

**UNIFORM NETWORK CODE – OFFTAKE ARRANGEMENTS DOCUMENT**

**SECTION I**

**NTS OPERATIONAL FLOWS**

**1 General**

**1.1 Introduction**

1.1.1 This Section I sets out:

- (a) requirements (for the purposes of TPD Section J4) as to the submission of Offtake Profile Notices in relation to NTS/LDZ Offtakes;
- (b) certain other details required in relation to NTS/LDZ Offtakes for the purposes of TPD Section J4;
- (c) provisions as to pressure at NTS/LDZ Offtakes;
- (d) other operational provisions relating LDZs and NTS/LDZ Offtakes.

**1.2 Interpretation**

1.2.1 In this Section I:

- (a) references to Offtakes are to NTS/LDZ Offtakes;
- (b) a reference (in relation to an LDZ or NTS/LDZ Offtake(s) serving an LDZ) to the aggregate offtake or rate of offtake is a reference to the aggregate, for all NTS/LDZ Offtakes serving the LDZ, of the offtakes or rates of offtake.

**2 Offtake Profile Notices**

**2.1 General requirements**

2.1.1 Offtake Profile Notices are to be submitted (in accordance with TPD Section J4.5) by the downstream DNO each Day in respect of each Offtake.

2.1.2 Offtake Profile Notices are to be submitted in the format and units and by the means provided in or pursuant to Section M.

2.1.3 Where so provided pursuant to Section M, Offtake Profile Notices:

- (a) may specify rates of volume flow (in MCM/day), together with a calorific value, in which case the applicable rates of offtake shall (for all purposes of the Code) be determined by multiplying such volume flow rate by the specified calorific value;
- (b) may specify quantities (in GWh) or volumes (in MCM) for an hour of the clock, in which case the rate of volume flow or rates of offtake (applicable as at all times within the relevant hour of the clock) shall be determined by dividing the specified quantity or volume by one hour;
- (c) may be provided in a single notice for all Offtakes serving one LDZ, specifying (in addition to rates of offtake for each Offtake) the aggregate rate of offtake.

2.1.4 The rate of offtake set out in an Offtake Profile Notice shall be constant within each hour of the clock.

2.1.5 The rates of offtake set out in Offtake Profile Notices (including any revisions thereof) shall:

- (a) reflect as accurately as reasonably practicable (but without prejudice to the further provisions of this paragraph 2) the quantities in which and rates and times at which the DNO intends or expects (at the time it submits the Offtake Profile Notice) to cause or permit gas to flow at each Offtake;
- (b) without prejudice to paragraph (a), on an aggregate basis for an LDZ, be consistent (after taking account of planned LDZ stock changes and flows at LDZ/LDZ Offtakes) with the forecast LDZ demand in the prevailing demand forecast issued by the downstream DNO pursuant to TPD Section H5 or paragraph 6.1; and
- (c) be consistent with the requirement in paragraph 6.3.1.

## 2.2 Initial Offtake Profile Notice

- 2.2.1 For the purposes of TPD Section J4.5.1, the time by which the Offtake Profile Notice for a Day is to be submitted to National Grid NTS is 18:00 hours on the Preceding Day.
- 2.2.2 If the DNO fails to submit an Offtake Profile Notice for a Day by the time required under paragraph 2.2.1, it shall be deemed to have submitted an Offtake Profile Notice which is the same as the Offtake Profile Notice for the Preceding Day prevailing at that time.

## 2.3 Revisions to Offtake Profile Notices

- 2.3.1 Subject to the provisions of this paragraph 2, a DNO may revise the prevailing Offtake Profile Notice (in relation to an Offtake) for any Day, as to the rate of offtake as at any time ( $T_{RO}$ ), by submitting a revised Offtake Profile Notice at a time ( $T_{OPN}$ ):
  - (a) in the case of an increase in rate of offtake:
    - (i) if the applicable flow rate change is not less than 50% of the Maximum Flat Offtake Rate, not later than 4 hours before time  $T_{RO}$ ;
    - (ii) if the applicable flow rate change is less than 50% but not less than 25% of the Maximum Flat Offtake Rate, not later than 2 hours before time  $T_{RO}$ ;
    - (iii) if the applicable flow rate change is less than 25% of the Maximum Flat Offtake Rate, not later than 1 hour before time  $T_{RO}$ ; and
  - (b) in the case of a decrease in rate of offtake, not later than 1 hour before time  $T_{RO}$ .
- 2.3.2 For the purposes of this paragraph 2.3:
  - (a) the "**Maximum Flat Offtake Rate**" in respect of an Offtake is a rate calculated as 1/24th of the DNO's NTS Offtake (Flat) Capacity;
  - (b) in relation to any revised Offtake Profile Notice(s), in relation to any time ( $T_{RO}$ ) on the Gas Flow Day, the applicable flow rate change is the magnitude of the difference between:
    - (i) the rate of offtake (as at time  $T_{RO}$ ) under the relevant Offtake Profile Notice; and
    - (ii) the rate of offtake (as at time  $T_{RO}$ ) under the revised Offtake Profile Notice;
 expressed as a percentage of the Maximum Flat Offtake Rate;
  - (c) for the purposes of paragraph (b), the "**relevant**" Offtake Profile Notice is:
    - (i) the prevailing Offtake Profile Notice(s); or

