

MAPP Certification of Interruptible Demand

***Peak Load Management
Alliance Conference
April 29, 2005***

Certification of Interruptible Demand

- ***Provides a process for Pool Participants to serve interruptible load without impacting the reserve capacity obligation***
- ***Two types of load groups:***
 - ***Distributed – widely dispersed and not easily metered on a coincidental basis – water heaters, AC, dual-fuel heat, irrigation***
 - ***Bulk – Usually large commercial or industrial loads***

Monetary Benefits

- ***For utilities with distributed systems, perhaps they can purchase from a neighboring utility and continue to serve load (and make money) if the cost of purchased power is less than the sale price of power to their retail customers. This could be especially helpful in winter peaking systems that neighbor summer peaking systems.***
- ***Utilities may also offer a "buy through" type service (for a fee of course) which would allow customers with a large interruptible load an option to "buy through" an interrupt period with their utility purchasing from the market to continue to supply their load.***

Qualification Requirements

- ***Must be capable of being shed by direct control of the System Operator – cannot involve telephone calls or human intervention other than by the System Operator***
- ***Must be capable of being shed within 10 minutes since Product L is immediately cancelable – qualifies as non-spinning operating reserve***
- ***Must provide extended relief over a period of at least four hours***

CID Primary Testing Process

- ***Requires at least one 4-hour test each 30 – day period for distributed***
- ***Requires at least one 4 – hour test each season for bulk***
- ***4-hour test must be completed and reported on Form N-1 prior to purchasing any Product L***
- ***4-hour tests must be completed at or near system peak***

CID Primary Testing Process - 2

- ***Must have a 24-hour test once each season at or near peak conditions to demonstrate total system load can be maintained at or below the target system demand level***
- ***Target system demand level is the intended maximum peak for the period – if 24-hour test fails, it sets new target***

REQUEST FOR PRELIMINARY CERTIFICATION OF INTERRUPTIBLE DEMAND

Send copies of this Form N-1 and supporting documentation via FAX, email, courier, or regular mail to the Secretary of the Accreditation Working Group prior to any purchase of Service Schedule Q, Product L.

System Name: _____

L REQUESTED CERTIFICATION

A. Distributed – Class or Type of Load: _____

1. Period requested (1 to 31 days) from _____ to _____.
2. _____ MW Certification Requested
3. Date of 4-hour test _____
4. _____ 24-hour test has not been performed
5. _____ 24-hour test performed on _____

B. Bulk – Name of Bulk Load Customer: _____

1. Standard certification procedure
 - Period requested (partial or full season) from _____ to _____.
 - _____ MW Certification Requested
 - _____ 24-hour test has not been performed
 - _____ 24-hour test performed on _____
2. Alternate certification procedure as described in GRSP Handbook Section 4.2.4.2.3
 - Period requested (partial or full season) from _____ to _____.
 - _____ MW firm load served at site during interruption
 - _____ MW is the estimated maximum Service Schedule Q, Product L that could be purchased based on this customer's interruptible load. (Actual to be determined after the fact)
 - Date of 4-hour test _____

Note: A 24-hour test is not required for certification under the Alternate Bulk Interruptible Procedures described in GRSP Handbook Section 4.2.4.2.3.

II FROM THE LATEST ESTIMATED MONTHLY LOAD AND CAPABILITY REPORT FOR SEASON COVERING PERIOD(S) IDENTIFIED IN ITEM 1

Year(s): _____

Months or Seasons

1.	Monthly System Demand Plus CID Actually Served (“Metered” load)						
2.	Service Schedule Q, Product L Purchase at Time of Monthly System Demand (Amt. Of Product L purchased in lieu of interruption of CID)						
3.	Monthly System Demand or “Target Demand” (Line 1 minus Line 2)						
15.	Surplus or Deficit (-) Capacity						

Please identify any AWG approved waivers (including date of AWG approval) from specific testing and reporting requirements applicable to this certification request: _____

Requesting System _____ Submitted By _____

Date Submitted _____

MAPPCOR Staff Approval _____

**FOUR AND/OR TWENTY-FOUR HOUR TEST REQUEST
FOR FINAL CERTIFICATION OF INTERRUPTIBLE DEMAND**

Send copies of this Form N-2 and supporting documentation via FAX, electronic mail, courier, or regular mail to the Secretary of the Accreditation Working Group.

NOTE: For certification under the alternative bulk interruptible procedure in Section 4.2.4.2.3:

- 1. The report for the four-hour test does not require data for a comparison day.**
- 2. A 24-hour test is not required.**

System Name: _____

Type of Interruptible Load: ____ Distributed ____ Bulk

Class or Type of Load (if distributed): _____

Name of Bulk Load Customer (if Bulk): _____

(use separate sheet for each type)

Is this report a follow-up to a Preliminary Certification Request (PCR), Form N-1? ____

If "yes", what was the date of submission of the PCR? _____

This certification is expected to be valid for the period _____ to _____.

