | Y | Y | IV | |
| 3. Non-ESF exhaust fans | DB | DB | B | NA | 6 | 2 | 6 | AMCA | N | N | | |
| 4. Non-ESF exhaust fan motors | DB | DB | B | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 5. Building unit heaters | DB | DB | B | NA | 6 | 2 | E | UL | N | N | | |
| 6. ESF ductwork | | | B | NA | 0 | 1 | 5 | ANSI N509 | Y | Y | | |
| 7. ESF dampers | | | B | NA | 0 | 1 | 5 | ANSI N509 | Y | Y | | |
| 8. Non-ESF ductwork | | | B | NA | 6 | 2 | 6 | SMACNA | N | N | | |
| 9. ESF damper motors | | | B | NA | 1 | 1 | E | NEMA MG1 | Y | Y | | |
| 10. ESF Instru- mentation | | | B | NA | 1 | 1 | J | mfg | Y | Y | | Note s |
| 11. Non-ESF instrumentation | | | B | NA | 6 | 2 | J | mfg | N | N | | |

VEGP-FSAR-3

TABLE 3.2.2-1 (SHEET 75 OF 97)

| Principal System and Components | (a) Location | | (b) Source of Supply | (c) Quality Group | (d) VEGP Safety Class | (e) Seismic Category | (f) Codes and Standards Designator | (g) Principal Construc- tion Code | (h) Q-List | (i) Safety Related | (j) Environ- mental Designator | (k) Comments |
|---|-----------------|---------|----------------------------|-------------------------|--------------------------------|----------------------------|---|--|---------------|--------------------------|---|-----------------|
| | Unit 1 | Unit 2 | | | | | | | | | | |
| TURBINE BUILDING CONDENSER VACUUM EXHAUST FILTRATION SYSTEM | | | | | | | | | | | | |
| 1. HEPA filters | TB-245' | TB-245' | S | NA | 6 | 2 | 6 | ANSI N509 | N | N | | |
| 2. Charcoal filter | TB-245' | TB-245' | S | NA | 6 | 2 | 6 | ANSI N509 | N | N | | |
| 3. Demister | TB-245' | TB-245' | S | NA | 6 | 2 | 6 | ANSI N509 | | | | |
| 4. Heater | TB-245' | TB-245' | S | NA | 6 | 2 | E | UL | N | N | | |
| 5. Piping | | | S | D | 4 | 2 | 4 | VIII | N | N | | |
| 6. Dampers | | | S | NA | 6 | 2 | 6 | ANSI N509 | N | N | | |
| 7. Instrumentation | | | S | NA | 6 | 2 | J | mfg | N | N | | |
| TURBINE BUILDING HVAC SYSTEM | | | | | | | | | | | | |
| 1. Turbine build- ing supply fans | TB-220' | TB-220' | S | NA | 6 | 2 | 6 | AMCA | N | N | | |
| 2. Turbine build- ing supply fan motors | TB-220' | TB-220' | S | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 3. Toilet exhaust fans | TB-220' | TB-220' | S | NA | 6 | 2 | 6 | AMCA | N | N | | |
| 4. Toilet exhaust fan motors | TB-220' | TB-220' | S | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 5. Water analysis A/C fan | TB-220' | TB-220' | S | NA | 6 | 2 | 6 | AMCA | N | N | | |
| 6. Water analysis A/C fan motor | TB-220' | TB-220' | S | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 7. Battery room A/C fan | TB-220' | TB-220' | S | NA | 6 | 2 | 6 | AMCA | N | N | | |
| 8. Battery room A/C fan motor | TB-220' | TB-220' | S | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 9. Switchgear room level 1 A/C fan | TB-220' | TB-220' | S | NA | 6 | 2 | 6 | AMCA | N | N | | |
| 10. Switchgear room level 1 A/C fan motor | TB-220' | TB-220' | S | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 11. Switchgear room level 2 A/C fan | TB-245' | TB-245' | S | NA | 6 | 2 | 6 | AMCA | N | N | | |
| 12. Switchgear room level 2 A/C fan motor | TB-245' | TB-245' | S | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 13. Stairwell exhaust fans | TB-270' | TB-270' | S | NA | 6 | 2 | 6 | AMCA | N | N | | |

