

APPENDIX C

EVALUATION AND DESIGN OF CONNECTIONS TO NON-TYPICAL DEMANDS

Where necessary, the relevant demand profile / gas use information should be provided under the Business Rules to allow the provision of a practical design solution. Where, at the outset of the design process this information is incomplete, a number of simplifying assumptions may be applied resulting in a sub-optimal design solution and additional assessment as the type and nature of the installation becomes clear.

The information that is required is shown in Tables C.1 and C.2.

Table C.1: Where a non-typical demand profile is identified

The details in this table represent the basis for discussion with the end-user or his representative.

To identify the proposed profile of gas use, it is necessary to understand the time(s) of day and year at which the gas demand is required and if the demand varies from this level at the other key times/conditions of the day and year.				
Please complete the following boxes as is appropriate for the demand.				
Period	Please indicate with a tick the times of the day and year when the peak demand may occur			
	0600-1000	1000-1600	1600-2000	2000-0600
Beginning Oct — end March				
Beginning June — end August				
Other periods of the year				

Table C.2: Where a compressor or booster is identified as being installed

Peak Instantaneous Demand to be compressed and the pressure required:	_____ kW/m ³ /tr		_____ mbar/bar	
Compressor Types (Reciprocating/Fan/Screw/Booster/Other):	_____			
Number of Compressors/Boosters and the Peak Instantaneous Demand to each excluding standby:	No.:		Flow:	Plant 1 _____ kW/m ³ /tr Plant 2 _____ kW/m ³ /tr Plant 3 _____ kW/m ³ /tr
Time taken to achieve full load from start up	Time taken _____ seconds			
Profile provided for non linear start up profile	Y/N/NA			
Number of burners to be installed?				
Will burners be operated in parallel?	Y/N/NA			
Typical burner stages	Start up / Pre-purge	Pilot fire	Low fire	High fire
Flow as % of burner's PID — burner 1				
Minimum time for each stage (s) — burner 1				
Flow as % of burner's PID — burner 2				
Minimum time for each stage (s) — burner 2				
Flow as % of burner's PID — burner 3				
Minimum time for each stage (s) — burner 3				

Where the customer has identified a non-typical demand, it should be assessed using network analysis and, where appropriate, Cadent's design assessment tool 'CompAss' or approved equivalent.

The following description refers to the use of CompAss, but it is assumed that the same principle will be used where an equivalent and approved tool is used.