UGS Grijpskerk

Open Season Information Pack

Nederlandse Aardolie Maatschappij B.V.

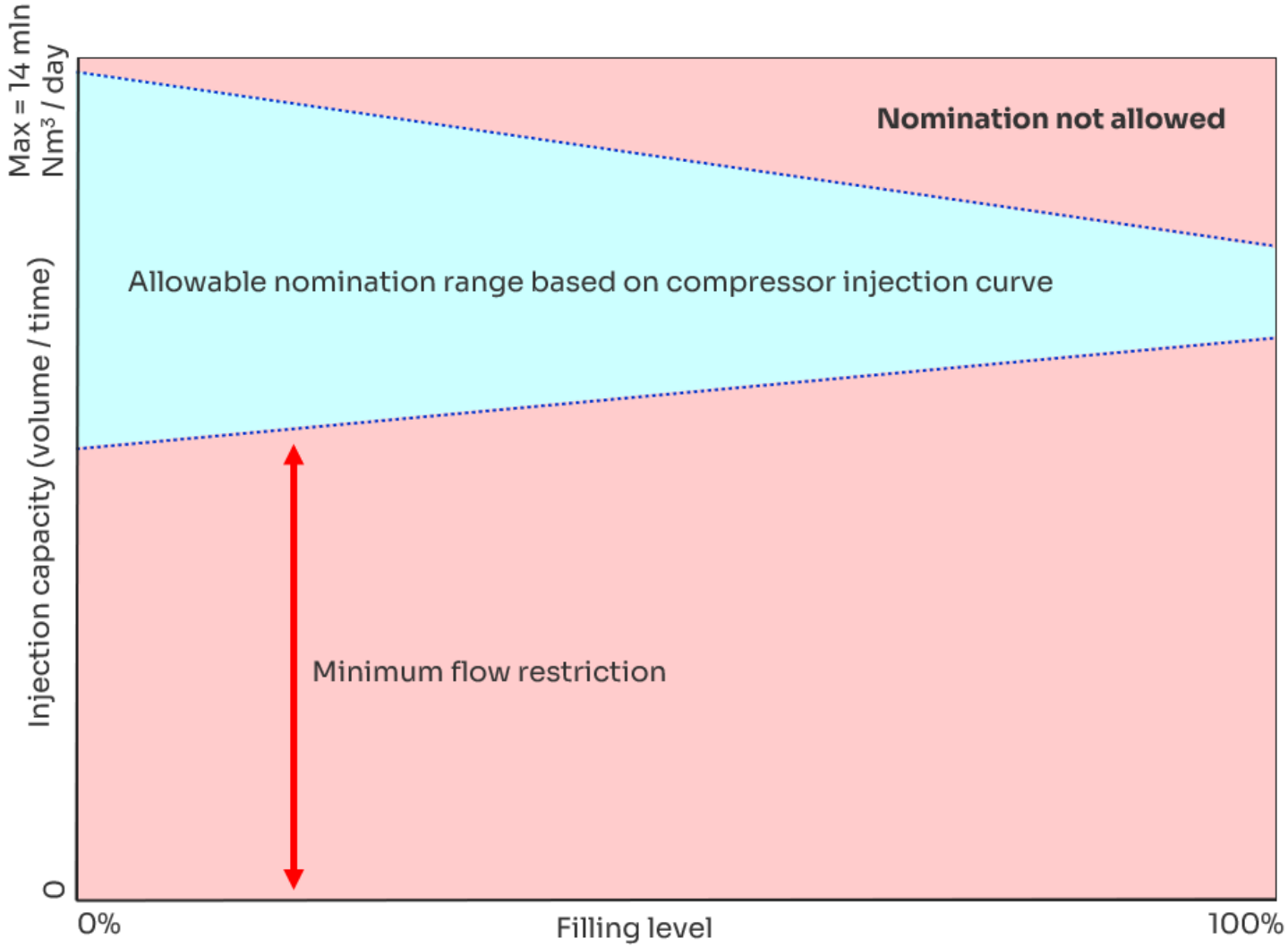
NAM

Indicative specifications (summary)

Please note that specifications are determined by volumetric limitations. NAM will communicate available ranges in calorific value on pre-agreed intervals.