- (ii) in relation to any Offtake in relation to which there are two or more connected Offtake Profile Notices, the earliest-submitted of such connected Offtake Profile Notices;

where two Offtake Profile Notices are connected if under the earlier-submitted notice any change in rate of offtake occurs at a time  $T_{RO}$  which is later than the latest time  $T_{OPN}$  at which the later-submitted notice was required (in accordance with paragraph 2.3.1) to be submitted.

2.3.3 Where, pursuant to one or more revised Offtake Profile Notice(s) submitted by a DNO in relation to the Offtake(s) serving one LDZ, there is at any time ( $T_{RO}$ ) a change in the aggregate rate of offtake:

- (a) the time ( $T_{OPN}$ ) at which such revised Offtake Profile Notice(s) are submitted shall not be less than two hours before time  $T_{RO}$ ; and
- (b) the aggregate flow rate change, for any time ( $T_{RO}$ ) of the Day, pursuant to revised Offtake Profile Notices submitted within any one hour ( $H_{OPN}$ ) of the clock, shall not exceed 5%.

2.3.4 For the purposes of paragraph 2.3.3(b), in relation to any hour ( $H_{OPN}$ ), the aggregate flow rate change at any time ( $T_{RO}$ ) is the magnitude of difference between:

- (a) the aggregate rate of offtake at time  $T_{RO}$  pursuant to the Offtake Profile Notices prevailing at the start of hour  $H_{OPN}$ ; and
- (b) the aggregate rate of offtake at time  $T_{RO}$  pursuant to the Offtake Profile Notices prevailing (pursuant to any revisions thereof within hour  $H_{OPN}$ ) at the end of hour  $H_{OPN}$ ;

expressed as a percentage of the aggregate rate of offtake at time  $T_{RO}$  pursuant to the Offtake Profile Notices prevailing at the start of hour  $H_{OPN}$ .

2.3.5 The DNO may not submit a revised Offtake Profile Notice in relation to any Offtake:

- (a) more frequently than once in each hour of the clock;
- (b) so as to change the rate of offtake other than with effect from an exact hour of the clock; or
- (c) later than 04:00 hours on the Gas Flow Day.

## **2.4 Revisions requested by National Grid NTS**

2.4.1 National Grid NTS may at any time request a DNO to submit revised Offtake Profile Notices for two or more Offtakes for an LDZ, subject to and in accordance with this paragraph 2.4.

2.4.2 National Grid NTS' request shall specify:

- (a) the Offtakes in respect of which such revision is requested;
- (b) the times with effect from which the DNO is requested to revise the relevant rates of offtake; and
- (c) the revised rates of offtake requested.

2.4.3 Any request by National Grid NTS for the revision of any Offtake Profile Notices shall satisfy the requirement that, for all times in the Day, the aggregate, in respect of all Offtakes (serving the same LDZ) for which such request is made, of the revised rates of offtake requested is the same as the aggregate rates of offtake under the prevailing Offtake Profile Notices at the time the request is made.

2.4.4 To the extent to which the revision by the DNO of any Offtake Profile Notice(s) in compliance with National Grid NTS' request would infringe any of the requirements of this paragraph 2 or TPD Section J4.5.2, National Grid NTS shall be deemed to have waived such other requirements (on the assumption

that the DNO submits such revised Offtake Profile Notice(s) within 15 minutes after National Grid NTS' request is made).

- 2.4.5 The DNO shall comply with National Grid NTS' request unless in the DNO's reasonable opinion the safe and efficient operation of the LDZ (consistent with the DNO's obligations to Users under the Transportation Principal Document) would be materially prejudiced by the flow of gas at the relevant Offtakes on the basis of the requested revisions, in which case the DNO shall:
- (a) contact and inform National Grid NTS of the position as soon as possible following receipt of National Grid NTS' request; and
  - (b) cooperate with National Grid NTS and use all reasonable endeavours to agree upon alternative revisions to Offtake Profile Notices.

