



GAS REGIONAL INVESTMENT PLAN SOUTHERN CORRIDOR

Based on ENTSOG's TYNDP 2018

ANNEX C

IP Capacities – offered, booked and used

SOUTHERN CORRIDOR



TABLE OF CONTENTS

A CROSS-BORDER IPS WITHIN THE EU	4
Oberkappel (GCA>GRT Gaz Deutschland and Open Grid Europe) Bidirectional.....	4
Oberkappel (GRT Gaz Deutschland and Open Grid Europe>GCA) Bidirectional	6
Murfeld/Ceršak (GCA>Plinovodi) Unidirectional.....	8
Tarvisio/Arnoldstein (TAG>Snam Rete Gas) Bidirectional.....	10
Gorizia/Šempeter (Snam Rete Gas>Plinovodi) Bidirectional.....	12
Gorizia/Šempeter (Plinovodi>Snam Rete Gas) Bidirectional.....	14
Rogatec (Plinovodi>Plinacro) Unidirectional.....	16
Lanžhot (eustream>NET4GAS) Bidirectional	18
Lanžhot (NET4GAS >eustream) Bidirectional	20
Baumgarten (eustream>GCA and TAG) Bidirectional	22
Mosonmagyaróvár (GCA>FGSZ) Unidirectional	24
Kulata/Sidirokastro (Bidirectional).....	26
Negru Voda 1 (Transgaz>Bulgartransgaz) Bidirectional	28
Negru Voda 2 & 3 (Transgaz>Bulgartransgaz) Unidirectional.....	30
Ruse/Giurgiu (Transgaz>Bulgartransgaz) unidirectional	32
Csanádpalota (FGSZ>Transgaz) Bidirectional	36
Csanádpalota (Transgaz >FGSZ) Bidirectional	38
Dravaszerdahely (FGSZ>Plinacro) Bidirectional.....	40
Dravaszerdahely (Plinacro>FGSZ) Bidirectional.....	42
Velké Zlievce (eustream>Magyar Gaz Tranzit ZRt.) Unidirectional.....	43
B CROSS-BORDER IP WITH NON EU COUNTRIES	44
IMPORT	44
Mazara del Vallo (TMPC>Snam Rete Gas)	44
Passo Gries (Swissgas>Snam Rete Gas).....	45
Gela (Green Stream>Snam Rete Gas).....	46
Uzhgorod/Velke Kapušany (Ukrtransgaz>eustream).....	47
Beregdaróc (Ukrtransgaz>FGSZ)	48
Mediesul Aurit Isaccea (Ukrtransgaz>Transgaz)	49
Kipi (BOTAŞ>DESFA)	50
EXPORT	51
Budince (eustream>Ukrtransgaz)	51
Kiskundorozsma (FGSZ>Ssbijagaz)	52
Malkoclar (Bulgartransgaz>BOTAŞ).....	53
Jidilovo (Bulgartransgaz>GA-MA).....	54
Beregdaróc (FGSZ>Ukrtransgaz)	55
Passo Gries (Snam Rete Gas>Swissgas).....	56
C LNG ENTRY POINTS	57
Panigaglia (GNL Italia>Snam Rete Gas).....	58
Cavarzere (Terminale GNL Adriatico>Snam Rete Gas and Infrastrutture Trasporto Gas).....	59
IP Livorno (OLT LNG>Snam Rete Gas)	60
Revythoussa (DESFA)	61

A CROSS-BORDER IPS WITHIN THE EU

OBERKAPPEL (GCA>GRT GAZ DEUTSCHLAND AND OPEN GRID EUROPE) BIDIRECTIONAL

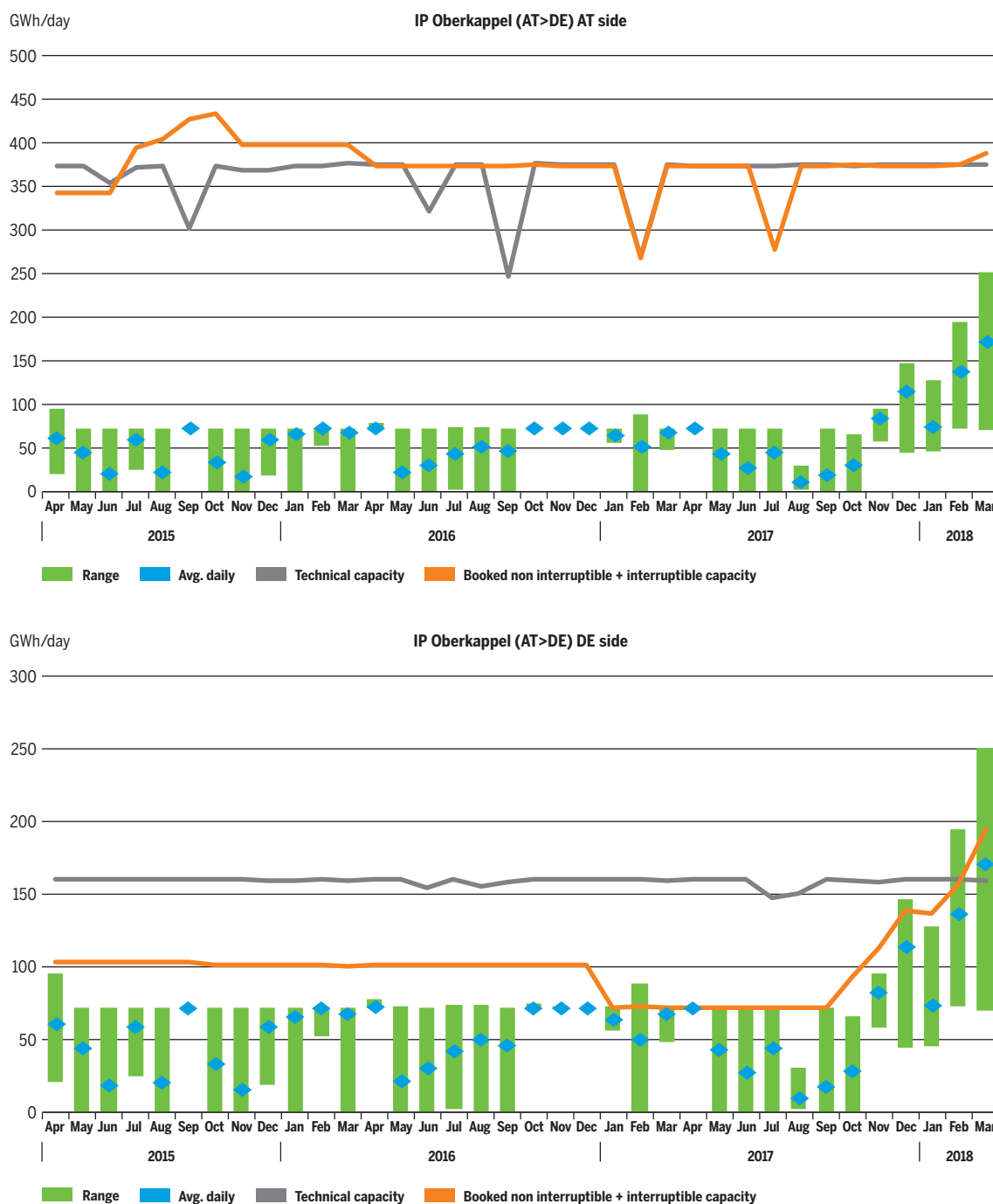
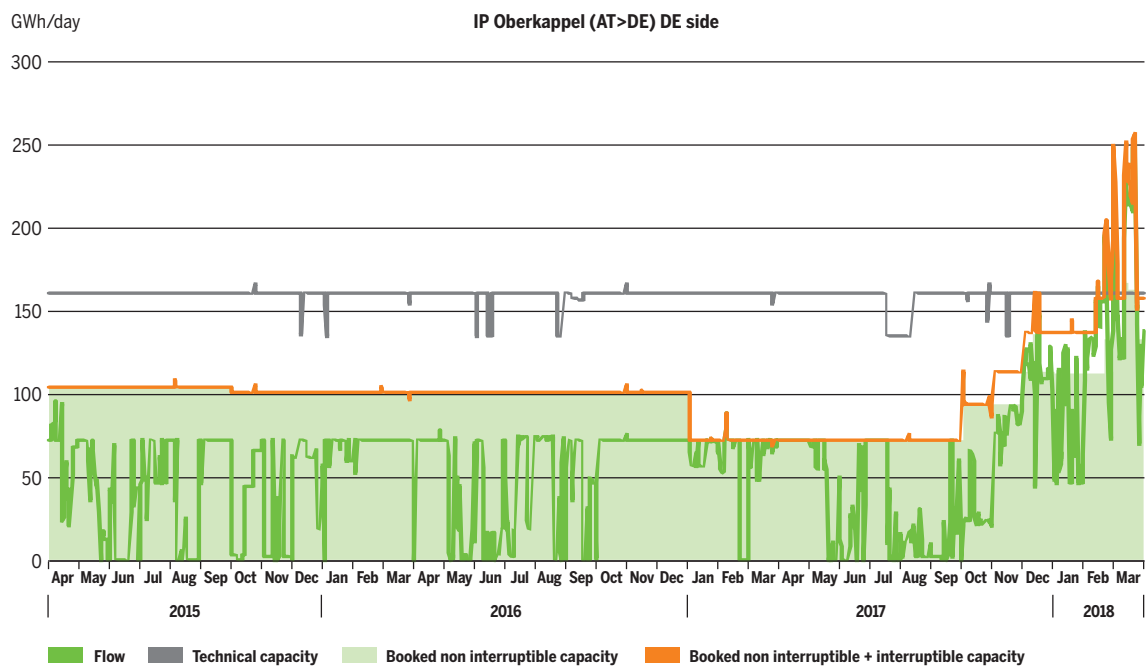


Figure C.1.1: Oberkappel (AT>DE): Flows and booked capacity vs. technical capacity (monthly)



