V.3.3-RES-SNGL-GENL SINGLE RESERVOIR REGULATION OPERATION GENERAL SECTION

The GENERAL section is used to specify general information for the RES-SNGL Operation.

The following is a list of the section header, section trailer and keywords needed to input GENERAL information:

<u>Item</u>	Purpose
GENERAL	Header to start input of general reservoir information
TITLE	Keyword to provide descriptive information about the Operation
UNITS	Keyword to indicate type of units used for value input
PARMS	Keyword to start input of general parameters
TIME-SERIES	Keyword to start input of general time series information
CARRYOVER	Keyword to start input of general carryover information
ENDGENL	Trailer to end input of general information

The order of the subsection keywords is not critical except for the UNITS keyword. It must be entered before PARMS, TIME-SERIES or CARRYOVER is entered.

Section Header

GENERAL Indicates start of general input

Subsections

Operation Title

Optional 20 character description of Operation definition; default is all blanks

Unit Specification

Units used for input in this definition followed by: [UNITS] or

[METRIC]

ACFT or TIMD are used to indicate units of input for storage contents.

TIMD stands for time-interval-mean discharge.

Default is ENGLISH ACFT.

Units for various dimensions are:

<u>Dimension</u> <u>Metric Unit</u> <u>English Unit</u>

Height M FT Flow CMS CFS

Flow volume CMSD CFSD

Storage CMSD ACFT or TIMD

TIMD is the fractional unit of CFSD depending on the Operation data time interval. For 6 hours the TIMD units are 1/4 CFSD. For 12 hours the TIMD units are 1/2 CFSD.

General Parameter Input

PARMS Keyword indicating start of general parameter input

PARMS keywords

ELVSSTOR Elevation versus storage curve; n values (maximum 250) of

elevation followed by n values (maximum 250) of storage contents; elevations and storage contents must be in ascending order and first elevation must be at the zero

storage capacity level

[INTERP] Curve interpolation flag followed by:

[LINEAR]

or

[LOG]

default is linear interpolation

ENDP Keyword indicating end of general parameter input

General Time Series Input

TIME-SERIES Keyword indicating start of general time-series input

Time Series Subsection Input

INSTQIN Defines instantaneous inflow time series $\frac{1}{2}$

MEANQIN Defines mean inflow time series $\underline{1}/$

MEANQOUT Defines simulated mean outflow time series $\underline{1}/$

[INSTQOUT] Defines optional simulated instantaneous outflow time series

1/

[POOL] Defines optional simulated pool elevation time series $\underline{1}/$

[STORAGE] Defines optional simulated storage contents time series 1/

ENDTS Keyword indicating end of general time series input

- $\underline{1}$ / All keywords are followed by the following three pieces of time-series identifying information:
 - time series identifier
 - data type code
 - time interval of time series

The requirements of each general time series are as follows:

					Data	Missing
					Time	Values
General Type	Dimn	Units	Use	Required	<u>Interval</u>	Allowed
INSTQIN	L3/T	CMS	I	Yes	Any	No
MEANQIN	L3	CMSD	I	Yes	<u>1</u> /	No
MEANQOUT	L3	CMSD	0	Yes	<u>1</u> /	No
INSTQOUT	L3/T	CMS	0	No	<u>2</u> /	No
POOL	L	M	0	No	<u>2</u> /	No
STORAGE	L3	CMSD	0	No	<u>2</u> /	No

- 1/ Time interval must be same as time interval of INSTQIN. This is the computational time interval of the Operation.
- 2/ Time interval must be even multiple of time interval of INSTQIN.

General Carryover Input

<u>C</u>ARRY<u>O</u>VER Keyword indicating start of general carryover input

Carryover Subsection Keywords

INFLOW	Instantaneous inflow at start of run
[Q-MEAN]	Mean discharge for period proceeding start of run $\underline{1}/$
[Q-INST]	Instantaneous discharge at start of run $\underline{1}/$
[POOL0]	Pool elevation one period before start of run $\underline{2}/$
[POOL1]	Pool elevation at start of run $\underline{2}/$
[STORAGE]	Storage contents at start of run $3/$
<u>ENDC</u> O	Keyword indicating end of general carryover input

- $\underline{1}$ / One of either Q-INST or Q-MEAN is required. The other is assigned the value input if it is not entered.
- 2/ One of either POOLO or POOL1 is required. The other is assigned the value input if it is not entered.
- 3/ If STORAGE is not input, it is computed using the POOL1 elevation and the elevation versus storage curve.

Section Trailer

ENDGENL Indicates end of general input