**Attempt 1:**

Haoyu Debug, CompInfo, unit= BOP

Haoyu Debug, unit= BOP , t= 0.0 , curr= 1500, V1= 1130.8382, delta=-369.16177

Haoyu Debug, unit= BOP , t= 1.0 , curr= 1500, V1= 1130.8382, delta=-369.16177

Haoyu Debug, unit= BOP , t= 2.0 , curr= 1500, V1= 1130.8382, delta=-369.16177

Haoyu Debug, unit= BOP , t= 3.0 , curr= 1500, V1= 1130.8382, delta=-369.16177

Haoyu Debug, unit= BOP , t= 4.0 , curr= 1500, V1= 1130.8382, delta=-369.16177

Haoyu Debug, unit= BOP , t= 5.0 , curr= 1500, V1= 1130.8382, delta=-369.16177

Haoyu Debug, unit= BOP , t= 6.0 , curr= 1500, V1= 1130.8382, delta=-369.16177

Haoyu Debug, unit= BOP , t= 7.0 , curr= 1500, V1= 1130.8382, delta=-369.16177

Haoyu Debug, unit= BOP , t= 8.0 , curr= 1500, V1= 1130.8382, delta=-369.16177

Haoyu Debug, unit= BOP , t= 9.0 , curr= 1500, V1= 1130.8382, delta=-369.16177

Haoyu Debug, unit= BOP , t= 10.0 , curr= 1500, V1= 1130.8382, delta=-369.16177

Haoyu Debug, unit= BOP , t= 11.0 , curr= 1500, V1= 1130.8382, delta=-369.16177

Haoyu Debug, unit= BOP , t= 12.0 , curr= 1500, V1= 1130.8382, delta=-369.16177

Haoyu Debug, unit= BOP , t= 13.0 , curr= 1500, V1= 1130.8382, delta=-369.16177

Haoyu Debug, unit= BOP , t= 14.0 , curr= 1500, V1= 1130.8382, delta=-369.16177

Haoyu Debug, unit= BOP , t= 15.0 , curr= 1500, V1= 1130.8382, delta=-369.16177

Haoyu Debug, unit= BOP , t= 16.0 , curr= 1500, V1= 1130.8382, delta=-369.16177

Haoyu Debug, unit= BOP , t= 17.0 , curr= 1500, V1= 1130.8382, delta=-369.16177

Haoyu Debug, unit= BOP , t= 18.0 , curr= 1500, V1= 1130.8382, delta=-369.16177

Haoyu Debug, unit= BOP , t= 19.0 , curr= 1500, V1= 1130.8382, delta=-369.16177

Haoyu Debug, unit= BOP , t= 20.0 , curr= 1500, V1= 1130.8382, delta=-369.16177

Haoyu Debug, unit= BOP , t= 21.0 , curr= 1500, V1= 1130.8382, delta=-369.16177

Haoyu Debug, unit= BOP , t= 22.0 , curr= 1500, V1= 1130.8382, delta=-369.16177

Haoyu Debug, unit= BOP , t= 23.0 , curr= 1500, V1= 1130.8382, delta=-369.16177

Haoyu Debug, CompInfo, unit= SES

Haoyu Debug, unit= SES , t= 0.0 , curr= 100, V1= 49.996516, delta=-50.003484

Haoyu Debug, unit= SES , t= 1.0 , curr= 100, V1= 49.996516, delta=-50.003484

Haoyu Debug, unit= SES , t= 2.0 , curr= 100, V1= 49.996516, delta=-50.003484

Haoyu Debug, unit= SES , t= 3.0 , curr= 100, V1= 49.996516, delta=-50.003484

Haoyu Debug, unit= SES , t= 4.0 , curr= 100, V1= 49.996516, delta=-50.003484

Haoyu Debug, unit= SES , t= 5.0 , curr= 100, V1= 49.996516, delta=-50.003484

Haoyu Debug, unit= SES , t= 6.0 , curr= 100, V1= 49.996516, delta=-50.003484

Haoyu Debug, unit= SES , t= 7.0 , curr= 100, V1= 49.996516, delta=-50.003484

Haoyu Debug, unit= SES , t= 8.0 , curr= 100, V1= 49.996516, delta=-50.003484

Haoyu Debug, unit= SES , t= 9.0 , curr= 100, V1= 49.996516, delta=-50.003484

Haoyu Debug, unit= SES , t= 10.0 , curr= 100, V1= 49.996516, delta=-50.003484

Haoyu Debug, unit= SES , t= 11.0 , curr= 100, V1= 49.996516, delta=-50.003484

Haoyu Debug, unit= SES , t= 12.0 , curr= 100, V1= 49.996516, delta=-50.003484

Haoyu Debug, unit= SES , t= 13.0 , curr= 100, V1= 49.996516, delta=-50.003484