Gas Regional Investment Plan for Southern Corridor (4th edition) | Annex C | 5

OBERKAPPEL (GRT GAZ DEUTSCHLAND AND OPEN GRID EUROPE>GCA) BIDIRECTIONAL

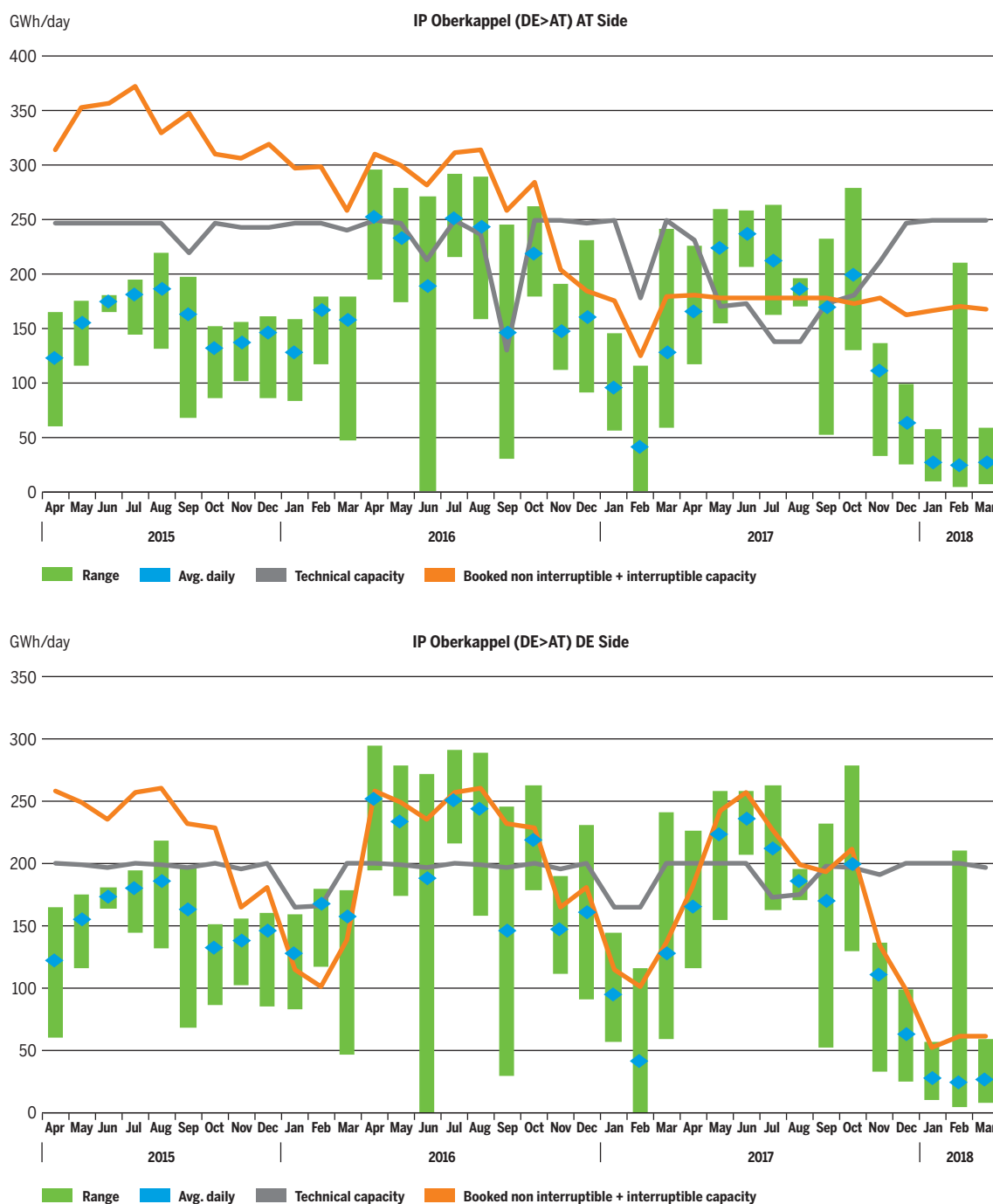


Figure C.2.1: Oberkappel (DE>AT): Flows and booked capacity vs. technical capacity (monthly)

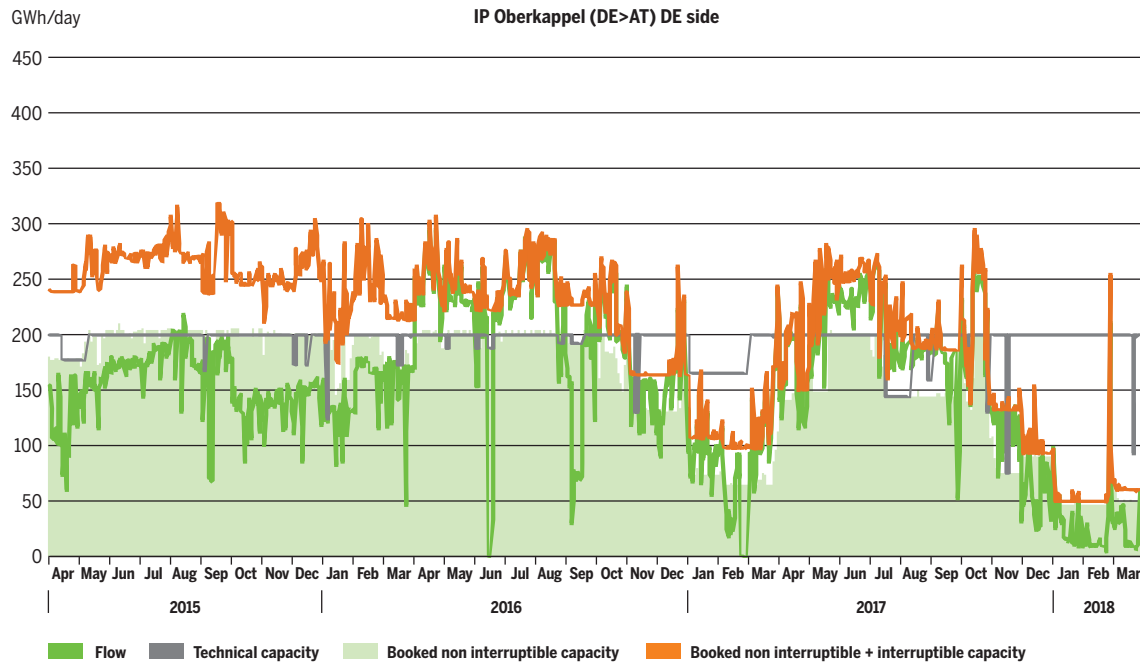
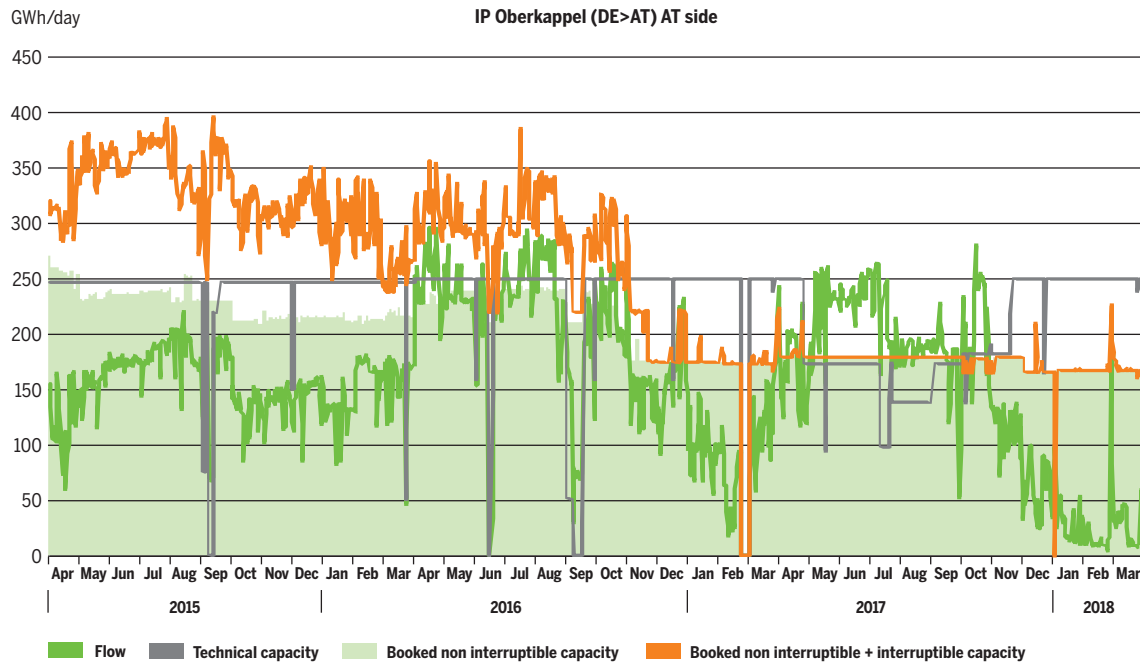


Figure C.2.2: Oberkappel (DE>AT): Flows and booked capacity vs. technical capacity (daily)

MURFELD/CERŠAK (GCA>PLINOVODI) UNIDIRECTIONAL

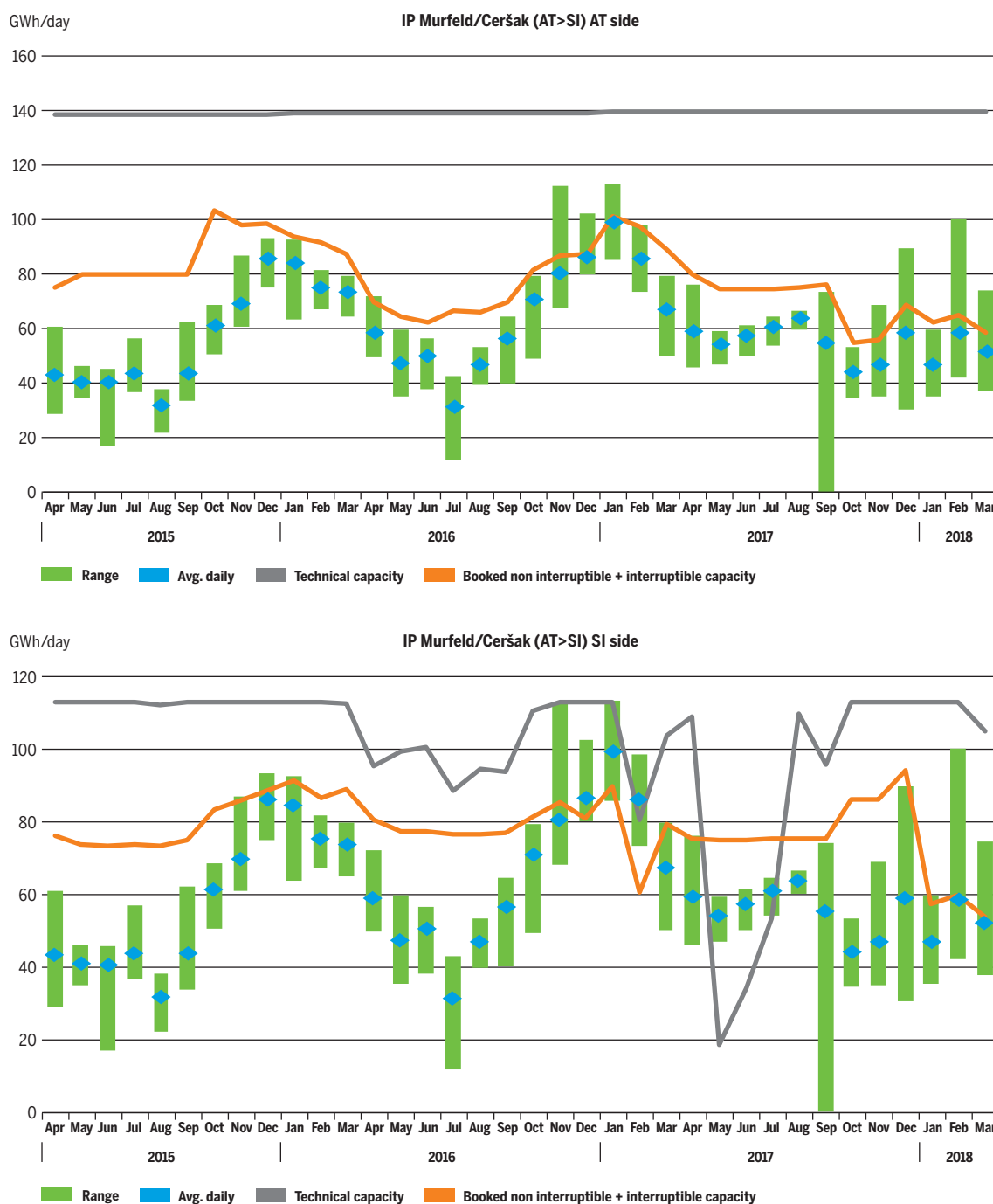


Figure C.3.1: Murfeld/Ceršak (AT>SI): Flows and booked capacity vs. technical capacity (monthly)