VEGP-FSAR-3

TABLE 3.2.2-1 (SHEET 79 OF 97)

| Principal System and Components | (a) Location | | (b) Source of Supply | (c) Quality Group | (d) VEGP Safety Class | (e) Seismic Category | (f) Codes and Standards Designator | (g) Principal Construc- tion Code | (h) Q-List | (i) Safety Related | (j) Environ- mental Designator | (k) Comments |
|--|-----------------|--------|----------------------------|-------------------------|--------------------------------|----------------------------|---|--|---------------|--------------------------|---|-----------------|
| | Unit 1 | Unit 2 | | | | | | | | | | |
| 14. Instrumentation | | | B | NA | 6 | 2 | J | mfg | N | N | | |
| RADWASTE SOLIDIFICATION BUILDING PROCESS AREA HVAC SYSTEM | | | | | | | | | | | | |
| 1. Fans | RSB | shared | B | NA | 6 | 2 | 6 | AMCA | N | N | | |
| 2. Fan motors | RSB | shared | B | NA | 6 | 2 | E | NEMA MGI | N | N | | |
| 3. HEPA filters | RSB | shared | B | NA | 6 | 2 | 6 | ANSI N509 | N | N | | |
| 4. Charcoal filters | RSB | shared | B | NA | 6 | 2 | 6 | ANSI N509 | N | N | | |
| 5. Prefilters | RSB | shared | B | NA | 6 | 2 | 6 | ASHRAE | N | N | | |
| 6. Heaters | RSB | shared | B | NA | 6 | 2 | E | UL | N | N | | |
| 7. Cooling coils | RSB | shared | B | NA | 6 | 2 | 6 | ARI | N | N | | |
| 8. Ductwork | | | B | NA | 6 | 2 | 6 | SMACNA | N | N | | |
| 9. Instrumentation | | | B | NA | 6 | 2 | J | mfg | N | N | | |
| RADWASTE SOLIDIFICATION BUILDING NONCONTAMINATED AREA HVAC SYSTEM | | | | | | | | | | | | |
| 1. Fans | RSB | shared | B | NA | 6 | 2 | 6 | AMCA | N | N | | |
| 2. Fan motors | RSB | shared | B | NA | 6 | 2 | E | NEMA MGI | N | N | | |
| 3. HEPA filters | RSB | shared | B | NA | 6 | 2 | 6 | ANSI N509 | N | N | | |
| 4. Heaters | RSB | shared | B | NA | 6 | 2 | E | UL | N | N | | |
| 5. Cooling coils | RSB | shared | B | NA | 6 | 2 | 6 | ARI | N | N | | |
| 6. Ductwork | | | B | NA | 6 | 2 | 6 | SMACNA | N | N | | |
| 7. Instrumentation | | | B | NA | 6 | 2 | J | mfg | N | N | | |
| RADWASTE SOLIDIFICATION BUILDING SWITCHGEAR/MCC AIR COOLING SYSTEM | | | | | | | | | | | | |
| 1. Fans | RSB | shared | B | NA | 6 | 2 | 6 | AMCA | N | N | | |
| 2. Fan motors | RSB | shared | B | NA | 6 | 2 | E | NEMA MGI | N | N | | |
| 3. Heaters | RSB | shared | B | NA | 6 | 2 | E | UL | N | N | | |
| 4. Ductwork | | | B | NA | 6 | 2 | 6 | SMACNA | N | N | | |
| 5. Instrumentation | | | B | NA | 6 | 2 | J | mfg | N | N | | |
| RADWASTE TRANSFER BUILDING HVAC SYSTEM | | | | | | | | | | | | |
| 1. Fans | RSB | shared | B | NA | 6 | 2 | 6 | AMCA | N | N | | |
| 2. Fan motors | RSB | shared | B | NA | 6 | 2 | E | NEMA MGI | N | N | | |
| 3. Heaters | RSB | shared | B | NA | 6 | 2 | E | UL | N | N | | |
| 4. Reheat coils | RSB | shared | B | NA | 6 | 2 | E | UL | N | N | | |
| 5. Cooling coils | RSB | shared | B | NA | 6 | 2 | 6 | ARI | N | N | | |
| 6. Ductwork | | | B | NA | 6 | 2 | 6 | SMACNA | N | N | | |
| 7. Instrumentation | | | B | NA | 6 | 2 | J | mfg | N | N | | |

VEGP-FSAR-3

TABLE 3.2.2-1 (SHEET 81 OF 97)

