Load demand: (MW)

[336,280,260,240,270,300,320,428,480,466,448,530.52,511.6,520,514,536,500,460,480,510,530,4 90,520,424]

Time of use price: (k\$/MWh)

[0.3089; 0.3

1.0447;1.0447;1.0447;1.0447;...

 $0.6268; 0.6268; 0.6268; 0.6268; 0.6268; \dots$

1.0447;1.0447;1.0447;1.0447;...

0.3089;0.3089;0.3089]

Maximum power of wind farms: (MW)

Group1: 43.5000 44.5000 42.5000 45.0000 Group2: 45.5000 40.0000 40.0000 43.0000 Group3: 45.0000 50.0000 41.0000 42.5000

c and κ are scale and shape factors of the Weibull PDF

С

= [18.040, 15.070, 15.400, 16.040, 16.13, 13.79, 14.76, 13.53, 13.01, 12.160, 14.44, 13.91, 12.76, 13.52, 14.48, 14.47, 12.62, 13.95, 14.59, 14.26, 15.89, 17.64, 18.55, 15.26;

16.13,13.79,14.76,13.53,13.01,12.160,14.44,18.040,15.070,15.4,13.95,14.59,14.26,15.89,17.64,18 .55,15.26,16.040,13.91,12.76,13.52,14.48,14.47,12.62;

15.26,16.040,13.91,12.76,13.52,14.48,14.47,13.53,13.01,12.160,14.44,18.040,15.070,15.4,13.95,1 4.59,14.26,15.89,17.64,16.13,13.79,14.76,18.55,12.62;

13.53,13.01,12.160,14.44,14.47,15.4,13.95,14.59,14.26,15.89,17.64,16.13,13.79,14.76,18.55,12.6 2,18.040,15.070,15.26,16.040,13.91,12.76,13.52,14.48;

18.040,15.070,15.400,16.040,16.13,13.79,14.76,13.53,13.01,12.160,14.44,13.91,12.76,13.52,14.4 8,14.47,12.62,13.95,14.59,14.26,15.89,17.64,18.55,15.26;

 $16.13,13.79,14.76,13.53,13.01,12.160,14.44,18.040,15.070,15.4,13.95,14.59,14.26,15.89,17.64,18\\.55,15.26,16.040,13.91,12.76,13.52,14.48,14.47,12.62;$

15.26,16.040,13.91,12.76,13.52,14.48,14.47,13.53,13.01,12.160,14.44,18.040,15.070,15.4,13.95,1 4.59,14.26,15.89,17.64,16.13,13.79,14.76,18.55,12.62;

13.53,13.01,12.160,14.44,14.47,15.4,13.95,14.59,14.26,15.89,17.64,16.13,13.79,14.76,18.55,12.6 2,18.040,15.070,15.26,16.040,13.91,12.76,13.52,14.48;

18.040,15.070,15.400,16.040,16.13,13.79,14.76,13.53,13.01,12.160,14.44,13.91,12.76,13.52,14.48,14.47,12.62,13.95,14.59,14.26,15.89,17.64,18.55,15.26;

16.13,13.79,14.76,13.53,13.01,12.160,14.44,18.040,15.070,15.4,13.95,14.59,14.26,15.89,17.64,18 .55,15.26,16.040,13.91,12.76,13.52,14.48,14.47,12.62;

15.26,16.040,13.91,12.76,13.52,14.48,14.47,13.53,13.01,12.160,14.44,18.040,15.070,15.4,13.95,1 4.59,14.26,15.89,17.64,16.13,13.79,14.76,18.55,12.62;

13.53,13.01,12.160,14.44,14.47,15.4,13.95,14.59,14.26,15.89,17.64,16.13,13.79,14.76,18.55,12.6 2,18.040,15.070,15.26,16.040,13.91,12.76,13.52,14.48];

κ=

[9.54, 9.50, 9.45, 9.59, 9.58, 9.51, 9.36, 9.59, 9.43, 9.42, 8.33, 8.68, 9.57, 8.88, 9.32, 9.41, 9.31, 9.54, 9.50, 9.56, 9.50, 9.62, 9.52, 9.31;

9.59,9.43,9.42,9.31,9.54,9.50,9.56,9.50,9.36,9.62,9.52,9.31,8.33,8.68,9.57,8.88,9.32,9.41,9.54,9.5 0,9.45,9.59,9.58,9.51;

9.54,9.54,9.50,9.56,9.50,9.62,9.52,9.31,9.50,9.45,9.59,9.58,9.51,9.36,9.59,9.43,9.42,8.33,8.68,9.5 7,8.88,9.32,9.41,9.31;

8.33,8.68,9.57,8.88,9.32,9.41,9.31,9.54,9.54,9.50,9.56,9.50,9.62,9.52,9.31,9.50,9.45,9.59,9.58,9.5 1,9.36,9.59,9.43,9.42;

9.54,9.50,9.45,9.59,9.58,9.51,9.36,9.59,9.43,9.42,8.33,8.68,9.57,8.88,9.32,9.41,9.31,9.54,9.50,9.5 6,9.50,9.62,9.52,9.31;

9.59,9.43,9.42,9.31,9.54,9.50,9.56,9.50,9.36,9.62,9.52,9.31,8.33,8.68,9.57,8.88,9.32,9.41,9.54,9.5 0,9.45,9.59,9.58,9.51;

9.54,9.54,9.50,9.56,9.50,9.62,9.52,9.31,9.50,9.45,9.59,9.58,9.51,9.36,9.59,9.43,9.42,8.33,8.68,9.5 7,8.88,9.32,9.41,9.31;

8.33,8.68,9.57,8.88,9.32,9.41,9.31,9.54,9.54,9.50,9.56,9.50,9.62,9.52,9.31,9.50,9.45,9.59,9.58,9.5 1,9.36,9.59,9.43,9.42;

9.54,9.50,9.45,9.59,9.58,9.51,9.36,9.59,9.43,9.42,8.33,8.68,9.57,8.88,9.32,9.41,9.31,9.54,9.50,9.5 6,9.50,9.62,9.52,9.31;

9.59,9.43,9.42,9.31,9.54,9.50,9.56,9.50,9.36,9.62,9.52,9.31,8.33,8.68,9.57,8.88,9.32,9.41,9.54,9.5 0,9.45,9.59,9.58,9.51;

9.54,9.54,9.50,9.56,9.50,9.62,9.52,9.31,9.50,9.45,9.59,9.58,9.51,9.36,9.59,9.43,9.42,8.33,8.68,9.5 7,8.88,9.32,9.41,9.31;

8.33,8.68,9.57,8.88,9.32,9.41,9.31,9.54,9.50,9.56,9.50,9.62,9.52,9.31,9.50,9.45,9.59,9.58,9.5 1,9.36,9.59,9.43,9.42];