DATA REQUEST

A. TIME REFERENCE

	TEST DATA, LOAD INTERRUPTED	COMPARISON DATA, LOAD NOT INTERRUPTED
Date		
Day of Week		
Time of Peak		
Hours During Which Load Was Interrupted		Not Interrupted

B. WEATHER CONDITIONS

Average Temperature During Peak Period		
Daily Maximum Temperature		
Daily Minimum Temperature		
Wind Speed (mph) and Direction		
Relative Humidity		

C. WEATHER CONDITIONS ON PRECEDING DAY

	TEST DATA, LOAD INTERRUPTED	COMPARISON DATA, LOAD NOT INTERRUPTED
Average Temperature During Peak Period		
Daily Maximum Temperature		
Daily Minimum Temperature		
Wind Speed (mph) and Direction		
Relative Humidity		

**D. DEMAND DATA - FOUR AND TWENTY-FOUR HOUR PERIOD
CENTERED ON NORMAL PEAK HOUR**

Average MWh for Hour Ending:

(First Hour)		
(Second Hour)		
(Third Hour)		
(Fourth Hour)		

Reduction in Demand MW, Comparison Data Minus Test Data:

(First Hour)		
(Second Hour)		
(Third Hour)		
(Fourth Hour)		

Average for Four-Hour Period _____
 Requested Certification Level _____
 System Target Demand Level _____

E. BULK INTERRUPTIBLE LOADS ONLY

Was the industrial load or other load in this class operating in a similar manner on both the test day and the comparison day? If "no", was the difference reflected in the certification level requested?

F. SUPPORTING INFORMATION - FOUR HOUR TEST

Attach a plot of the portion of the daily load profile for both the test day and the comparison day for the eight-hour period beginning two hours prior to the four-hour control period "window". If the data does not confirm that the load was dropped in 10 minutes, add additional or explanatory information.

G. SUPPORTING INFORMATION - TWENTY-FOUR HOUR TEST

(a 24-hour test and comparison day is not required for interruptible load to be certified under the Bulk Interruptible Procedures described in GRSP Handbook Section 4.2.4.2.3)

Attach a plot of the daily load profile for the entire 24-hour period on both the test day and the comparison day. Notice that detailed hourly demand for a four-hour period centered on the normal peak hour is required in Section D above.

H. NORMALIZED DATA

If normalized data is used for the comparison days of four and 24-hour tests, supporting information or normalizing procedures shall accompany Form N-2.

L. WAIVERS

If any waivers have been granted by the AWG or there are deviations from the testing and reporting requirements, please explain.

Requesting System _____ Submitted By _____

Date Submitted _____

MAPPCOR Staff Approval _____

Testing Waivers

- ***In some situations where a Pool Participant has demonstrated a mature interruptible system, waivers to allow reduced testing can be granted***
 - ***Only one 4-hour test/season for distributed***
 - ***Only a 1-hour test for certain bulk loads that do not vary***
- ***Waiver requests must be submitted with full documentation sufficiently in advance to allow the AWG to give preliminary approval prior to when waiver is needed. Final approval comes after documentation for required testing is in.***

Alternative Bulk Testing Procedure

- ***Meant for variable bulk loads, intent is to determine portion of firm load.***
- ***4-hour test determines the firm load served during control action, rather than determining load shed***
- ***At time of peak, Pool Participant can subtract load above the determined firm load if being served by Product L***
- ***No 24-hour test requirement***
- ***Reporting procedures are the same as before***

Purchasing MAPP Product L

- ***Can only be purchased from a MAPP Member eligible to use Product L tariff***
- ***Can only be purchased when the Pool Participant is at or above its System Target Demand Level***
 - ***The world is not precise – can purchase L if you believe you are at that point, but can only subtract the amount to get you down to System Target Demand Level***
- ***CID above target must be served with L or you cannot subtract it on Form 3***
- ***If no one is willing to sell you Product L, then you either control the load or set a new peak.***

CID Issues

- ***10 minute shed requirement – however, most demand meters are on 15 minute blocks***
 - ***You can take this into consideration when demonstrating the 10-minute requirement, but it must be documented***
- ***Sometimes weather does not cooperate to provide peak or near peak conditions for testing. AWG takes into consideration, but if that is the case then you shouldn't have needed the CID anyway for your proposed target demand level***

Questions?

References:

- MAPP Website <http://www.mapp.org>
- MAPP Restated Agreement
http://www.mapp.org/assets/pdf/MAPP_RESTATED.PDF
- MAPP Generations Reserve Sharing Pool Handbook
http://www.mapp.org/assets/pdf/GRSP_Handbook_20050311.pdf