| Principal System and Components | (a) Location | | (b) Source of Supply | (c) Quality Group | (d) VEGP Safety Class | (e) Seismic Category | (f) Codes and Standards Designator | (g) Principal Construc- tion Code | (h) Q-List | (i) Safety Related | (j) Environ- mental Designator | (k) Comments |
|---|-----------------|--------|----------------------------|-------------------------|--------------------------------|----------------------------|---|--|---------------|--------------------------|---|-----------------|
| | Unit 1 | Unit 2 | | | | | | | | | | |
| MISCELLANEOUS HVAC SYSTEMS | | | | | | | | | | | | |
| Mechanical components | VB | VB | B | NA | 6 | 2 | 6 | mfg | N | N | | |
| Electrical equipment | VB | VB | B | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| Instrumentation | | | B | NA | 6 | 2 | J | mfg | N | N | | |
| MAIN CONTROL BOARD | | | | | | | | | | | | Notes 1 and 5 |
| PAMS instrumentation | | | W | NA | 1 | 1 | J | mfg | Y | Y | | |
| Hand switches and controls for safety-related equipment | | | W | NA | 1 | 1 | J | mfg | Y | Y | | |
| All other instruments and controls | | | W | NA | 6 | 1 | J | mfg | N | N | | |
| NUCLEAR INSTRUMENTATION SYSTEM | | | | | | | | | | | | |
| All instruments inputting to reactor protection system | | | W | NA | 1 | 1 | J | mfg | Y | Y | | |
| PROCESS CONTROL SYSTEM | | | | | | | | | | | | |
| NSSS safety-related instrumentation and controls | | | W | NA | 1 | 1 | J | mfg | Y | Y | | |
| BOP safety related instrumentation and controls | | | W | NA | 1 | 1 | J | mfg | Y | Y | | |
| PROTECTION SYSTEM NSS | | | | | | | | | | | | |
| Protection instrumentation and controls | | | W | NA | 1 | 1 | J | mfg | Y | Y | | Note 5 |

VEGP-FSAR-3

TABLE 3.2.2-1 (SHEET 83 OF 97)

| Principal System and Components | (a) Location | | (b) Source of Supply | (c) Quality Group | (d) VEGP Safety Class | (e) Seismic Category | (f) Codes and Standards Designator | (g) Principal Construc- tion Code | (h) Q-List | (i) Safety Related | (j) Environ- mental Designator | (k) Comments |
|---|-----------------|--------|----------------------------|-------------------------|--------------------------------|----------------------------|---|--|---------------|--------------------------|---|-----------------|
| | Unit 1 | Unit 2 | | | | | | | | | | |
| POST-ACCIDENT MONITORING SYSTEM | | | | | | | | | | | | |
| 1. Safety-related portions | | | W,B | NA | 1 | 1 | J | mfg | Y | Y | | Note p |
| 2. Nonsafety-related, seismic Category 1 portions | | | W,B | NA | 6 | 1 | J | mfg | N | N | | |
| 3. Other portions | | | W,B | NA | 6 | 2 | J | mfg | N | N | | |
| PLANT AUXILIARY CONTROL BOARDS | | | | | | | | | | | | |
| 1. Safety-related portions | | | W,B | NA | 1 | 1 | J | mfg | Y | Y | | Note s |
| 2. Nonsafety-related portions | | | W,B | NA | 6 | 2 | J | mfg | N | N | | |
| SAFETY-RELATED SYSTEMS BYPASS/INOPERABLE STATUS AND TRIP/MONITORING INDICATING LIGHTS | | | | | | | | | | | | |
| 1. Trip monitoring lights | | | W | NA | 6 | 1 | J | mfg | N | N | | |
| 2. All other portions | | | W,B | NA | 1 | 1 | J | mfg | Y | Y | | |
| INCORE INSTRUMENTATION | | | | | | | | | | | | |
| 1. All portions | | | W | NA | 6 | 1 | J | mfg | N | N | | |
| TURBINE PROTECTION SYSTEM | | | | | | | | | | | | |
| 1. All portions | | | S | NA | 6 | 2 | J | mfg | N | N | | |
| TURBINE SUPERVISORY INSTRUMENTATION | | | | | | | | | | | | |
| 1. All portions | | | S | NA | 6 | 2 | J | mfg | N | N | | |
| ELECTROHYDRAULIC CONTROL SYSTEM | | | | | | | | | | | | |
| 1. EHC panel | | | S | NA | 6 | 1 | J | mfg | N | N | | |
| 2. All other portions | | | S | NA | 6 | 2 | J | mfg | N | N | | |

VEGP-FSAR-3

TABLE 3.2.2-1 (SHEET 88 OF 97)