Subject	Grijpskerk
Working volume	2.4 billion Nm^3 (in a standard storage year) For the year 1 April 2026 – 1 April 2027, due to extended maintenance, the maximum volume available for injection will be limited to approx. 2.134 billion Nm^3
Gas Quality	**L-gas**
Number of injection compressors	1
Maximum injection capacity	14 mln Nm^3 per day
Flow range per compressor	9.5 – 14 mln Nm^3 per day (in a near empty storage) 10.5 – 11.5 mln Nm^3 per day (in a near full storage)
Active wells	10
Minimum flow production	5 mln Nm^3 per day
Maximum flow production	61.4 mln Nm^3 per day (L-gas) (in a full storage) 20 mln Nm^3 per day (NGT- gas quality) after production of ~1.8 bcm working volume. Production (send-out) capacity declines as working volume declines.

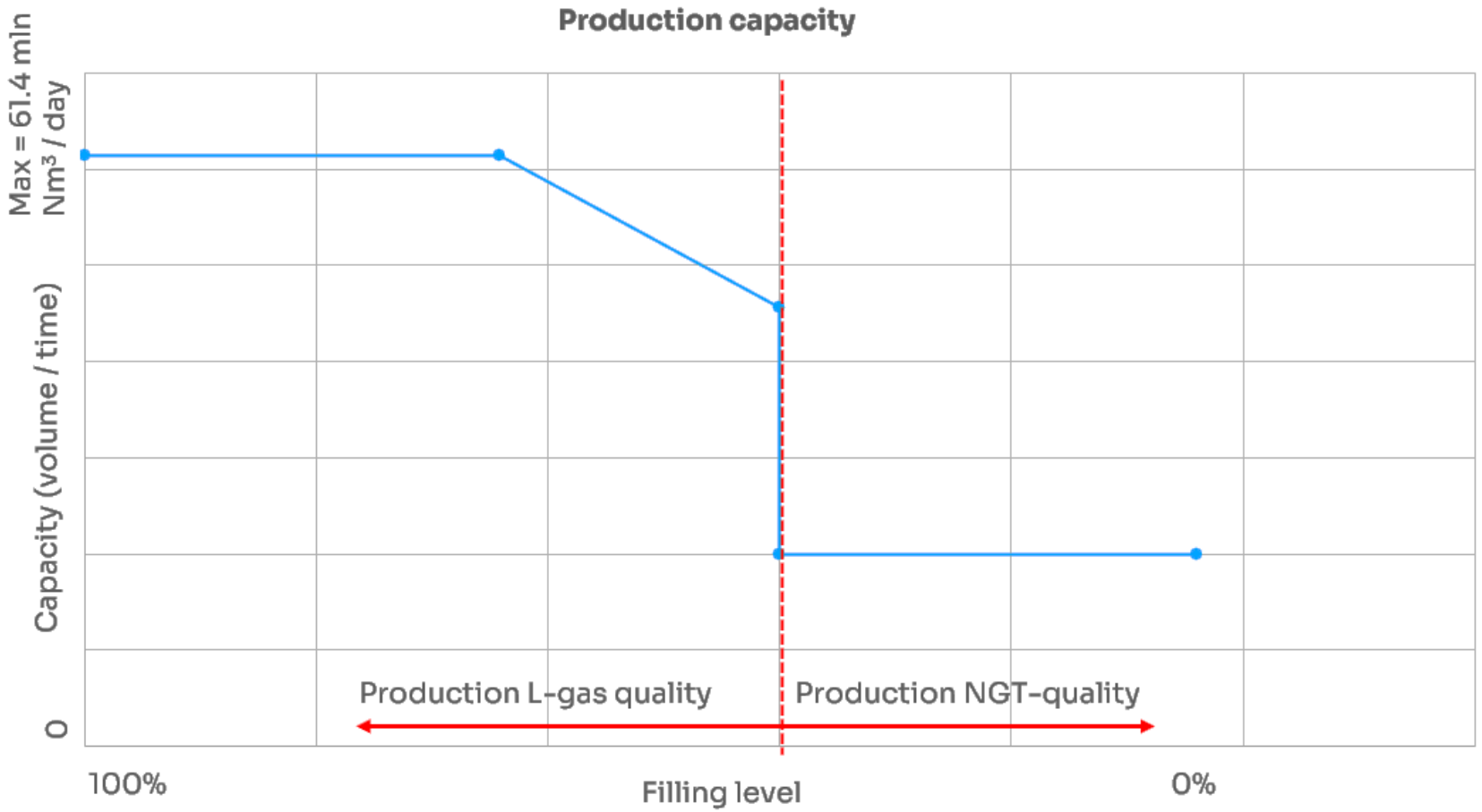
Injection curve Grijpskerk



Injection capacity is influenced by the following factors:

- Reservoir filling level
- Nomination within allowable range
- Nomination / Injection behaviour
- Outside Temperature (limits compressor availability at high temperatures)
- Prevailing pressure in GTS grid
- Gas quality delivered by GTS
- Well and installation availability (maintenance windows are fixed)
- Compressor specifications (fixed)

Indicative Production Decline Curve Grijpskerk



Available production capacity depends on a number of factors:

- Any outflow capacity restrictions as determined by GTS
- Flow limits of the installation.
- The capacity of the wells.
- The filling level of the reservoir.
- Well and installation availability

UGS Grijpskerk has recently been converted into an L-gas storage facility.