Haoyu Debug, unit= SES , t= 14.0 , curr= 100, V1= 49.996516, delta=-50.003484

Haoyu Debug, unit= SES , t= 15.0 , curr= 100, V1= 49.996516, delta=-50.003484

Haoyu Debug, unit= SES , t= 16.0 , curr= 100, V1= 49.996516, delta=-50.003484

Haoyu Debug, unit= SES , t= 17.0 , curr= 100, V1= 49.996516, delta=-50.003484

Haoyu Debug, unit= SES , t= 18.0 , curr= 100, V1= 49.996516, delta=-50.003484

Haoyu Debug, unit= SES , t= 19.0 , curr= 100, V1= 49.996516, delta=-50.003484

Haoyu Debug, unit= SES , t= 20.0 , curr= 100, V1= 49.996516, delta=-50.003484

Haoyu Debug, unit= SES , t= 21.0 , curr= 100, V1= 49.996516, delta=-50.003484

Haoyu Debug, unit= SES , t= 22.0 , curr= 100, V1= 49.996516, delta=-50.003484

Haoyu Debug, unit= SES , t= 23.0 , curr= 100, V1= 49.996516, delta=-50.003484

Haoyu Debug, CompInfo, unit= TES

Haoyu Debug, unit= TES , t= 0.0 , curr= 500455, V1= 500455, delta=0

Haoyu Debug, unit= TES , t= 1.0 , curr= 500929.41, V1= 500929.41, delta=0

Haoyu Debug, unit= TES , t= 2.0 , curr= 501421.91, V1= 501001.91, delta=-420.00224

Haoyu Debug, unit= TES , t= 3.0 , curr= 501929.94, V1= 501007.08, delta=-922.86473

Haoyu Debug, unit= TES , t= 4.0 , curr= 502449.89, V1= 501010.75, delta=-1439.1416

Haoyu Debug, unit= TES , t= 5.0 , curr= 502977.33, V1= 501014.12, delta=-1963.2105

Haoyu Debug, unit= TES , t= 6.0 , curr= 503507.33, V1= 501017.48, delta=-2489.8448

Haoyu Debug, unit= TES , t= 7.0 , curr= 504034.77, V1= 501020.85, delta=-3013.9195

Haoyu Debug, unit= TES , t= 8.0 , curr= 504554.72, V1= 501024.21, delta=-3530.5076

Haoyu Debug, unit= TES , t= 9.0 , curr= 505062.75, V1= 501027.58, delta=-4035.1772

Haoyu Debug, unit= TES , t= 10.0 , curr= 505555.25, V1= 501030.94, delta=-4524.3126

Haoyu Debug, unit= TES , t= 11.0 , curr= 506029.66, V1= 501034.3, delta=-4995.3563

Haoyu Debug, unit= TES , t= 12.0 , curr= 506484.66, V1= 501037.67, delta=-5446.9949

Haoyu Debug, unit= TES , t= 13.0 , curr= 506920.25, V1= 501041.03, delta=-5879.2181

Haoyu Debug, unit= TES , t= 14.0 , curr= 507337.75, V1= 501044.4, delta=-6293.3581

Haoyu Debug, unit= TES , t= 15.0 , curr= 507739.72, V1= 501047.76, delta=-6691.964

Haoyu Debug, unit= TES , t= 16.0 , curr= 508129.77, V1= 501051.12, delta=-7078.6477

Haoyu Debug, unit= TES , t= 17.0 , curr= 508512.33, V1= 501054.49, delta=-7457.841

Haoyu Debug, unit= TES , t= 18.0 , curr= 508892.34, V1= 501057.85, delta=-7834.4823

Haoyu Debug, unit= TES , t= 19.0 , curr= 509274.9, V1= 501061.22, delta=-8213.6792

Haoyu Debug, unit= TES , t= 20.0 , curr= 509664.94, V1= 501064.58, delta=-8600.3629

Haoyu Debug, unit= TES , t= 21.0 , curr= 510066.91, V1= 501067.95, delta=-8998.9685

Haoyu Debug, unit= TES , t= 22.0 , curr= 510484.41, V1= 501071.31, delta=-9413.1047

Haoyu Debug, unit= TES , t= 23.0 , curr= 510920.01, V1= 501074.67, delta=-9845.3317

**Attempt 2:**

Haoyu Debug, CompInfo, unit= BOP

Haoyu Debug, unit= BOP , t= 12.0 , curr= 1130.8382, V1= 1130.8382, delta=0

Haoyu Debug, unit= BOP , t= 13.0 , curr= 1130.8382, V1= 1130.8382, delta=-8.6401997e-12

