

V.3.3-RES-SNGL-SPEC-PASSFLOW SINGLE RESERVOIR REGULATION OPERATION
SCHEME PASS INFLOW

Purpose

Scheme PASSFLOW allows the user to pass the reservoir inflow directly as the reservoir discharge.

The pool will be maintained at the same elevation.

Input Summary

No inputs are required in addition to general parameter, carryover and time series information.

Method

See Section II.4-RES-SNGL for additional information.

1. Set the instantaneous discharge at the end of the time interval to the instantaneous inflow at the end of the time interval.
2. Compute mean discharge by averaging the instantaneous discharge at the beginning and the end of the time interval.
3. Compute reservoir storage using the continuity equation.
4. Compute pool elevation from the elevation storage curve.

User Guidelines

The SPILLWAY Scheme can be used together with the PASSFLOW Scheme through the Reservoir Command Language (RCL) specification to accommodate minimum reservoir release requirements or inability of the dam to pass inflow. If the dam cannot pass all possible inflows the reservoir regulation routing Scheme should be used with this Scheme as illustrated in the following example:

```
IF (QT.GT.65000.0.OR.POOL.GT.109.0) THEN DO SPILLWAY
  ELSE DO PASSFLOW
  IF (QO.GT.65000.0.OR.POOL.GT.109.0) THEN DO SPILLWAY
  ENDIF
ENDIF
```

The two IF statements are analyzed as follows:

1. the first IF statement checks the values of instantaneous discharge and pool elevation as they existed at the end of the previous period
2. the second IF statement checks the values of the two quantities as they were computed in the pass inflow (PASSFLOW)

Scheme