| Principal System and Components | (a) Location | | (b) Source of Supply | (c) Quality Group | (d) VEGP Safety Class | (e) Seismic Category | (f) Codes and Standards Designator | (g) Principal Construc- tion Code | (h) Q-List | (i) Safety Related | (j) Environ- mental Designator | (k) Comments |
|--|-----------------|--------|----------------------------|-------------------------|--------------------------------|----------------------------|---|--|---------------|--------------------------|---|--|
| | Unit 1 | Unit 2 | | | | | | | | | | |
| ac SYSTEM - 13.8 kV | | | | | | | | | | | | |
| 1. 13.8-kV buses and switchgear | | | B,S | NA | 6 | 2 | E | mfg | N | N | | |
| 2. 13.8-kV RCP 1E breakers | | | B | NA | 1 | 1 | E | mfg | Y | Y | | |
| HIGH VOLTAGE SWITCHYARD | | | | | | | | | | | | |
| 1. All portions | | | S | NA | 6 | 2 | E | mfg | N | N | | |
| STRUCTURES AND BUILDINGS | | | | | | | | | | | | |
| 1. Containment building | | | B | NA | 0 | 1 | C | ASME III, Div. 2, CC-3000 III-MC | Y | Y | | Code id tified design See sec 3.6.1 f details |
| 2. Equipment hatch C and personnel locks | | C | B | NA | 0 | 1 | C | | Y | Y | | |
| 3. Liner plate | C | C | B | NA | 0 | 1 | C | ASME III | Y | Y | | |
| 4. Penetration sleeves assemblies | C | C | B | NA | 0 | 1 | C | Div. 2, CC-3000 | Y | Y | | |
| 5. Fuel transfer tube housing and bellows assembly | C,FB | C,FB | B | NA | 0 | 1 | C | III-MC | Y | Y | | |
| 6. Equipment building | | | B | NA | 6 | 2 | C | AISC-69, ACI 318-71 | N | N | | |
| 7. NSCW cooling towers | | | B | NA | 0 | 1 | C | AISC-69, ACI 318-71 | Y | Y | | |
| 8. Diesel gener- ator building | | | B | NA | 0 | 1 | C | AISC-69, ACI 318-71 | Y | Y | | |
| 9. Auxiliary building | | | B | NA | 0 | 1 | C | AISC-69, ACI 318-71 | Y | Y | | |
| 10. Fuel handling building | | | B | NA | 0 | 1 | C | AISC-69, ACI 318-71 | Y | Y | | |
| 11. Control building | | | B | NA | 0 | 1 | C | AISC-69, ACI 318-71 | Y | Y | | |
| 12. Refueling water storage tank | 0 | 0 | B | NA | 0 | 1 | C | AISC-69, ACI 318-71 | Y | Y | | |
| 13. Condensate storage tank | 0 | 0 | B | NA | 0 | 1 | C | AISC-69, ACI 318-71 | Y | Y | | |

VEGP-FSAR-3

TABLE 3.2.2-1 (SHEET 90 OF 97)

| Principal System and Components | (a) Location | | (b) Source of Supply | (c) Quality Group | (d) VEGP Safety Class | (e) Seismic Category | (f) Codes and Standards Designator | (g) Principal Construc- tion Code | (h) Q-List | (i) Safety Related | (j) Environ- mental Designator | (k) Comments |
|---|-----------------|--------|----------------------------|-------------------------|--------------------------------|----------------------------|---|--|---------------|--------------------------|---|-----------------|
| | Unit 1 | Unit 2 | | | | | | | | | | |
| 29. Turbine gener- ator pedestal | | | S | NA | 6 | 2 | C | AISC-69, ACI 318-71, UBC-76 | N | N | | |
| 30. Storm drain system | | | S | NA | 6 | 2 | C | AISC-69, ACI 318-71, UBC-76 | N | N | | |
| 31. River makeup water piping | | | S | NA | 6 | 2 | C | AISC-69, ACI 318-71, UBC-76 | N | N | | |
| 32. Radwaste solidification building | | | B | NA | 6 | 2 | C | AISC-69, ACI 318-71, UBC-76 | N | N | | |
| 33. NSCW tower valve house | | | B | NA | 0 | 1 | C | AISC-69, ACI 318-71 | N | N | | |
| 34. Radwaste transfer building | | | B | NA | 6 | 2 | C | AISC-69, ACI 318-71, UBC-76 | N | N | | |
| 35. Electrical cable trays and supports | | | B | NA | 0 | 1 | C | AISC-69 | Y | Y | | |
| 36. HVAC duct supports | | | B | NA | 0 | 1 | C | AISC-69 | Y | Y | | |
| 37. Pipe supports | | | | | | | | | | | | Note p |
| 38. Pipe whip restraints | | | W,B | NA | 0 | 1 | C | AISC-69 | Y | Y | | |
| 39. Water tight doors and seals | | | B | NA | 0 | 1 | C | mfg | Y | Y | | |
| 40. Waterproofing and water stops | | | B | NA | 6 | 2 | C | mfg | N | N | | |
| 41. Category 1 backfill | | | B | NA | 0 | 1 | C | mfg | Y | Y | | |
| CONTAINMENT BUILDING POLAR BRIDGE CRANE | | | | | | | | | | | | |
| 1. Mechanical components | C | C | B | NA | 6 | 1 | 6 | mfg | N | N | | Note q |
| 2. Motors | C | C | B | NA | 6 | 2 | E | NEMA MG1 | N | N | | |
| 3. Instrumentation and controls | | | B | NA | 6 | 2 | J | mfg | N | N | | |

VEGP-FSAR-3