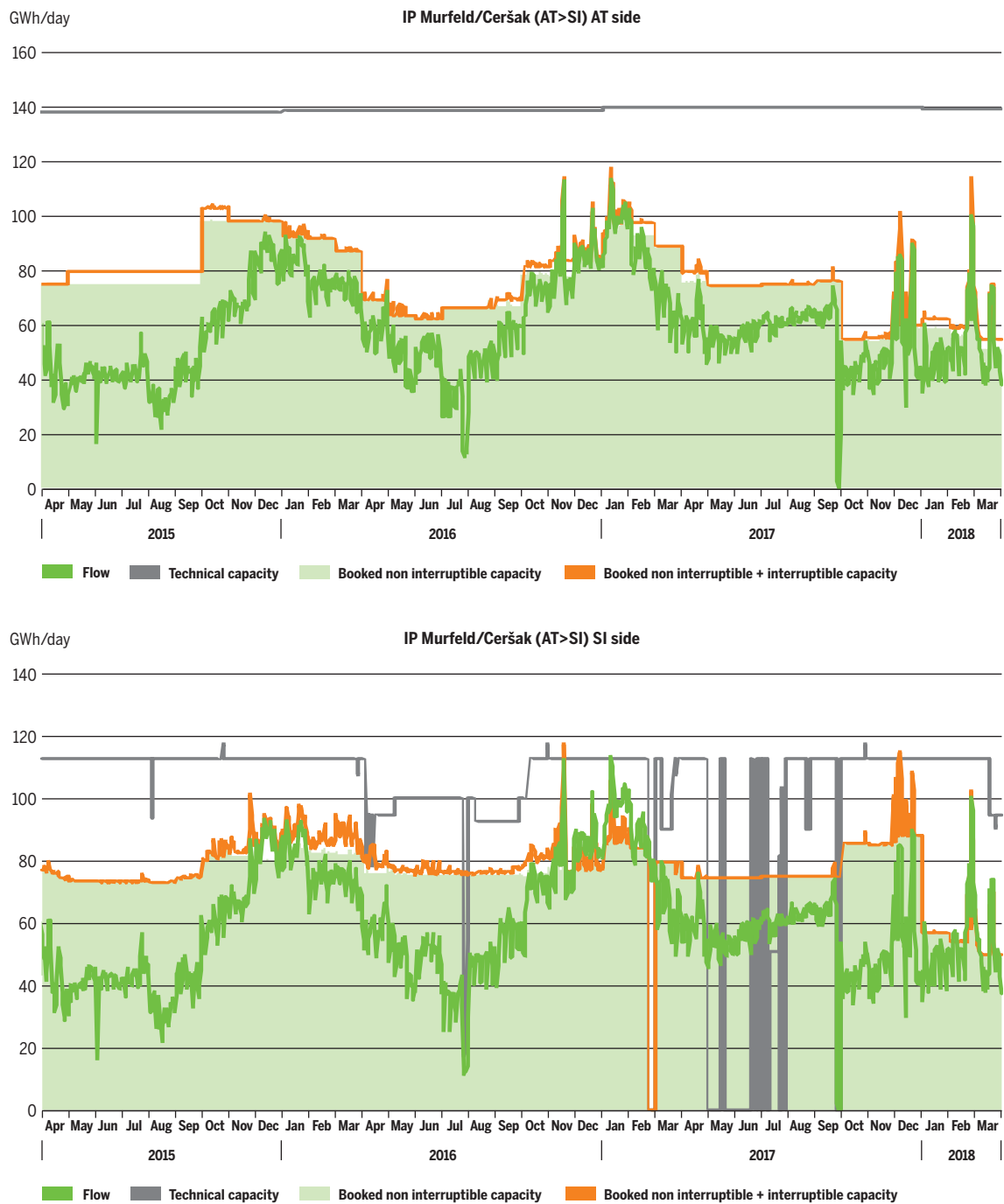


Figure C.3.2: Murfeld/Ceršak (AT>SI): Flows and booked capacity vs. technical capacity (daily)

TARVISIO/ARNOLDSTEIN (TAG>SNAM RETE GAS) BIDIRECTIONAL

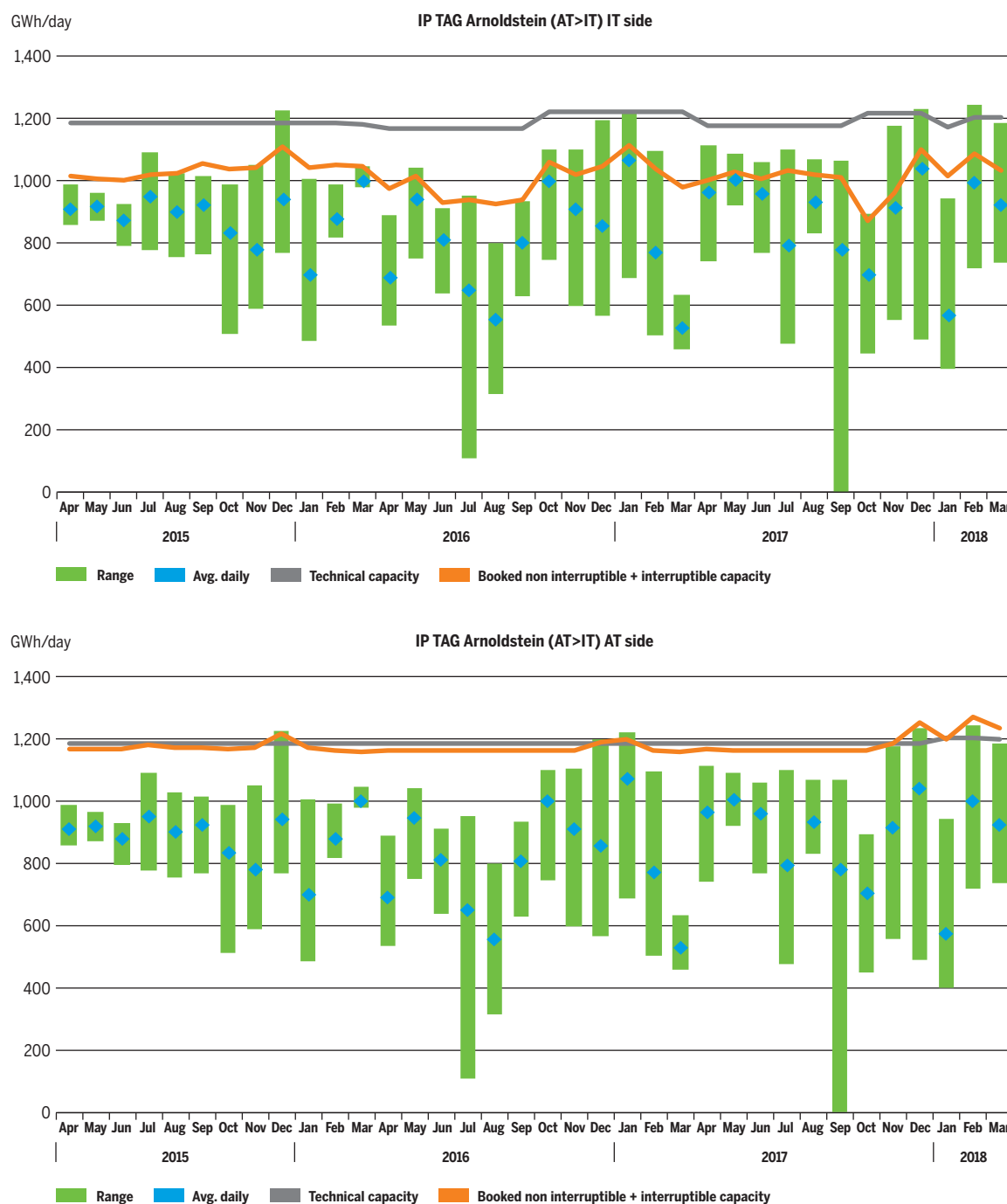


Figure C.4.1: Tarvisio/Arnoldstein (AT>IT): Flows and booked capacity vs. technical capacity (monthly)

GORIZIA/ŠEMPETER (SNAM RETE GAS>PLINOVODI) BIDIRECTIONAL

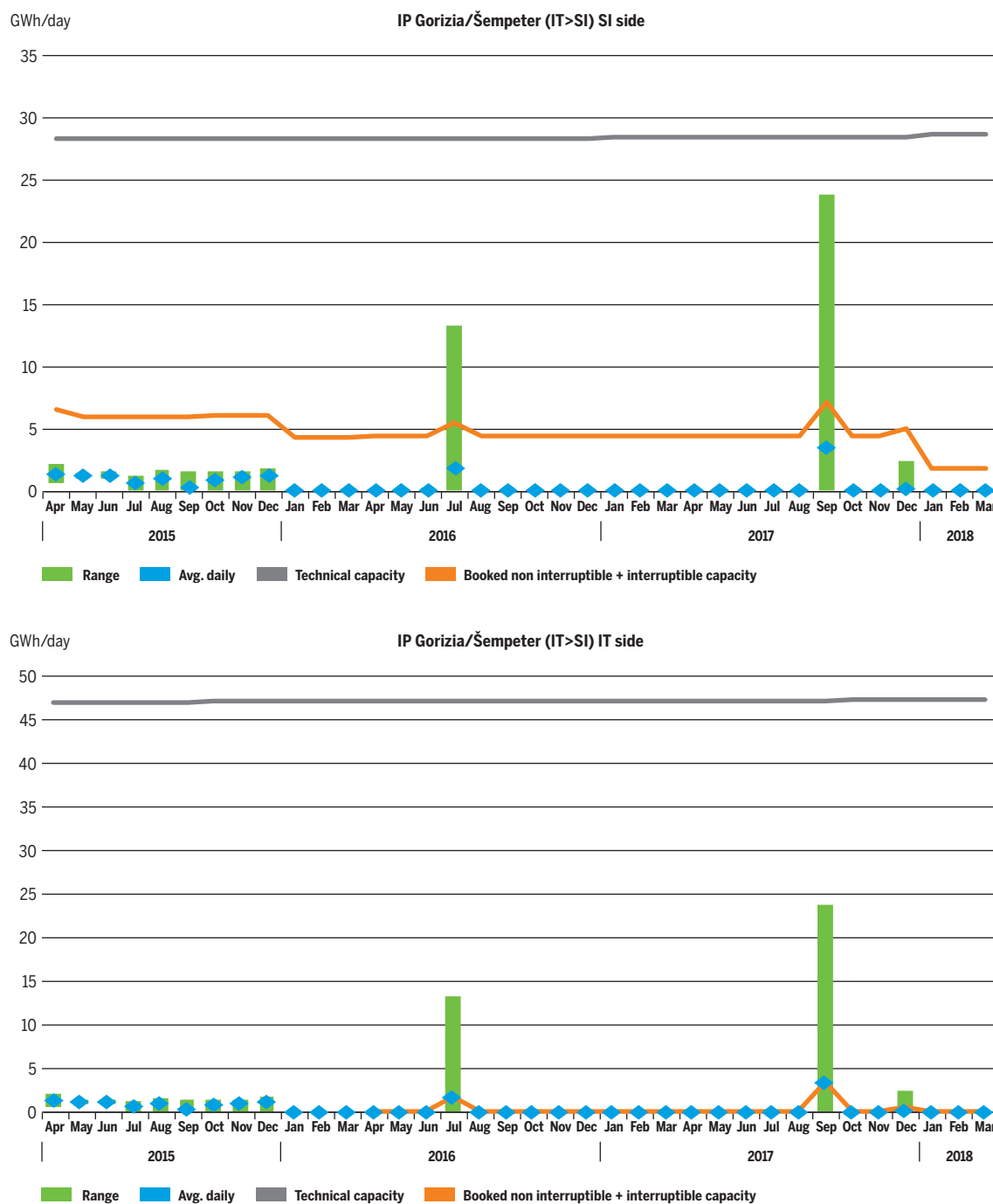


Figure C.5.1: Gorizia/Šempeter (IT>SI): Flows and booked capacity vs. technical capacity (monthly)

