**Init**

Q = {boot\_hw, senchk, tchk, psichk, ready}

Σ1 = {hw\_ok, senok, t\_ok, psi\_ok}

Σ2 = {}

q0 : boot\_hw

Ѵ = {}

Λ: Transition specifications

1.

2.

3.

4.

5.

**Lockdown**

Q = {prep\_vpurge, alt\_temp, alt\_psi, risk\_assess, safe\_status}

Σ1 = {initiate\_purge, tcyc\_comp, psicyc\_comp}

Σ2 = {lock\_doors, unlock\_doors}

q0 : prep\_vpurge

Ѵ : risk: percentage

Λ : Transition specifications

1.

2.

3.

4.

5.

6.

7.

8.

**Error\_diagnosis**

Q = {error\_rcv, applicable\_rescue, reset\_module\_data}

Σ1 = {apply\_protocol\_rescues, reset\_to\_stable}

Σ2 = { }

q0 : error\_rcv

Ѵ : err\_protocol\_def: Boolean

Λ : Transition specifications

1.

2.

3.

4.

5.