## **2.5 Revisions requested by DNOs**

- 2.5.1 A DNO may request, where it believes it necessary for the purposes of ensuring the safe and efficient operation of its System, that it be permitted to submit revised Offtake Profile Notices for two or more Offtakes for an LDZ, subject to and in accordance with this paragraph 2.5.
- 2.5.2 A DNO's request shall specify:
- (a) the operational circumstances giving rise to the DNO's request;
  - (b) the Offtakes and LDZ in respect of which such revision is requested
  - (c) the times with effect from which the DNO wishes to revise the relevant rates of offtake; and
  - (d) the revised rates of offtake requested.
- 2.5.3 Any request by a DNO for the revision of any Offtake Profile Notices shall satisfy the requirement that, for all times in the Day, the aggregate, in respect of all Offtakes (serving the same NTS Exit Zone) for which such request is made, of the revised rates of offtake requested is the same as the aggregate rates of offtake under the prevailing Offtake Profile Notices at the time the request is made.
- 2.5.4 To the extent to which the revision requested by the DNO of any Offtake Profile Notice(s) would infringe any of the requirements of this paragraph 2 or TPD Section J4.5.2, National Grid NTS shall be deemed to have waived such other requirements (on the assumption that the DNO submits such revised Offtake Profile Notice(s) within 15 minutes after the DNO's request is made).
- 2.5.5 National Grid NTS shall comply with the DNO's request unless in National Grid NTS's reasonable opinion the safe and efficient operation of the NTS (consistent with National Grid NTS's obligations to Users under the Transportation Principal Document) would be materially prejudiced by the flow of gas at the relevant Offtakes on the basis of the requested revisions, in which case National Grid NTS shall:
- (a) contact and inform the DNO of the position as soon as possible following receipt of the DNO's request; and
  - (b) cooperate with the DNO and use all reasonable endeavours to agree upon alternative revisions to Offtake Profile Notices.

## **2.6 Low Demand Days**

- 2.6.1 Where, in relation to any LDZ, LDZ demand for any Day is forecast (in the first LDZ demand forecast on the Preceding Day pursuant to TPD Section H5) to be less than 50% of 1-in-20 peak day demand, National Grid NTS may, by giving notice to the DNO not later than 17:00 hours on the Preceding Day, require that paragraph 2.6.2 shall apply, subject to paragraph 2.6.3.
- 2.6.2 Where this paragraph applies, irrespective of the amount (if any) of NTS Exit (Flexibility) Capacity held by the DNO at any Offtake:

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- (a) the DNO shall operate the LDZ and each Offtake such that, subject to the restrictions in paragraph 2.3 on revisions of Offtake Profile Notices, for any given level of LDZ demand, the EFQ (determined in accordance with TPD Section B3.13.5) for such Day in respect of all the Offtakes for that LDZ in aggregate is not greater than zero;
  - (b) in accordance with paragraph (a):
    - (i) after the DNO has submitted its initial Offtake Profile Notices, a revision of such Offtake Profile Notices under which the aggregate (for all Offtakes serving the LDZ) of the rates of offtake is revised, shall only be made to reflect changes in forecast LDZ demand; and
    - (ii) subject to the requirements of paragraph 4, the Offtake Profile Notice(s) for all Offtakes serving the LDZ, or revision of such Offtake Profile Notice(s), submitted by the DNO shall, specify a single aggregate rate of offtake:
      - (1) in the case of the initial Offtake Profile Notice(s), for the whole of the Day; and
      - (2) in the case of any revised Offtake Profile Notice(s), with effect from the time from which the rate of offtake is revised, for the remainder of the Day.
- 2.6.3 Where, in relation to any Day for which National Grid NTS gives a notice under paragraph 2.6.1, compliance with paragraph 2.6.2 would (in the reasonable opinion of the DNO) significantly prejudice security of supply or the safe operation of the LDZ:
- (a) the DNO shall so notify National Grid NTS promptly upon receipt of National Grid NTS' notice;
  - (b) paragraph 2.6.2 shall not apply, but the DNO and National Grid NTS will cooperate with a view to agreeing on limits on the variation of rates of offtake within the Day, and the DNO's Offtake Profile Notices shall comply with the limits so agreed.

## **2.7 Variation of restrictions**

- 2.7.1 The requirements and restrictions in this paragraph 2 in relation to Offtake Profile Notices (and revisions thereof) shall not apply to the extent that (subject to and in accordance with TPD Section J4.5.5, where applicable) National Grid NTS waives or agrees to vary any such requirement or restriction in a particular case.