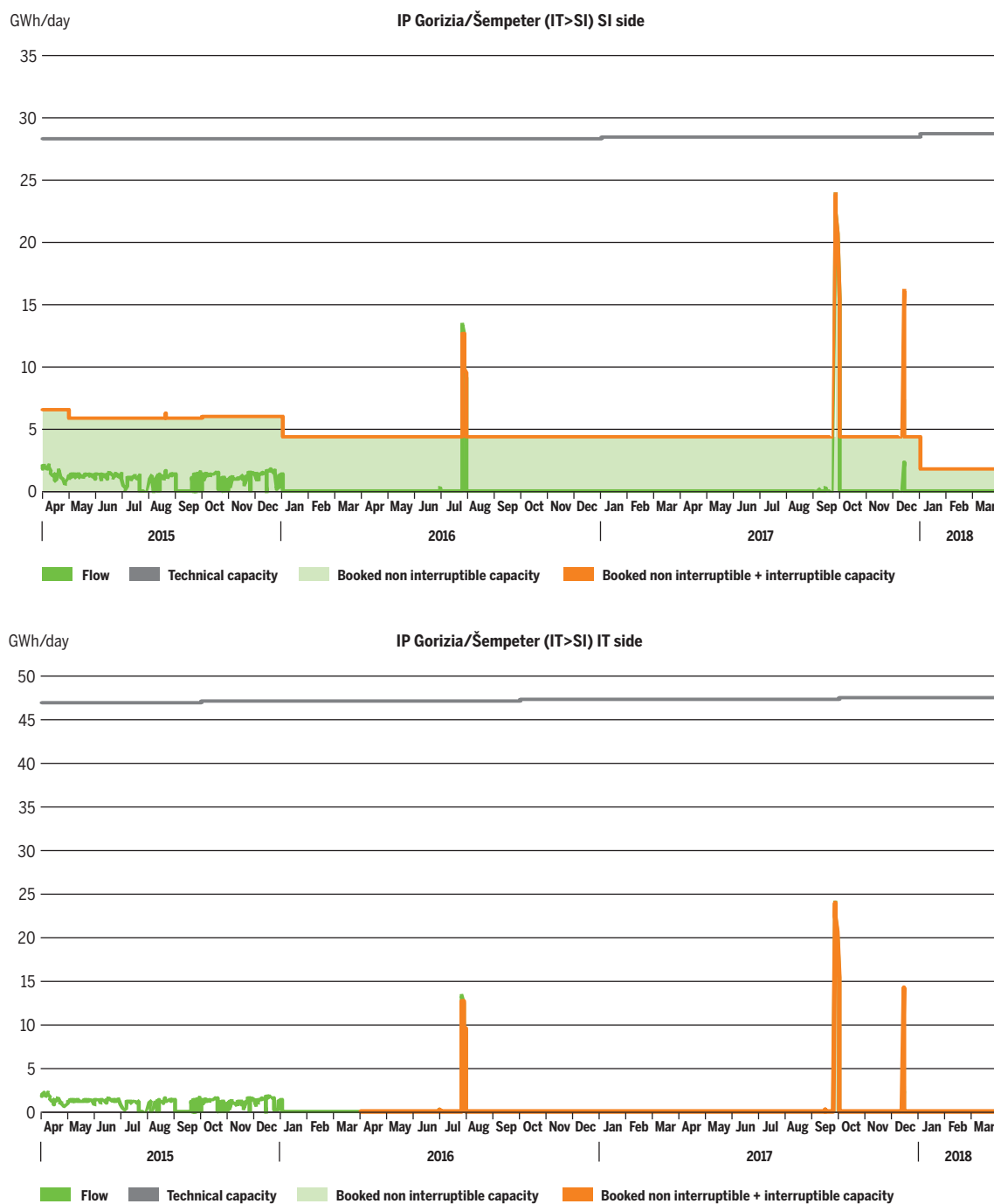


Figure C.5.2: Gorizia/Šempeter (IT>SI): Flows and booked capacity vs. technical capacity (daily)

GORIZIA/ŠEMPETER (PLINOVODI>SNAM RETE GAS) BIDIRECTIONAL

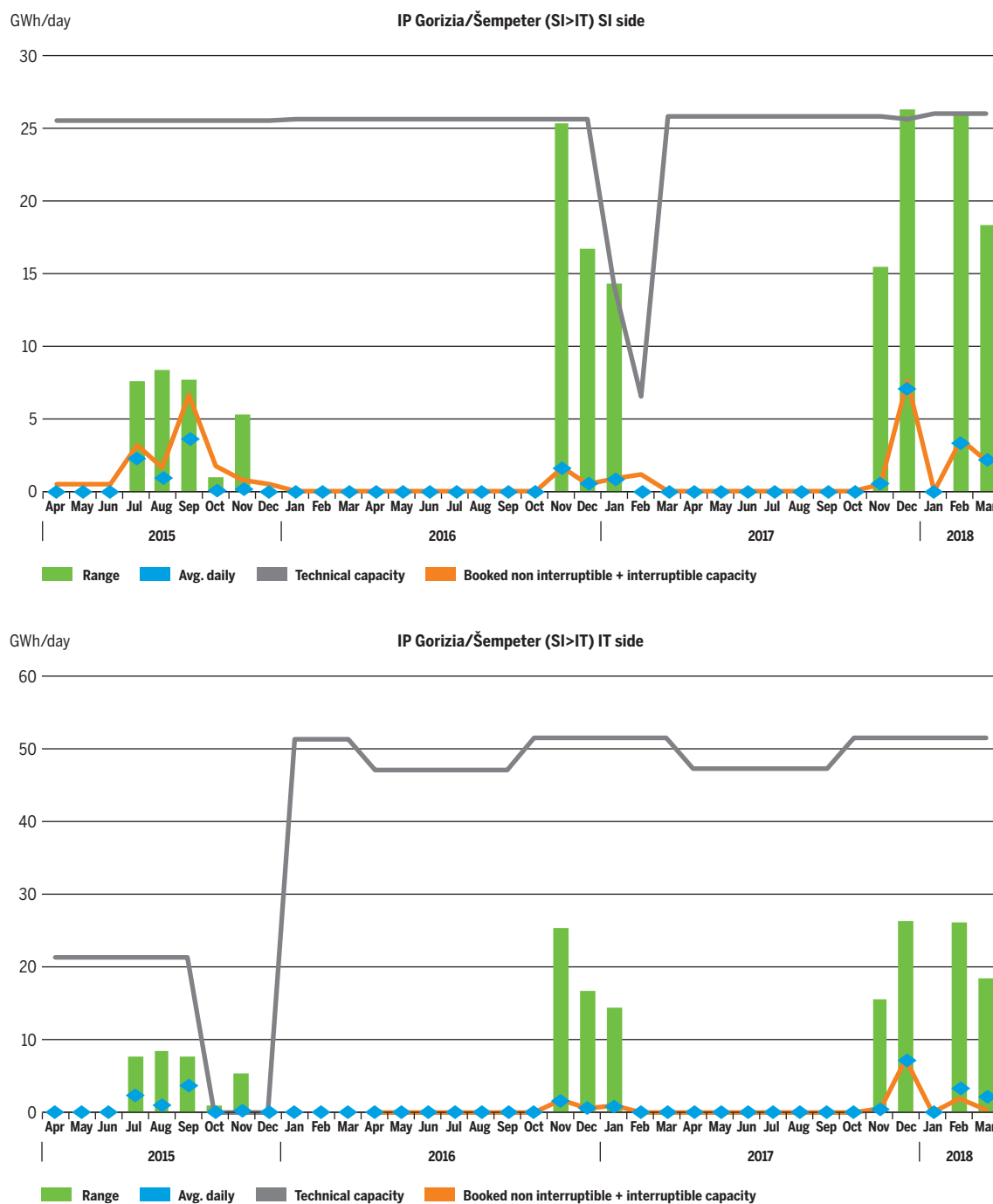


Figure C.6.1: Gorizia/Šempeter (SI>IT): Flows and booked capacity vs. technical capacity (monthly)

