

CRITICAL RULE CURVE REALIGNMENT PROGRAM

PROGRAM: CRCNEW.EXE

NOTE: This program is only required when the Critical Rule Curve (CRC) data received from the Northwest Power Pool (NWPP) has July as the first value for the CRC's.

INTRODUCTION. The Critical Rule Curve Realignment (CRCNEW) program realigns the Critical Rule Curves (CRC's) for use in the Pacific Northwest Coordination Agreement (PNCA) refill studies. Each year the Northwest Power Pool (NWPP) develops Detailed Operating Plan (DOP) rule curves for the succeeding operating year. These rule curves are the CRC's which are used as input to the PNCA refill studies performed by the Corps using the HYSSR programs.

Before these DOP CRC's can be used in the refill studies they must be converted from NWPP format and units to HYSSR format and units by the COENWPP program. (See the section on the COENWPP program for further information on the NWPP format and units.) The July value for the converted first year CRC (CRC1) is the July 1928 value from the DOP, but the CRC1 values on HYSSR record code 42 need to begin with the first half of August 1928 value and end with the July 1929 value for refill studies. To realign the CRC's, the CRCNEW program is run using the converted CRC's from the DOP as input.

The CRCNEW program ignores the JUL value on record code 42 (CRC1) in the DOP CRC input file. The program takes the JUL value from record code 43 and writes it as the JUL value on record code 42. Then the JUL value from record code 44 is written as the JUL value on record code 43. This process is repeated for record code 44. Finally to fill in the missing values on record code 45 after February (the Critical Period ends in February) the program repeats the FEB value beginning in March and continuing through July. The CRC's are now ready to be used as input to the TDMODS file which will become input to the HYSSR regulator.

INPUT. The Critical Rule Curve Realignment program executes interactively, so the program prompts the user to enter the necessary information. The only input file required is the file containing the DOP CRC's which need to be realigned. A sample of the input is follows:

SAMPLE INPUT :

42	31	JUL	2231.3	AG1	2234.6	AUG	2238.7	SEP	2229.4	OCT	2248.1
42	31	NOV	2259.2	DEC	2253.1	JAN	2238.4	FEB	2227.9	MAR	2329.6
42	31	AP1	2381.5	APR	2383.0	MAY	2737.3	JUN	2935.9		
43	31	JUL	2557.0	AG1	2395.3	AUG	2238.0	SEP	2224.1	OCT	2217.8
43	31	NOV	2195.1	DEC	2230.4	JAN	2212.7	FEB	2317.6	MAR	2506.2
43	31	AP1	2873.4	APR	3083.5	MAY	3168.6	JUN	3111.3		
44	31	JUL	2690.8	AG1	2458.3	AUG	2238.0	SEP	2226.6	OCT	2240.7
44	31	NOV	2271.2	DEC	2269.8	JAN	2293.7	FEB	2329.6	MAR	2558.4
44	31	AP1	2847.4	APR	2850.5	MAY	3142.6	JUN	3026.5		
45	31	JUL	2581.0	AG1	2406.3	AUG	2238.0	SEP	2224.1	OCT	2212.7
45	31	NOV	2216.5	DEC	2221.6	JAN	2227.9	FEB	1886.2		

OUTPUT. The realigned CRC's are placed back into the input file. A sample of the output is found below.

42	31	AG1	2234.6	AUG	2238.7	SEP	2229.4	OCT	2248.1	NOV	2259.2
42	31	DEC	2253.1	JAN	2238.4	FEB	2227.9	MAR	2329.6	AP1	2381.5
42	31	APR	2383.0	MAY	2737.3	JUN	2935.9	JUL	2231.3		
43	31	AG1	2395.3	AUG	2238.0	SEP	2224.1	OCT	2217.8	NOV	2195.1
43	31	DEC	2230.4	JAN	2212.7	FEB	2317.6	MAR	2506.2	AP1	2873.4
43	31	APR	3083.5	MAY	3168.6	JUN	3111.3	JUL	2557.0		
44	31	AG1	2458.3	AUG	2238.0	SEP	2226.6	OCT	2240.7	NOV	2271.2
44	31	DEC	2269.8	JAN	2293.7	FEB	2329.6	MAR	2558.4	AP1	2847.4
44	31	APR	2850.5	MAY	3142.6	JUN	3026.5	JUL	2690.8		
45	31	AG1	2406.3	AUG	2238.0	SEP	2224.1	OCT	2212.7	NOV	2216.5
45	31	DEC	2221.6	JAN	2227.9	FEB	1886.2	MAR	1886.2	AP1	1886.2
45	31	APR	1886.2	MAY	1886.2	JUN	1886.2	JUL	1886.2		

EXECUTION ON THE PC. To execute the Critical Rule Curve Realignment program, have a copy of **CRCNEW.EXE** in the local C:\HYSSR\PGM subdirectory. The program also requires that the Sort program, **SORTEX.EXE**, be available in the local C:\HYSSR\SORT subdirectory. Now type **CRCNEW** while in the C:\HYSSR\PGM subdirectory, and the program will begin execution.