Haoyu Debug, unit= BOP , t= 14.0 , curr= 1130.8382, V1= 1130.8382, delta=0

Haoyu Debug, unit= BOP , t= 15.0 , curr= 1130.8382, V1= 1130.8382, delta=0

Haoyu Debug, CompInfo, unit= SES

Haoyu Debug, unit= SES , t= 12.0 , curr= 49.996516, V1= 49.996516, delta=0

Haoyu Debug, unit= SES , t= 13.0 , curr= 39.091969, V1= 39.091969, delta=0

Haoyu Debug, unit= SES , t= 14.0 , curr= 49.996516, V1= 49.996516, delta=0

Haoyu Debug, unit= SES , t= 15.0 , curr= 49.996516, V1= 49.996516, delta=0

Haoyu Debug, CompInfo, unit= TES

Haoyu Debug, unit= TES , t= 12.0 , curr= 501035.51, V1= 501004.07, delta=-31.439455

Haoyu Debug, unit= TES , t= 13.0 , curr= 501041.03, V1= 501003.33, delta=-37.704012

Haoyu Debug, unit= TES , t= 14.0 , curr= 501039.37, V1= 501002.74, delta=-36.632783

Haoyu Debug, unit= TES , t= 15.0 , curr= 501022.18, V1= 501001.78, delta=-20.394801

DEBUGG ... ... Time 12 (12.0) Component "TES" Resource "electricity": Reference Governor Violation

DEBUGG added validation constraint "TES\_electricity\_12\_vld\_limit\_constr\_2"

DEBUGG ... ... Time 13 (13.0) Component "TES" Resource "electricity": Reference Governor Violation

DEBUGG added validation constraint "TES\_electricity\_13\_vld\_limit\_constr\_2"

DEBUGG ... ... Time 14 (14.0) Component "TES" Resource "electricity": Reference Governor Violation

DEBUGG added validation constraint "TES\_electricity\_14\_vld\_limit\_constr\_2"

DEBUGG ... ... Time 15 (15.0) Component "TES" Resource "electricity": Reference Governor Violation

DEBUGG added validation constraint "TES\_electricity\_15\_vld\_limit\_constr\_2"

**Attempt 3:**

Haoyu Debug, CompInfo, unit= BOP

Haoyu Debug, unit= BOP , t= 12.0 , curr= 1130.8382, V1= 1130.8382, delta=-2.8649083e-11

Haoyu Debug, unit= BOP , t= 13.0 , curr= 1130.8382, V1= 1130.8382, delta=-8.6401997e-12

Haoyu Debug, CompInfo, unit= SES

Haoyu Debug, unit= SES , t= 12.0 , curr= 18.557061, V1= 19.31739, delta=0.76032967

Haoyu Debug, unit= SES , t= 13.0 , curr= 32.827412, V1= 32.827412, delta=0

Haoyu Debug, CompInfo, unit= TES

Haoyu Debug, unit= TES , t= 12.0 , curr= 501004.07, V1= 501003.69, delta=-0.38333333

Haoyu Debug, unit= TES , t= 13.0 , curr= 501003.33, V1= 501002.3, delta=-1.0289043

DEBUGG ... ... Time 12 (12.0) Component "SES" Resource "electricity": Reference Governor Violation

DEBUGG added validation constraint "SES\_electricity\_12\_vld\_limit\_constr\_2"

DEBUGG ... ... Time 12 (12.0) Component "TES" Resource "electricity": Reference Governor Violation

DEBUGG added validation constraint "TES\_electricity\_12\_vld\_limit\_constr\_3"

DEBUGG ... ... Time 13 (13.0) Component "TES" Resource "electricity": Reference Governor Violation

DEBUGG added validation constraint "TES\_electricity\_13\_vld\_limit\_constr\_3"

**Attempt 4:**

Haoyu Debug, CompInfo, unit= BOP

Haoyu Debug, unit= BOP , t= 12.0 , curr= 1130.0779, V1= 1130.0779, delta=0

Haoyu Debug, CompInfo, unit= SES

Haoyu Debug, unit= SES , t= 12.0 , curr= 19.31739, V1= 19.31739, delta=0

Haoyu Debug, CompInfo, unit= TES

Haoyu Debug, unit= TES , t= 12.0 , curr= 501004.07, V1= 501003.69, delta=-0.38333333

DEBUGG ... ... Time 12 (12.0) Component "TES" Resource "electricity": Reference Governor Violation

DEBUGG added validation constraint "TES\_electricity\_12\_vld\_limit\_constr\_4"