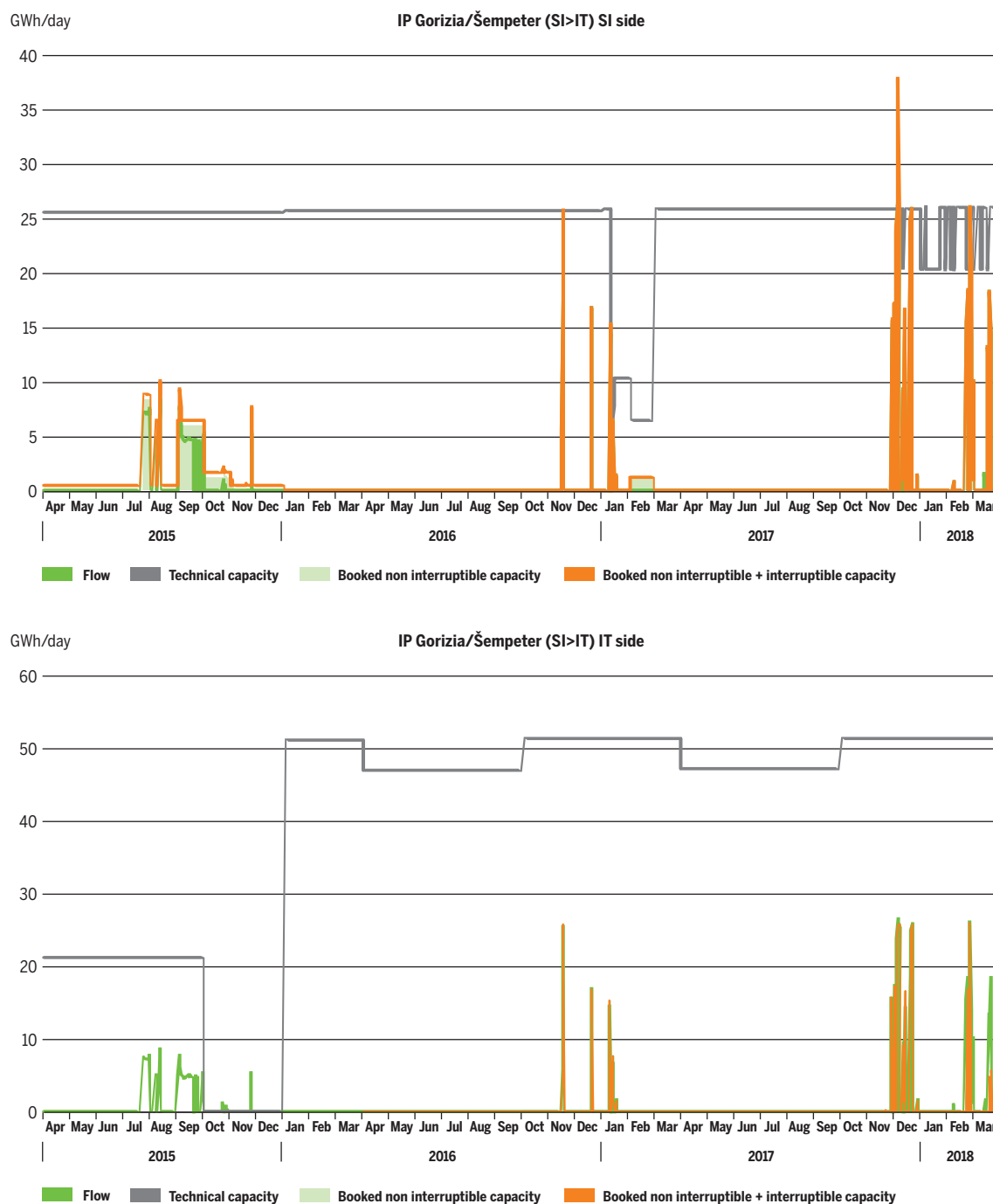


Figure C.6.2: Gorizia/Šempeter (SI>IT): Flows and booked capacity vs. technical capacity (daily)

ROGATEC (PLINOVODI>PLINACRO) UNIDIRECTIONAL

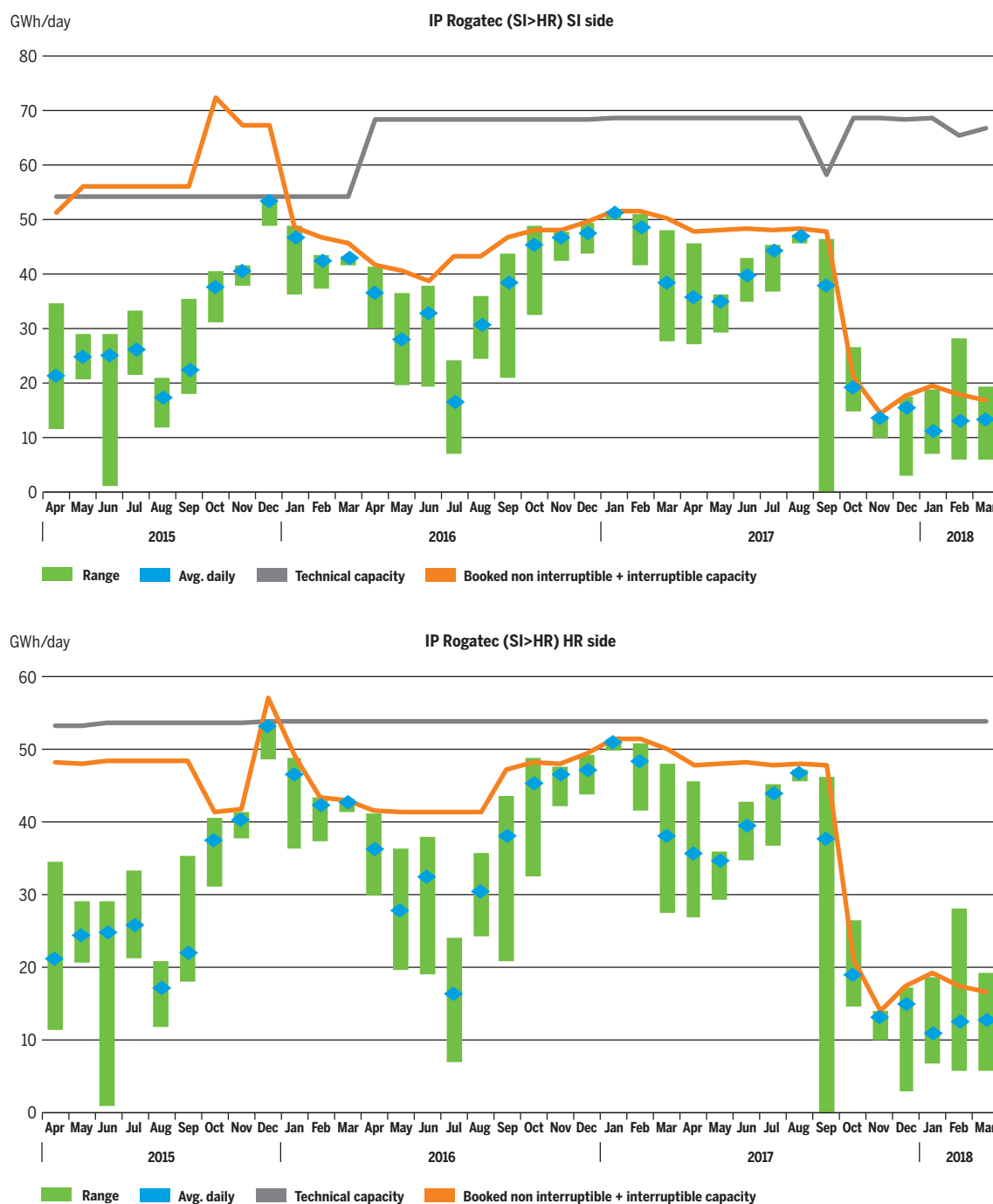


Figure C.7.1: Rogatec (SI>HR): Flows and booked capacity vs. technical capacity (monthly)

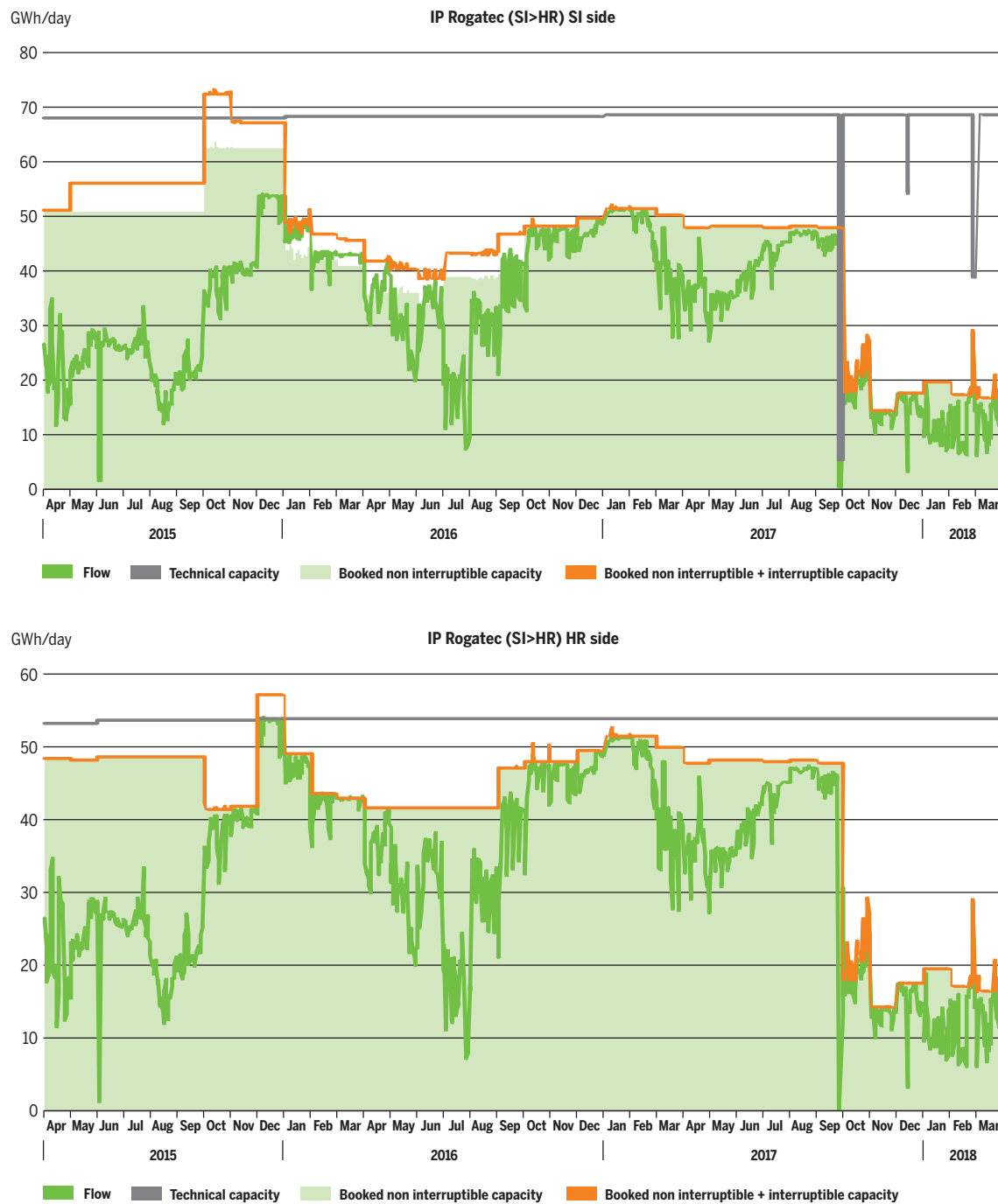


Figure C.7.2: Rogatec (SI>HR): Flows and booked capacity vs. technical capacity (daily)

