#### Presentation to Savannah River Site - Citizens Advisory Board

**Strategic & Legacy Management Committee** 

# **Drought Contingency Plan (DCP)**

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#### Purpose

- Update on drought conditions
- Interaction with other Agencies
- Potential drought impacts
- Contingency actions
- Implementation of Options



### **Drought Conditions**

- The Central Savannah River Area is presently in a 5 year drought when considering both ground and surface water levels.
- Drought conditions are impacting Thurmond Lake levels and subsequent discharges down the Savannah River.



### Interaction with other Agencies

- SRS interacts with the following agencies on a regular basis:
  - South Carolina Drought Response Committee
  - U. S. Corps of Engineers
  - National Oceanic and Atmospheric Administration



#### **Savannah River Watershed**





## Savannah River Below Thurmond Dam



Thurmond Dam



### **Minimal Pool Levels**

- Minimal pool levels could result in reduced flow from Thurmond Lake which would impact our ability to produce steam & electricity.
- Corps of Engineers projects reaching a minimal pool level in Thurmond Lake (elevation 312 msl) by 2012 (Phase 4 drought level triggers full implementation of the Drought Contingency Plan options).



## **Drought Impacts**

- Inability of SRS to perform mission
  - Inability to operate D-Area Powerhouse (5G pumphouse cavitates at river water elevation of 79' msl, 3G at 77' msl)
    - Loss of Steam
    - Loss of onsite electrical generating capacity
- Loss of fire water supply in L-Area
  - Fire water supply is provided by the river water system



### **Drought Impacts**

#### (continued)

- Inability to maintain L Lake and Par Pond levels
  - Low water levels may result in environmental and radiological impacts.
- Loss of blending water for the sanitary waste treatment facilities in K and L-Area.



## **Drought Contingency Actions**

- Low cost / no cost actions
  - Drought Contingency Plan and schedule developed.
  - Contingency Plan to acquire package boilers to maintain steam supply to operating areas has been completed.
  - All electrical needs can be purchased from South Carolina Electric and Gas Company.



### **Drought Contingency Actions**

#### (continued)

- Alternate sources of fire water in L-Area and blending water for sanitary treatment facilities have been addressed.
- Working with regulators to gain agreement on Site actions if L-Lake and / or PAR Pond levels drop.
- River Water Alternatives Study for long-term options completed.



## Implementation of Options

- Why are we not already implementing the options identified?
  - Recent lessening of drought conditions
  - Cost
    - Rough Order of Magnitude estimation for implementing identified options is \$2.6M per month.
      - -Purchase all electricity
      - -Accommodate the loss of river water



#### **Path Forward**

- Continue interaction with other agencies
- Continue to monitor river levels
- Continue to monitor meteorological conditions
- Continue to maintain and update option information