The leaning process is still ongoing. As a result, the switching point from L-gas to NGT-gas will change depending on a number of factors:

- The delivered gas quality during injection.
- The extent of filling during the prevailing contract year.
- Filling level at the beginning of the contract year.

Availability Limitations Grijpskerk (1 April 2026 – 1 April 2027)

NAM commits to an overall facility reliability of 95%. Any predetermined windows impacting availability as per below. These windows do not impact the reliability commitment.

Subject	Date range	Availability	Comments
Total shutdown	18 May – 30 June (Inclusive)	0% Injection Capacity 0% Production Capacity	
Production shutdown	1 July – 19 July (Inclusive)	100% Injection Capacity 0% Production Capacity	
Production partial shutdown	1 April – 30 Sept (Inclusive)	50% Production Capacity*	*Between 1 April and 30 Sept, NAM only commits to offering 50% of it's production capacity as per the decline curve.
Injection Shutdown	16 Nov – 13 Dec (Inclusive)	0% Injection Capacity 100% Production Capacity	

Other relevant specifications and data

- The UGS operates within an aspired operational accuracy of delivery versus nomination of 2% (both for production and injection).
- Ramp-up and ramp-down curves are applicable, which could impact this accuracy during rapid ramp-up or ramp-down of production or injection rate.
- An Operational Balancing Account (OBA) applies with GTS. Applicability of the OBA is subject to conditions of GTS.
- Physical delivery of gas to national grid (GTS) Point ID 301114
- On a single gas day, either production or injection is possible (not both).
- Transport bookings (entry/exit GTS) are to be made by the Customer.
- NAM communicates available capacity (both volumetric and calorific) on a weekly basis.
- Standard Injection season 1 April – 1 October
- Standard Production season 1 October – 1 April

Nominations and Messaging

Protocols

- Communication Protocol: AS4
- Edig@s-CML-protocol: 5.1

Basic Messaging flow

- NAM receives a nomination (NOMINT bericht)
- Matching with GTS occurs with call-up (DELORD)
- Response through TRN to GTS (DELRES)
- Response to customer (NOMRES)
- Delivery of gas to one GTS shipper at GTS entry/exit point
- Matching procedure with GTS: Lesser-of rule applies

Deadlines for nominations and storage messages

- Day ahead-nominations to be received before 13:00.
- Minimum Lead time of 2 hours for nomination changes (both injection and production)

UGS Grijpskerk Basic Fee structure

UGS Grijpskerk Annual Bundle Fee

- Annual Bundle Fee UGS Grijpskerk € 74.72 mln (indexing applies in Oct)
  - The injection season will be 1 April – 1 Nov, due to an extended maintenance period in May and June 2026.
  - Includes electricity cost for injection in standard injection period 1 April – 1 Nov
- A UGS reliability of 95% applies. Any unavailability of the UGS below this reliability threshold, and outside the standard maintenance periods could result in a discount on the UGS Bundle Fee
- Entry and Exit capacity with GTS to be booked by Customer

UGS Grijpskerk earthquake damages

- According to the Tijdelijke Wet Groningen (Art 15) , NAM is charged a levy (Heffing) for the cost incurred by the Dutch government in view of the tasks executed by the IMG and the NCG for the effects of exploitation of the Groningenveld, UGS Norg and UGS Grijpskerk. This includes charges related to claims for damages, strengthening and other measures related to earthquakes (bodembeweging).
- NAM will charge the actual cost of any such Levy (Heffing) received for the contract year 1 April 2026 – 1 April 2027 to the UGS user
- NAM will attribute all cost related to the area within 6km of the UGS Grijpskerk (as defined in Besluit Tijdelijke Wet Groningen Art 10oa) to the UGS user.
- Other costs included in the levy will be allocated between Groningenfield, UGS Norg and UGS Grijpskerk pro rata to the directly attributable cost.