LANŽHOT (EUSTREAM>NET4GAS) BIDIRECTIONAL

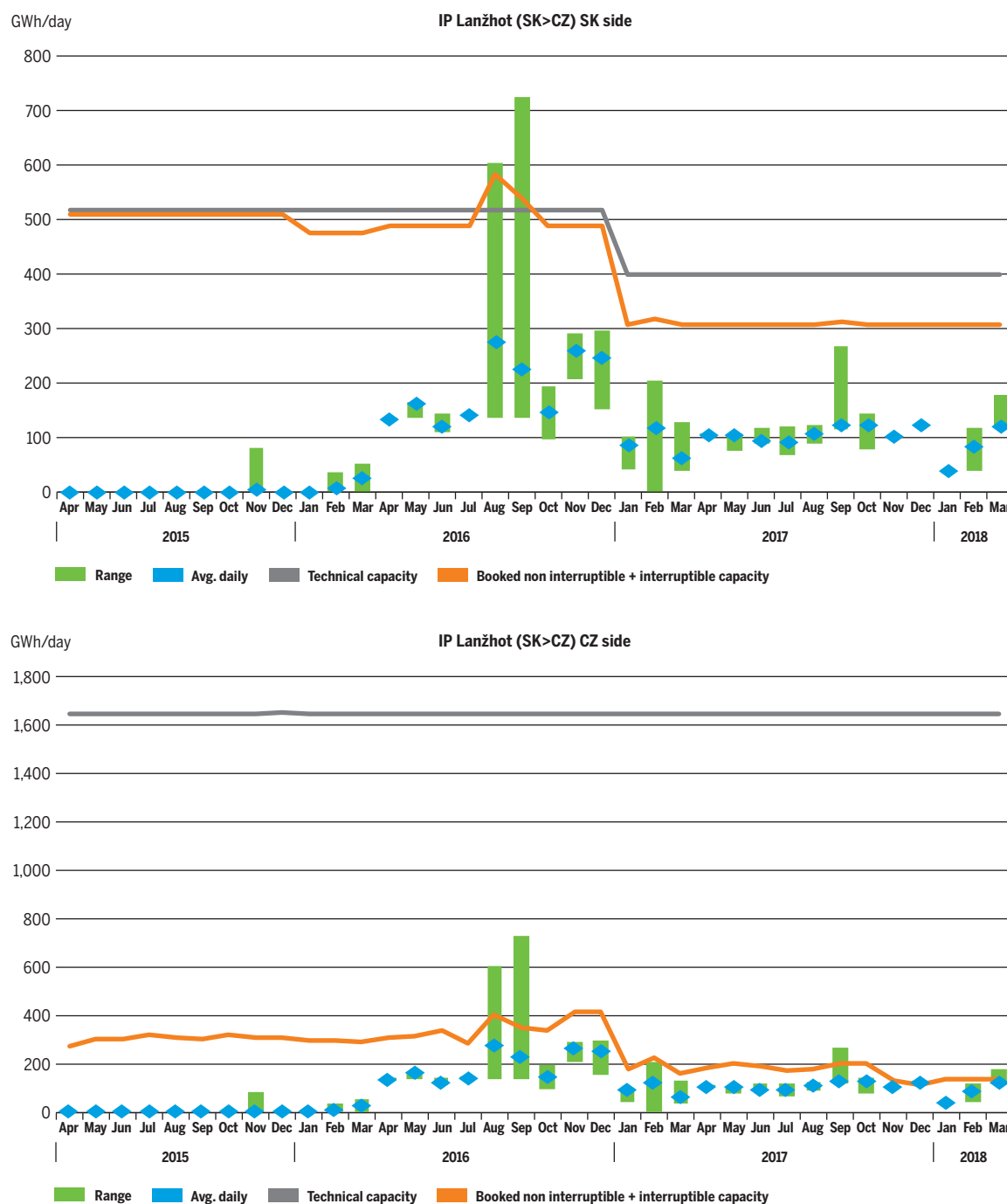


Figure C.8.1: Lanžhot (SK>CZ): Flows and booked capacity vs. technical capacity (monthly)

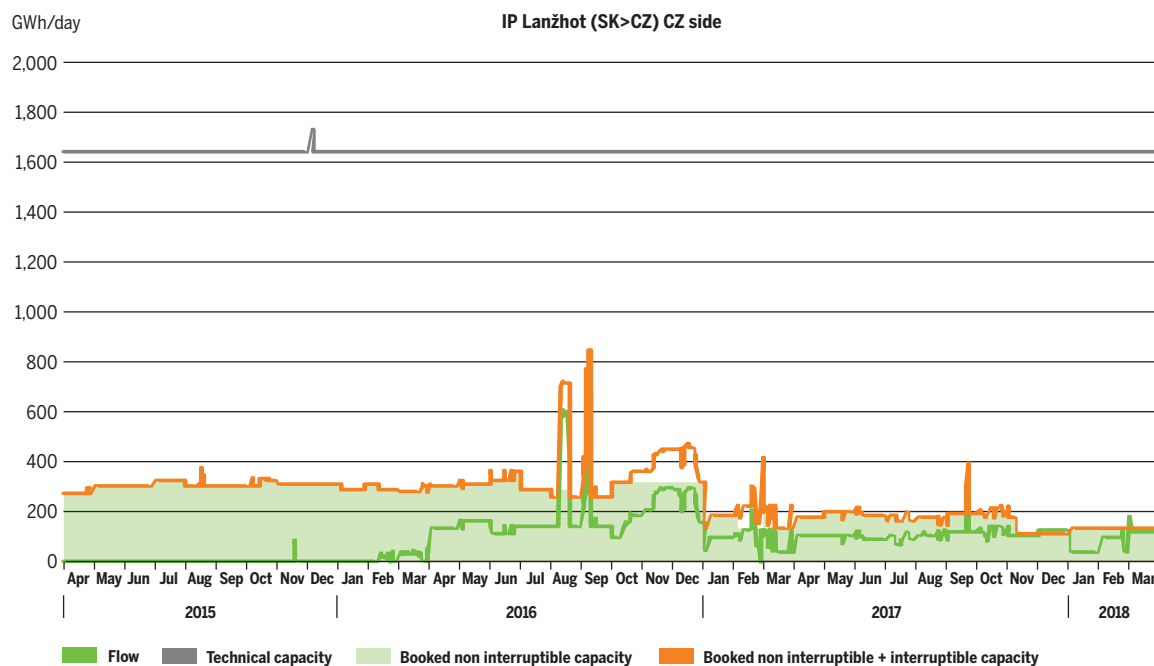
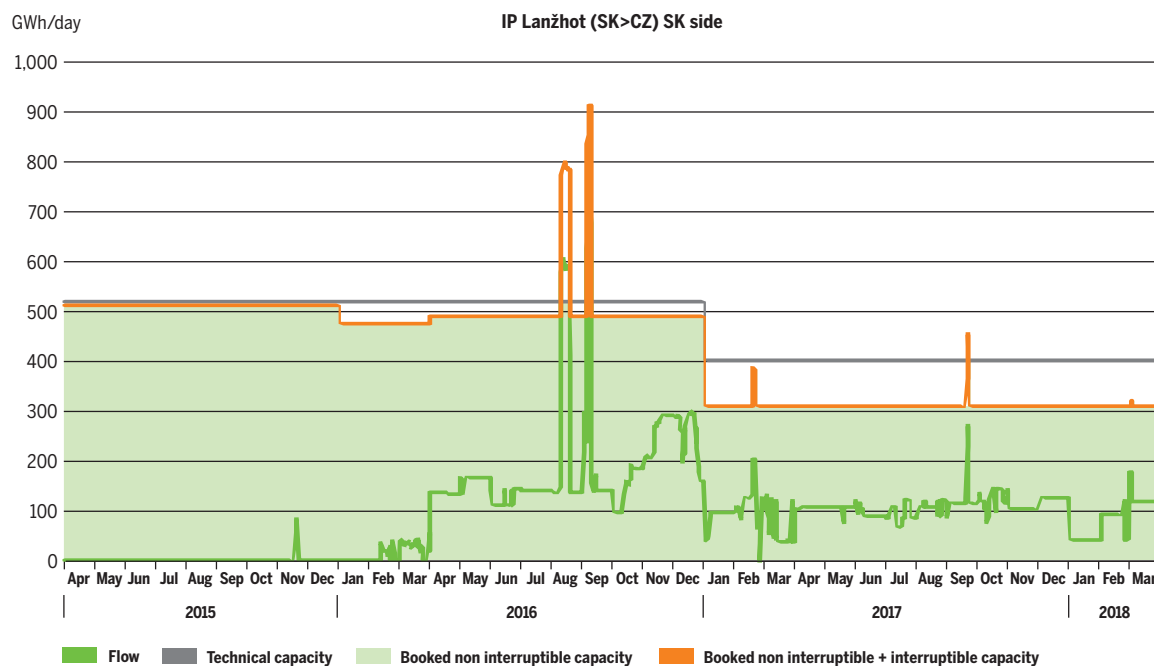


Figure C.8.2: Lanžhot (SK>CZ): Flows and booked capacity vs. technical capacity (daily)

LANŽHOT (NET4GAS >EUSTREAM) BIDIRECTIONAL

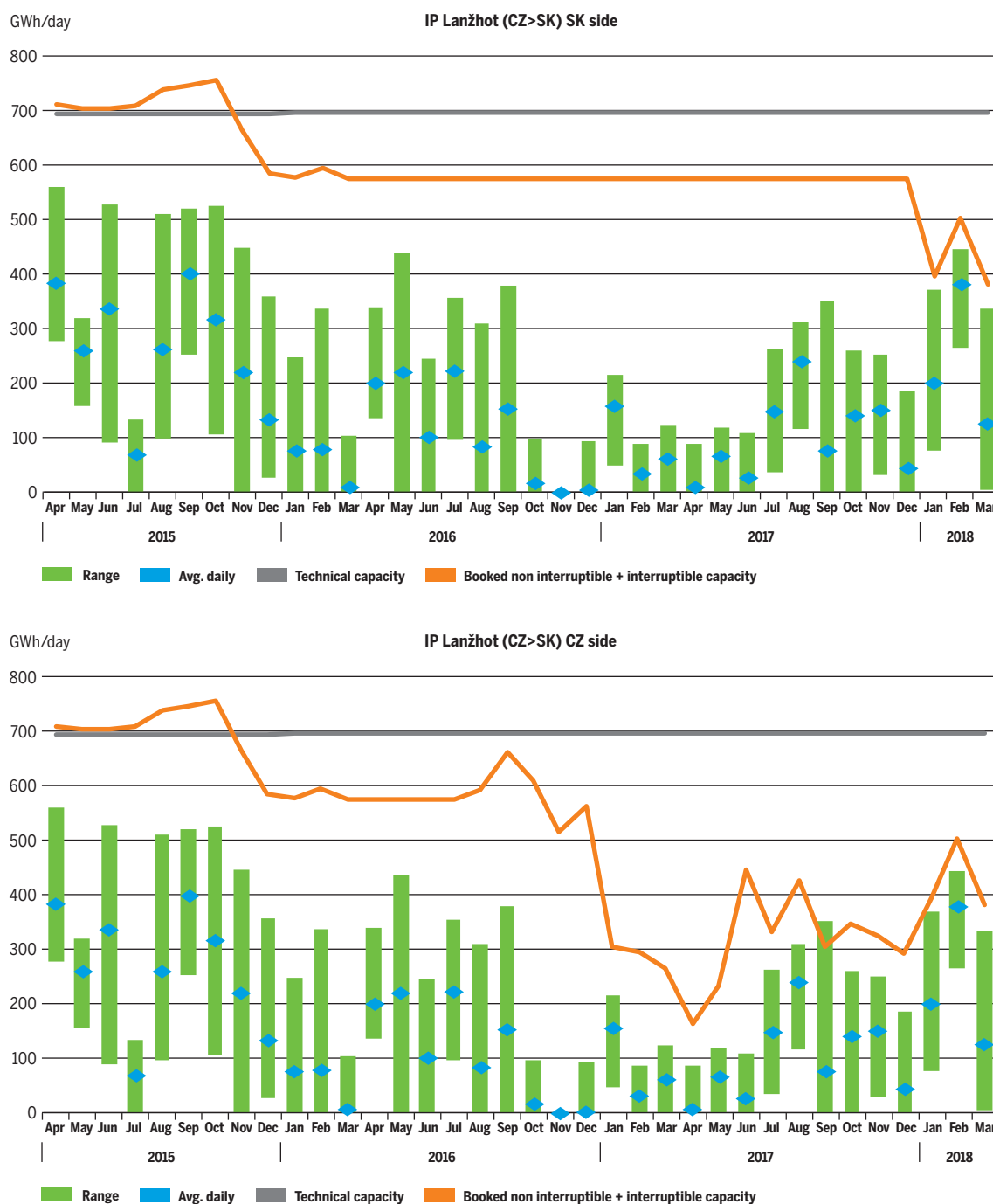


Figure C.9.1: Lanžhot (CZ>SK): Flows and booked capacity vs. technical capacity (monthly)