## **3 Further provisions of TPD Section J**

### **3.1 Offtake tolerances**

- 3.1.1 This paragraph 3.1 sets out the tolerances referred to in TPD Section J4.6.2.
- 3.1.2 For the purposes of TPD Section J4.6.2(a), the tolerance, in respect of the offtake of gas at an Offtake, is 10% of the Prevailing Offtake Rate.
- 3.1.3 For the purposes of TPD Section J4.6.2(b), the tolerance, in respect of the offtake of gas in aggregate at all of the Offtakes which serve an LDZ, is 3% of the aggregate of the Prevailing Offtake Rates.

### **3.2 Maximum rate of change**

- 3.2.1 For the purposes of TPD Section J4.7.1, the maximum rate of change in respect of an Offtake is the rate (if any) set out in the applicable Supplemental Agreement.

## 4 Pressure

### 4.1 General

4.1.1 For the purposes of this Section I, in relation to an Offtake:

- (a) **"Assured 0600 Pressure"** and **"Assured 2200 Pressure"** mean the 0600 pressure and the 2200 pressure respectively comprised in the Assured Offtake Pressure in accordance with TPD Section J2.5;
- (b) a reference to the 0600 pressure in relation to a Day is to pressure (at the Point of Offtake) at 0600 hours at the end of the Day;
- (c) at any time, in relation to any Day, the **"Agreed 0600 Pressure"** means the agreed 0600 pressure for that Day prevailing in accordance with paragraph 4.2.7 at that time.

4.1.2 For the purposes of TPD Section J2.1.4, pursuant to TPD Section J2.1.1(b)(iii), the Applicable Offtake Pressure (so far as relating to 0600 pressure) in relation to an Offtake on any Day shall be the Agreed 0600 Pressure.

4.1.3 Without prejudice to the rights and obligations of the Parties under this Document (or to the specific provisions of this paragraph 4), in relation to any or all of the Offtakes serving an LDZ, National Grid NTS and the DNO agree to cooperate with a view to establishing operating pressures at such Offtake(s) which optimise the safe and efficient operation of the NTS and such LDZ.

### 4.2 Agreed pressures

4.2.1 For the purposes of this paragraph 4.2, in relation to an Offtake:

- (a) a **"pressure request"** is a request (including a revised request) to be submitted by the DNO specifying a requested 0600 pressure, being the DNO's preferred 0600 pressure for the purposes of operating that Offtake and the LDZ on that Day;
- (b) the requested 0600 pressure in a pressure request may be lower than, equal to or (subject to paragraph 4.2.4) higher than:
  - (i) in the case of the initial pressure request (under paragraph 4.2.2(a)), the Assured 0600 Pressure; and
  - (ii) in the case of a revised pressure request, the Agreed 0600 Pressure.

4.2.2 In relation to each Offtake, for each Day:

- (a) the DNO shall, at the same time as submitting (in accordance with paragraph 2.2.1) an initial Offtake Profile Notice for the Day, submit to National Grid NTS an initial pressure request, specifying the requested 0600 pressure for Day D; and
- (b) the DNO may from time to time thereafter, up to but not (unless National Grid NTS otherwise agrees) after 2400 hours on the Day, submit a revised pressure request for the Day.

4.2.3 If (in relation to a pressure request) the requested 0600 pressure is no higher than:

- (a) (in the case of the initial pressure request) the Assured 0600 Pressure; or
- (b) (in the case of a revised pressure request) the prevailing Agreed 0600 Pressure;

National Grid NTS will agree the requested 0600 pressure, subject to paragraph 4.2.5.

- 4.2.4 If the requested 0600 pressure is higher than the Assured 0600 Pressure or (as the case may be) the prevailing Agreed 0600 Pressure, National Grid NTS will agree the requested 0600 pressure if it considers that the safe and efficient operation of the NTS (consistent with its obligations under the Code) would not be materially prejudiced if it were to make or seek to make gas available for offtake (at the Offtake) on the basis of the requested 0600 pressure, and not otherwise.
- 4.2.5 National Grid NTS may request the DNO to reduce the requested pressure in an initial pressure request or (as the case may be) the prevailing Agreed 0600 Pressure, where National Grid NTS would prefer to operate the NTS on the basis of that reduced 0600 pressure at the relevant Offtake.
- 4.2.6 The DNO will agree to a request by National Grid NTS to reduce the requested 0600 pressure or prevailing Agreed 0600 Pressure if the DNO considers that the safe and efficient operation of the LDZ (consistent with its obligations under the Transportation Principal Document) would not be materially prejudiced if gas were made available for offtake (at the Offtake) on the basis of such reduced pressure, and not otherwise.
- 4.2.7 For the purposes of this Section I, in relation to an Offtake and any Day, the Agreed 0600 Pressure at any time shall be the prevailing 0600 pressure agreed pursuant to paragraph 4.2.3, 4.2.4 or 4.2.6 (as the case may be).
- 4.2.8 National Grid NTS (for the purposes of paragraph 4.2.4, in relation to a pressure request by a DNO) or the DNO (for the purposes of paragraph 4.2.6, in relation to a request by National Grid NTS under paragraph 4.2.5) shall be entitled, in considering whether the operation of the NTS or (as the case may be) LDZ would be prejudiced as provided in paragraph 4.2.4 or 4.2.6, to make allowance for the risk of error in prevailing demand forecasts and for other possible changes in circumstances over the remainder of the Day (in particular, having regard to the effect of paragraph 4.2.6 or as the case may be 4.2.4 in the case where it accepts the relevant request).