**Attempt 5:**

Haoyu Debug, CompInfo, unit= BOP

Haoyu Debug, unit= BOP , t= 12.0 , curr= 1130.0779, V1= 1130.0779, delta=0

Haoyu Debug, CompInfo, unit= SES

Haoyu Debug, unit= SES , t= 12.0 , curr= 19.31739, V1= 19.31739, delta=0

Haoyu Debug, CompInfo, unit= TES

Haoyu Debug, unit= TES , t= 12.0 , curr= 501004.07, V1= 501003.69, delta=-0.38333333

DEBUGG ... ... Time 12 (12.0) Component "TES" Resource "electricity": Reference Governor Violation

DEBUGG added validation constraint "TES\_electricity\_12\_vld\_limit\_constr\_5"

**Attempt 6:**

Haoyu Debug, CompInfo, unit= BOP

Haoyu Debug, unit= BOP , t= 12.0 , curr= 1130.0779, V1= 1130.0779, delta=0

Haoyu Debug, CompInfo, unit= SES

Haoyu Debug, unit= SES , t= 12.0 , curr= 19.31739, V1= 19.31739, delta=0

Haoyu Debug, CompInfo, unit= TES

Haoyu Debug, unit= TES , t= 12.0 , curr= 501004.07, V1= 501003.69, delta=-0.38333333

DEBUGG ... ... Time 12 (12.0) Component "TES" Resource "electricity": Reference Governor Violation

DEBUGG added validation constraint "TES\_electricity\_12\_vld\_limit\_constr\_6"

**Attempt 7:**

Haoyu Debug, CompInfo, unit= BOP

Haoyu Debug, unit= BOP , t= 12.0 , curr= 1130.0779, V1= 1130.0779, delta=0

Haoyu Debug, CompInfo, unit= SES

Haoyu Debug, unit= SES , t= 12.0 , curr= 19.31739, V1= 19.31739, delta=0

Haoyu Debug, CompInfo, unit= TES

Haoyu Debug, unit= TES , t= 12.0 , curr= 501004.07, V1= 501003.69, delta=-0.38333333

DEBUGG ... ... Time 12 (12.0) Component "TES" Resource "electricity": Reference Governor Violation

DEBUGG added validation constraint "TES\_electricity\_12\_vld\_limit\_constr\_7"

**Attempt 8:**

Haoyu Debug, CompInfo, unit= BOP

Haoyu Debug, unit= BOP , t= 12.0 , curr= 1130.0779, V1= 1130.0779, delta=0

Haoyu Debug, CompInfo, unit= SES

Haoyu Debug, unit= SES , t= 12.0 , curr= 19.31739, V1= 19.31739, delta=0

Haoyu Debug, CompInfo, unit= TES

Haoyu Debug, unit= TES , t= 12.0 , curr= 501004.07, V1= 501003.69, delta=-0.38333333

DEBUGG ... ... Time 12 (12.0) Component "TES" Resource "electricity": Reference Governor Violation

DEBUGG added validation constraint "TES\_electricity\_12\_vld\_limit\_constr\_8"

**Attempt 9:**

Haoyu Debug, CompInfo, unit= BOP

Haoyu Debug, unit= BOP , t= 12.0 , curr= 1130.0779, V1= 1130.0779, delta=0

Haoyu Debug, CompInfo, unit= SES

Haoyu Debug, unit= SES , t= 12.0 , curr= 19.31739, V1= 19.31739, delta=0

Haoyu Debug, CompInfo, unit= TES

Haoyu Debug, unit= TES , t= 12.0 , curr= 501004.07, V1= 501003.69, delta=-0.38333333

DEBUGG ... ... Time 12 (12.0) Component "TES" Resource "electricity": Reference Governor Violation

DEBUGG added validation constraint "TES\_electricity\_12\_vld\_limit\_constr\_9"

**Attempt 10:**

Haoyu Debug, CompInfo, unit= BOP

Haoyu Debug, unit= BOP , t= 12.0 , curr= 1130.0779, V1= 1130.0779, delta=0

Haoyu Debug, CompInfo, unit= SES

Haoyu Debug, unit= SES , t= 12.0 , curr= 19.31739, V1= 19.31739, delta=0

Haoyu Debug, CompInfo, unit= TES

Haoyu Debug, unit= TES , t= 12.0 , curr= 501004.07, V1= 501003.69, delta=-0.38333333

DEBUGG ... ... Time 12 (12.0) Component "TES" Resource "electricity": Reference Governor Violation

DEBUGG added validation constraint "TES\_electricity\_12\_vld\_limit\_constr\_10"