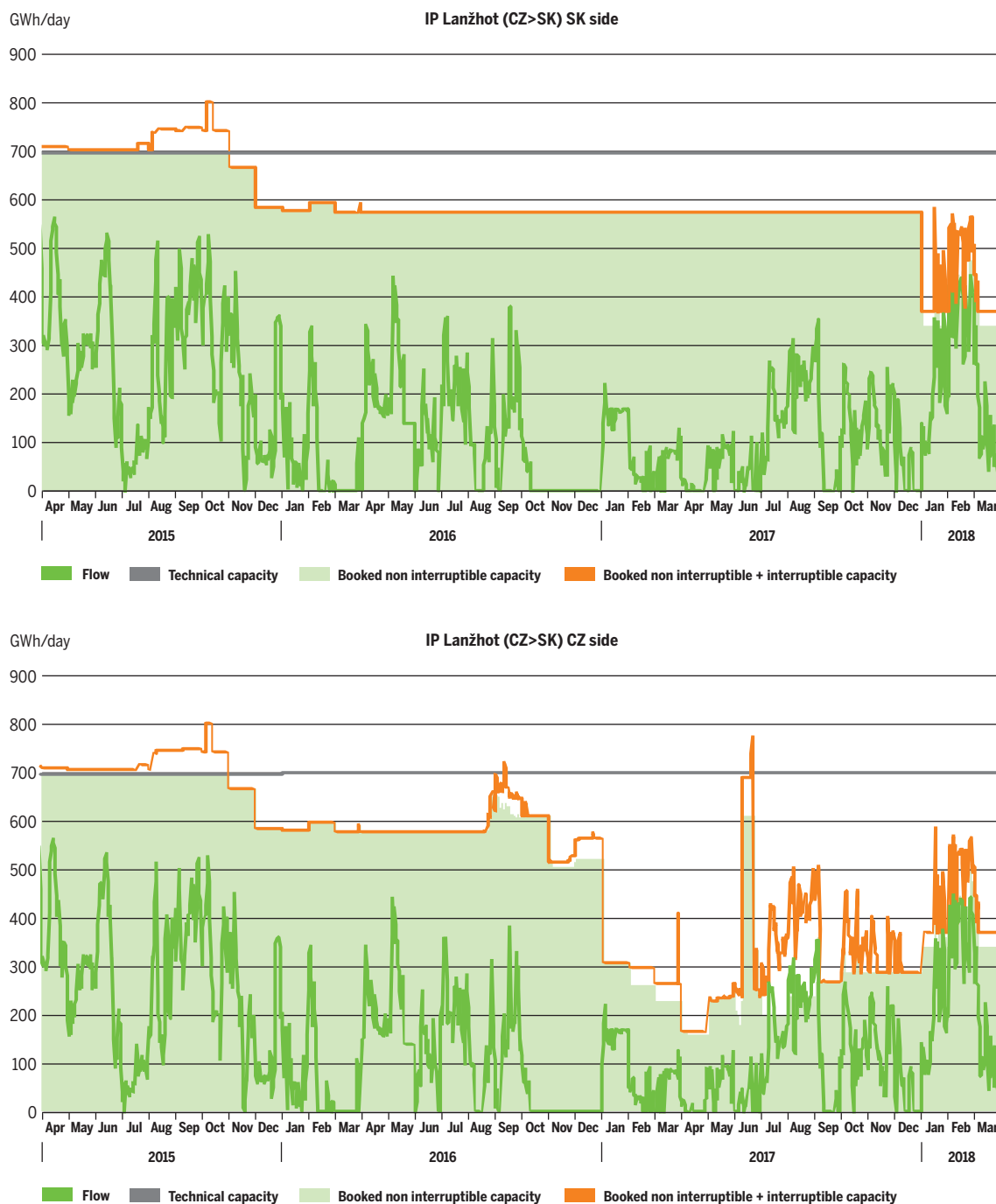


Figure C.9.2: Lanžhot (CZ>SK): Flows and booked capacity vs. technical capacity (daily)

BAUMGARTEN (EUSTREAM>GCA AND TAG) BIDIRECTIONAL

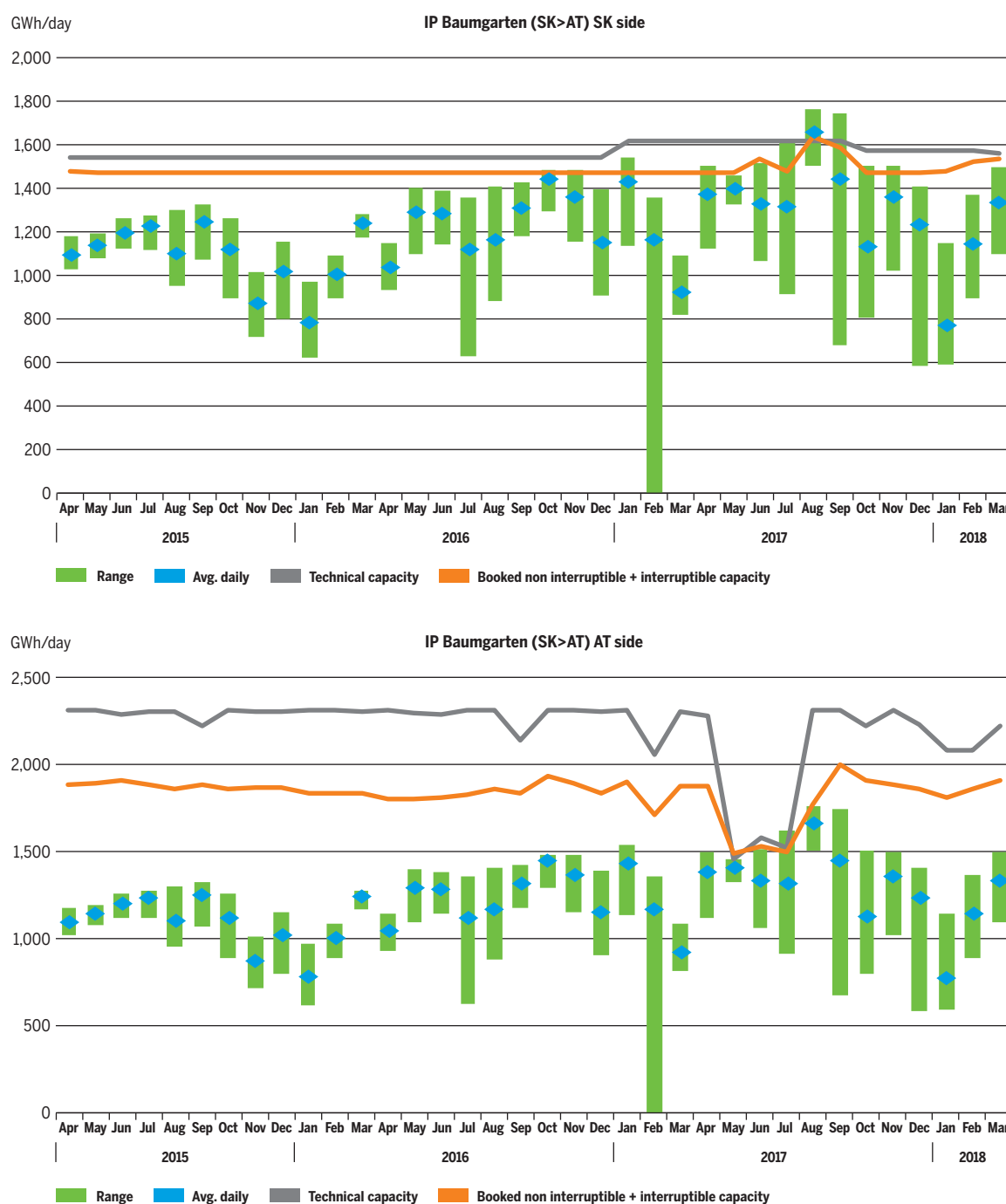


Figure C.10.1: Baumgarten (SK>AT): Flows and booked capacity vs. technical capacity (monthly)

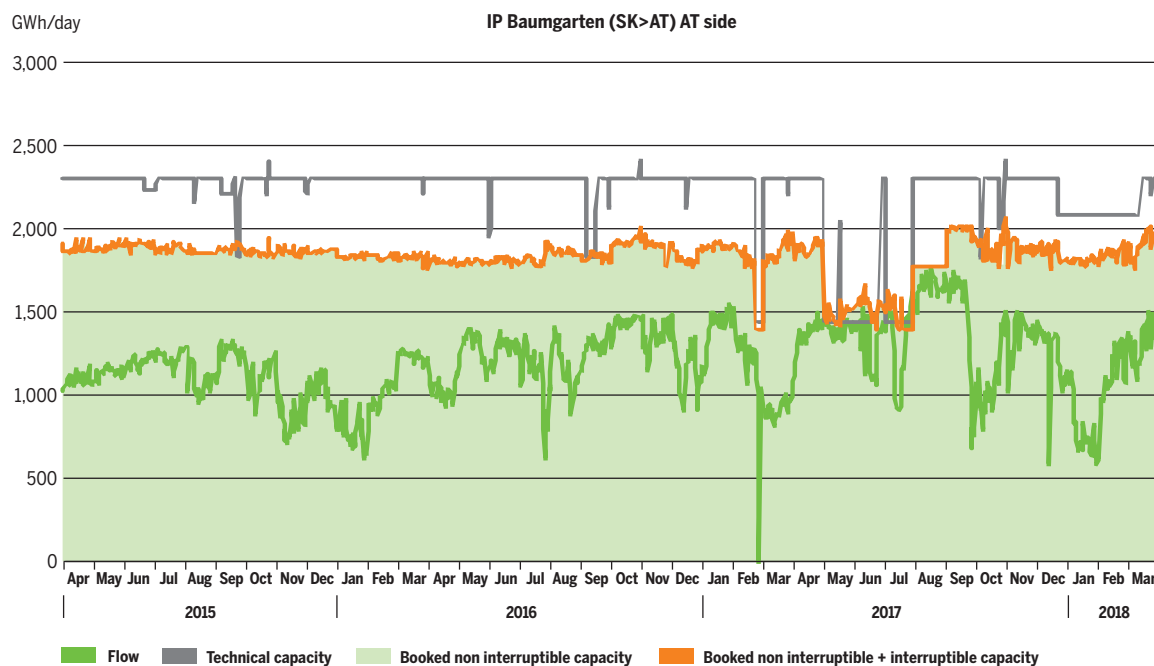
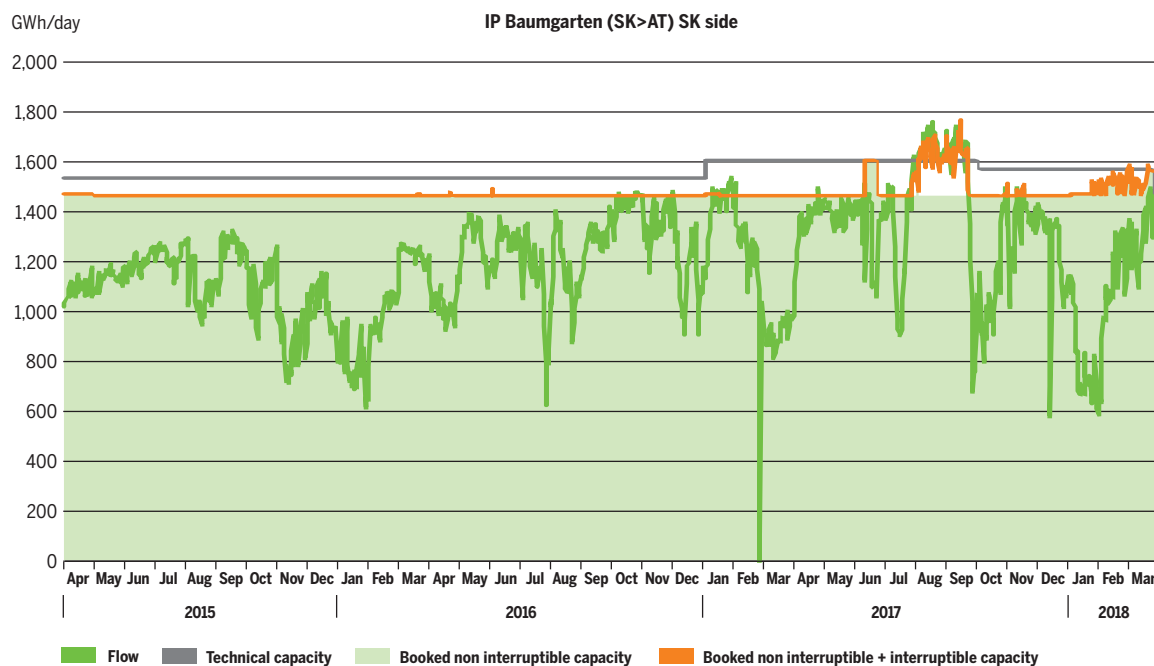