### 4.3 Pressures between 0600 hours and 2200 hours

- 4.3.1 The Parties acknowledge that pursuant to the Transportation Principal Document the Applicable Offtake Pressure comprises a 0600 pressure and a 2200 pressure, and applies on the basis in TPD Section J2.5.1(c).
- 4.3.2 At times other than 0600 hours at the end of a Day, National Grid NTS will use reasonable endeavours to make gas available for offtake at an Offtake at the pressure determined in accordance with paragraph 4.3.4.
- 4.3.3 For the avoidance of doubt the pressures determined under paragraph 4.3.4 are not part of the Assured Offtake Pressure nor the Applicable Offtake Pressure for the purposes of TPD Section J2.
- 4.3.4 Subject to paragraph 4.3.5, for each Day (D), the pressure referred to in paragraph 4.3.2 is:

- (a) at any time (t) during the period between 0600 hours at the start of Day D and 2200 hours:

$$AP_{0600}^{D-1} - \{1.1 * (AP_{0600}^{D-1} - AOP_{2200}) * H / 16\}$$

where:

$AP_{0600}^{D-1}$  is the Agreed 0600 pressure for Day D-1 (being the Agreed 0600 Pressure prevailing at the start of Day D);

$AOP_{2200}$  is the Assured 2200 Pressure;

H is the period in hours from 0600 hours to time t, rounded up to the nearest hour; and

- (b) at any time during the period between 2200 hours and 0600 hours at the end of Day D:

$$AOP_{2200} + \{0.9 * (AP_{0600}^D - AOP_{2200}) * H / 8\}$$

where:

$AP_{0600}^D$  is the Agreed 0600 Pressure for Day D prevailing at time t;

$AOP_{2200}$  is the Assured 2200 Pressure;

H is the period in hours since 2200 hours, rounded down to the nearest hour; or

- (c) at any time within Day D, such other pressure as National Grid NTS may agree upon the request of the DNO.

- 4.3.5 For the avoidance of doubt, at any time where the pressure determined under paragraph 4.3.4 would be less than the Assured 2200 Pressure, this paragraph 4.3 is of no effect (being superseded by the obligations of National Grid NTS pursuant to TPD Section J in relation to the Assured 2200 Pressure as the Applicable Offtake Pressure).

## **5 Interruption – Not Used**

## **6 Further provisions**

### **6.1 Demand forecasts**

- 6.1.1 In addition to providing Offtake Profile Notices under (and without prejudice to) paragraph 2, each DNO will undertake and provide to National Grid NTS an updated demand forecast (as provided in TPD Section H5) for its LDZ:

- (a) at any time at which its estimate of Forecast LDZ Demand changes by more than 5% from the prevailing demand forecast; and
- (b) at any other time at which National Grid NTS may reasonably require such forecast.

### **6.2 Nomination information**

- 6.2.1 National Grid NTS shall each Day notify the DNO of the Nominations made by a User (or made by National Grid NTS on the User's behalf) in relation to each LDZ as necessary for the purposes of enabling such DNO to carry out the operation of its LDZ(s).

### **6.3 Restrictions on gas flows**

- 6.3.1 The DNO shall not cause or permit the flow of gas at an Offtake at any time at a rate which is outside the range (of rates of flow) comprised in the Permitted Range for the Measurement Equipment at that Offtake.

### **6.4 Responsibility for controlling flows**

- 6.4.1 (Subject to any contrary provision in a Supplemental Agreement and subject to Section C2.7.4) the downstream DNO is responsible for controlling the flow of gas at each Inter-System Offtake by means of the flow control equipment comprised in the Offtake Facilities.
- 6.4.2 Without prejudice to Section C2.7.4, the upstream Transporter has no responsibility for controlling the flow of gas at any Inter-System Offtake or for the operation or control of the flow control equipment.