

DCP 227 CDCM model r6837

by Franck Latrémolière on Friday 3 July 2015

1. This document describes a CDCM tariff model produced to implement a specification issued by the DCP 227 working group on 16 March 2015.
1. The reference version is a model implementing DCP 161 and all implemented changes up to and including DCP 179.

Structural changes

2. The changes are confined to the Multi sheet.

Additional or modified input data

3. There are no changes to input data.

Additional or modified outputs

4. There are no changes to the structure of outputs.

New or modified calculation tables

5. All the changes are in the Multi sheet, which contains tables numbered between 2401 and 2462.
6. Tables 2401–2417 are as in the reference version (subject to some reordering and renumbering: 2415–2417 have moved to 2412–2414 and 2412–2413 have moved to 2415–2416).
7. Table 2418 “Single rate non half hourly tariff pseudo load coefficient” is new. It calculates the load coefficients (after coincidence factor correction and before DCP 179 equalisation) that now apply to the Domestic Unrestricted and Small Non Domestic Unrestricted tariffs instead of the coincidence factor to load factor ratio.
8. Tables 2419–2430 are as in the reference version (subject to some reordering and renumbering: 2414 has moved to 2419, 2418–2428 have moved to 2420–2430).
9. Table 2431 “Average non half hourly tariff pseudo load coefficient” is similar to table 2429 in the reference version, but linking to table 2418 “Single rate non half hourly tariff pseudo load coefficient” instead of table 2412 “Single rate non half hourly tariff load coefficient”.
10. Tables 2432–2434 are as in the reference version (subject to some reordering and renumbering: they were 2431–2433).
11. Table 2435 “Correction factor for non half hourly tariffs” is similar to table 2434 in the reference version, but linking to table 2418 “Single rate non half hourly tariff pseudo load coefficient” instead of table 2412 “Single rate non half hourly tariff load coefficient”.

12. Tables 2436–2462 are as in the reference version (subject to some reordering and renumbering: they were 2435–2461).
13. Table 1 provides a mapping between the tables in the Multi sheet in the DCP 227 model, the tables in the Multi sheet of the reference model, and the tables in the Multi sheet on the model published by the DCUSA Panel to set charges for 2015/2016. The differences between the DCUSA Panel’s model and the reference model are the implementation of DCP 161 (which has no impact on the Multi sheet) and variations in table ordering and numbering which arose from a change in methods that we use to generate these workbooks.

Table 1 Mapping of tables on the “Multi” sheet between models

Table in the DCP 227 model	Reference model	Panel model
2401. Adjust annual hours by distribution time band to match days in year	2401	2401
2402. Normalisation of split of rate 1 units by time band	2402	2402
2403. Split of rate 1 units between distribution time bands	2403	2403
2404. Normalisation of split of rate 2 units by time band	2404	2404
2405. Split of rate 2 units between distribution time bands	2405	2405
2406. Split of rate 3 units between distribution time bands (default)	2406	2406
2407. All units (MWh)	2407	2407
2408. Calculation of implied load coefficients for one-rate users	2408	2408
2409. Calculation of implied load coefficients for two-rate users	2409	2409
2410. Calculation of implied load coefficients for three-rate users	2410	2410
2411. Calculation of adjusted time band load coefficients	2411	2411
2412. Normalisation of peaking probabilities	2415	2412
2413. Peaking probabilities by network level (reshaped)	2416	2413
2414. Pseudo load coefficient by time band and network level	2417	2414

Table in the DCP 227 model	Reference model	Panel model
2415. Single rate non half hourly pseudo timeband load coefficients	2412	2426
2416. Single rate non half hourly units (MWh)	2413	2420
2417. Single rate non half hourly timeband use	2430	2419
2418. Single rate non half hourly tariff pseudo load coefficient	N/A	N/A
2419. Multi rate non half hourly units (MWh)	2414	2418
2420. Multi rate non half hourly pseudo timeband load coefficients	2418	2427
2421. Multi rate non half hourly timeband use	2419	2421
2422. Multi rate non half hourly tariff pseudo load coefficient	2420	2428
2423. Off-peak non half hourly units (MWh)	2421	2416
2424. Off-peak non half hourly pseudo timeband load coefficients	2422	2424
2425. Off-peak non half hourly timeband use	2423	2417
2426. Off-peak non half hourly tariff pseudo load coefficient	2424	2425
2427. Aggregated half hourly units (MWh)	2425	2431
2428. Aggregated half hourly pseudo timeband load coefficients	2426	2415
2429. Aggregated half hourly timeband use	2427	2432
2430. Aggregated half hourly tariff pseudo load coefficient	2428	2433
2431. Average non half hourly tariff pseudo load coefficient	2429	2429
2432. Average non half hourly timeband use	2431	2422
2433. Aggregated half hourly tariff pseudo load coefficient using average non half hourly unit mix	2432	2423
2434. Relative correction factor for aggregated half hourly tariff	2433	2430

Table in the DCP 227 model	Reference model	Panel model
2435. Correction factor for non half hourly tariffs	2434	2434
2436. Single rate non half hourly corrected pseudo timeband load coefficient	2435	2435
2437. Multi rate non half hourly corrected pseudo timeband load coefficient	2436	2436
2438. Off-peak non half hourly corrected pseudo timeband load coefficient	2437	2437
2439. Aggregated half hourly corrected pseudo timeband load coefficient	2438	2438
2440. Pseudo load coefficient by time band and network level (equalised)	2439	2439
2441. Unit rate 1 pseudo load coefficient by network level	2440	2440
2442. Unit rate 2 pseudo load coefficient by network level	2441	2441
2443. Unit rate 3 pseudo load coefficient by network level	2442	2442
2444. Adjust annual hours by special distribution time band to match days in year	2443	2443
2445. Normalisation of split of rate 1 units by special time band	2444	2444
2446. Split of rate 1 units between special distribution time bands	2445	2445
2447. Split of rate 2 units between special distribution time bands (default)	2446	2446
2448. Split of rate 3 units between special distribution time bands (default)	2447	2447
2449. Calculation of implied special load coefficients for one-rate users	2448	2448
2450. Calculation of implied special load coefficients for three-rate users	2449	2449
2451. Estimated contributions to peak demand	2450	2450
2452. Load coefficient correction factor for the group	2451	2451

Table in the DCP 227 model	Reference model	Panel model
2453. Calculation of special peaking probabilities	2452	2452
2454. Special peaking probabilities by network level	2453	2453
2455. Special peaking probabilities by network level (reshaped)	2454	2454
2456. Pseudo load coefficient by time band and network level	2455	2455
2457. Unit rate 1 pseudo load coefficient by network level (special)	2456	2456
2458. Unit rate 2 pseudo load coefficient by network level (special)	2457	2457
2459. Unit rate 3 pseudo load coefficient by network level (special)	2458	2458
2460. Unit rate 1 pseudo load coefficient by network level (combined)	2459	2459
2461. Unit rate 2 pseudo load coefficient by network level (combined)	2460	2460
2462. Unit rate 3 pseudo load coefficient by network level (combined)	2461	2461

Other changes

14. A few cosmetic issues have been addressed. In particular, error messages (e.g. #VALUE!) now show up in a distinctive colour.

Impact statement

15. The impact statement has been prepared in accordance with the requirements set down by the working group. The data sources for allowed revenue are the Annual Review Packs downloaded from dcusa.co.uk (not the DCP 066A templates). Where the working group did not specify a data source (e.g. transmission exit charges), the data have been set to the same value as in the DNOs' February 2015 models.