V.3.3-RES-SNGL-SPEC-SETDQ   SINGLE RESERVOIR REGULATION OPERATION
                             SCHEME DAILY RATE OF CHANGE OF RESERVOIR
                             RELEASE

Purpose

Scheme SETDQ allows the user to ramp up reservoir release or to ramp
down reservoir release or to put a limit on the maximum rate of
change of reservoir release through reservoir command language.

Input Summary

   Keyword   Definition and Format

   SETDQ   Input opening keyword for scheme

    PARMS   Parameter opening keyword for scheme

     QVALUE   Prescribed daily rate of change of discharge:
                            o if the daily rate of change of discharge is
                               specified numerically then the format is:
                                 - QVALUE 'value' [INST or MEAN]
                                 - 'value' is real; positive value to
                                   ramp up; negative value to ramp down
                                 - MEAN indicates a mean daily rate of
                                   change of discharge value
                                 - INST indicates an instantaneous daily
                                   rate of change of discharge value
                                 - defaults to INST
                            o if daily rate of change of discharge is
                               specified by a table indicates the daily
                               rate of change of discharge is to be
                               determined from INST/MEAN/POOL
                               (independent) versus INST/MEAN (dependent)
                               table then the format is:
                                 - QVALUE TABL [INST or MEAN]
                                 - INST indicates dependent variables are
                                   instantaneous rate of change of
                                   discharges
                                 - MEAN indicates dependent variables are
                                   mean daily rate of change of
                                   discharges
                                 - defaults to INST

       [TBLTYPE]   Data type of independent variable of table:
                                 - needed only if 'QVALUE TABL' entered
                                 - TBLTYPE [INST or MEAN or POOL]
                                 - INST indicates independent variable is
                                   instantaneous discharge
                                 - MEAN indicates independent variable is
                                   mean discharge
                                 - POOL indicates independent variable is
                                   pool elevation
                                 - defaults to INST

```
   Keyword                 Definition and Format


        [TABLE]            INST/MEAN/POOL (independent variable) versus
                           INST/MEAN (dependent variable) table.
                             - needed only if 'QVALUE TABL' entered
                             - 'j' values of INST/MEAN/POOL followed by
                               'j' values of daily rate of change of
                               INST/MEAN discharge; positive values for
                               ramping up; negative values for ramping
                               down; maximum 50 pairs
                             - independent variables INST/MEAN/POOL must
                               be in ascending order

     ENDPARMS              Parameter ending keyword for scheme

   ENDSETDQ                Input ending keyword for scheme
```

Input Examples

1. Constant daily rate of change of instantaneous discharge (500
   CFS/DAY or 500 CMS/DAY) to ramp down reservoir release:

```
   SETDQ
   PARMS
   QVALUE    -500.0     INST
   ENDP
   ENDSETDQ
```

2. Daily rate of change of mean discharge from pool elevation versus
   daily rate of change of mean discharge (CFS/DAY or CMS/DAY) table
   to ramp up reservoir release:

```
   SETDQ
   PARMS
   QVALUE    TABL   MEAN
   TBLTYPE   POOL
   TABLE      500.0      500.1      520.0      530.0      540.0
               50.0       50.0      200.0      300.0      400.0
   ENDPARM
   ENDSETDQ
```