

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.