Figure C.10.2: Baumgarten (SK>AT): Flows and booked capacity vs. technical capacity (daily)

MOSONMAGYARÓVÁR (GCA>FGSZ) UNIDIRECTIONAL

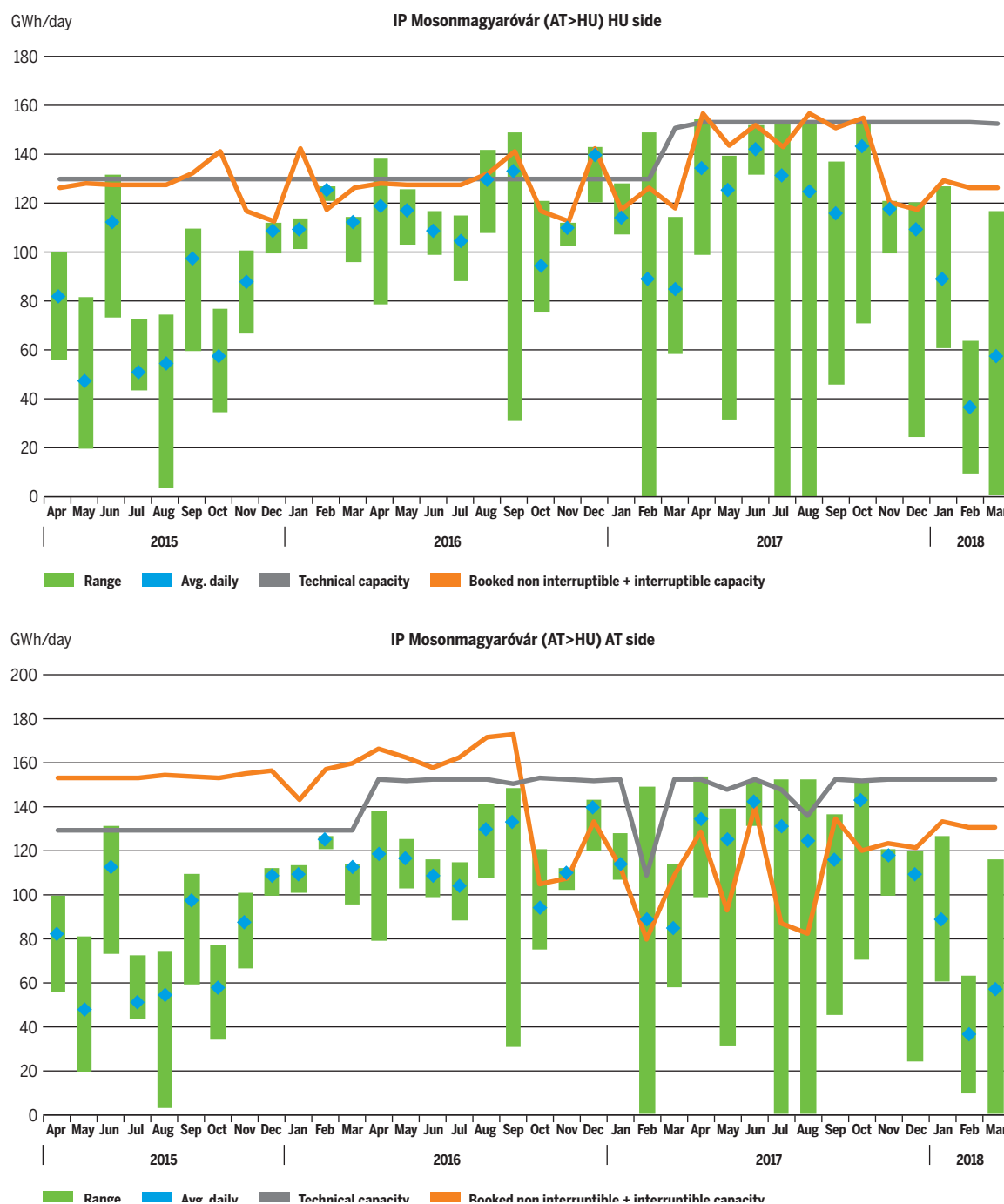


Figure C.11.1: Mosonmagyaróvár (AT>HU): Flows and booked capacity vs. technical capacity (monthly)

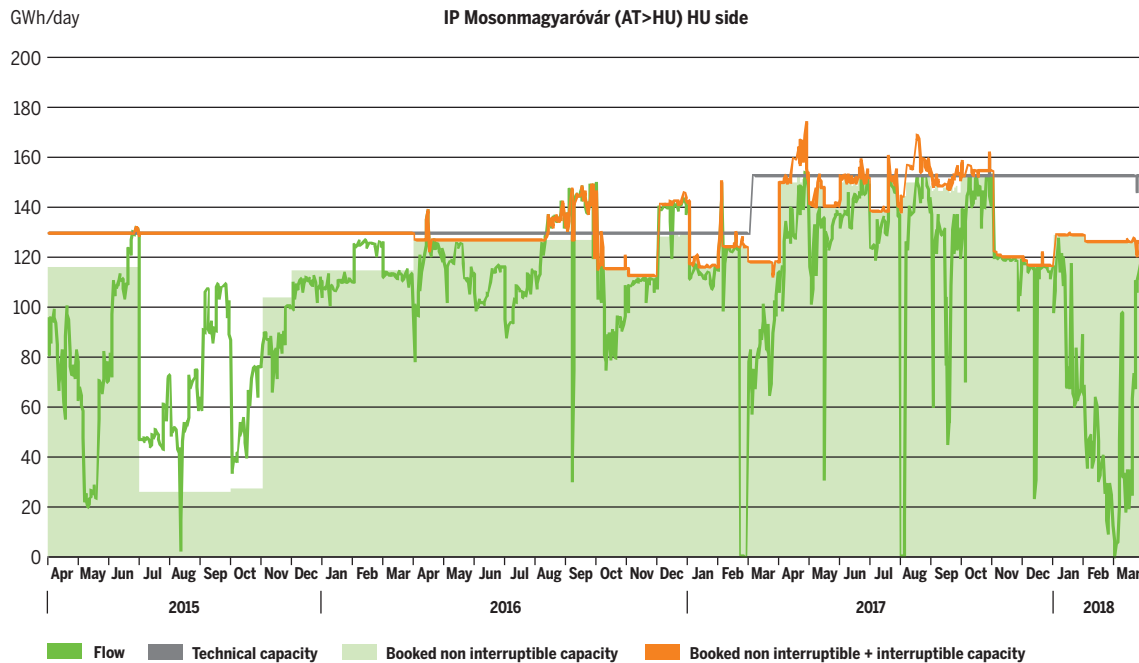
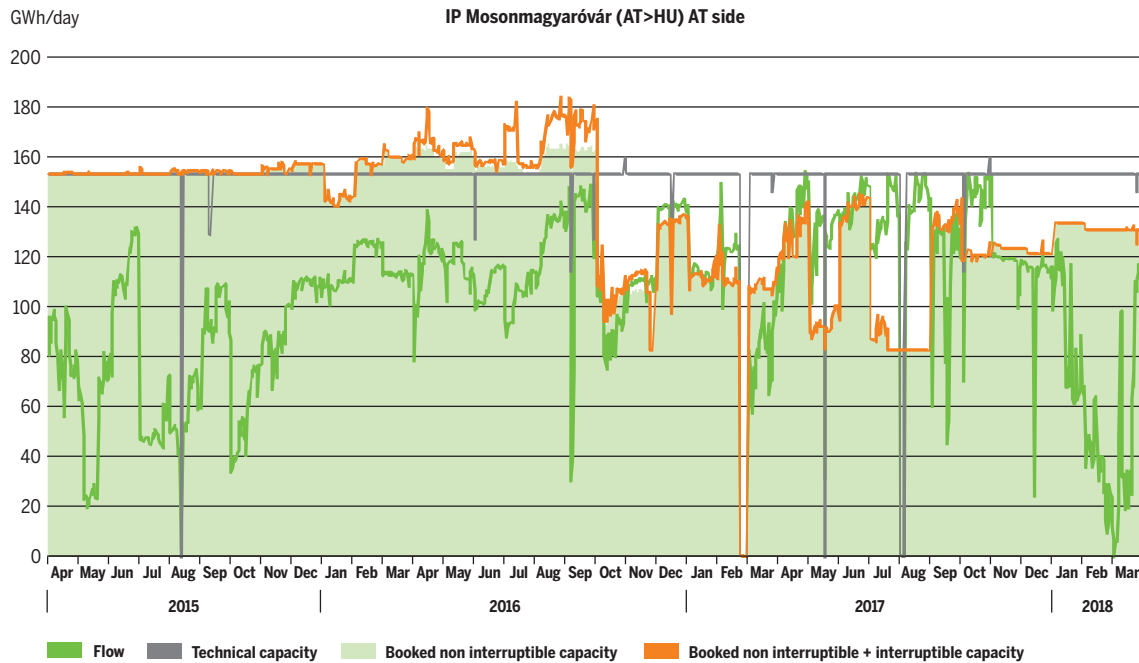


Figure C.11.2: Mosonmagyaróvár (AT>HU): Flows and booked capacity vs. technical capacity (daily)

KULATA/SIDIROKASTRO (BIDIRECTIONAL)



Figure C.12.1: Kulata/Sidirokastro (BG>GR): Flows and booked capacity vs. technical capacity (monthly)

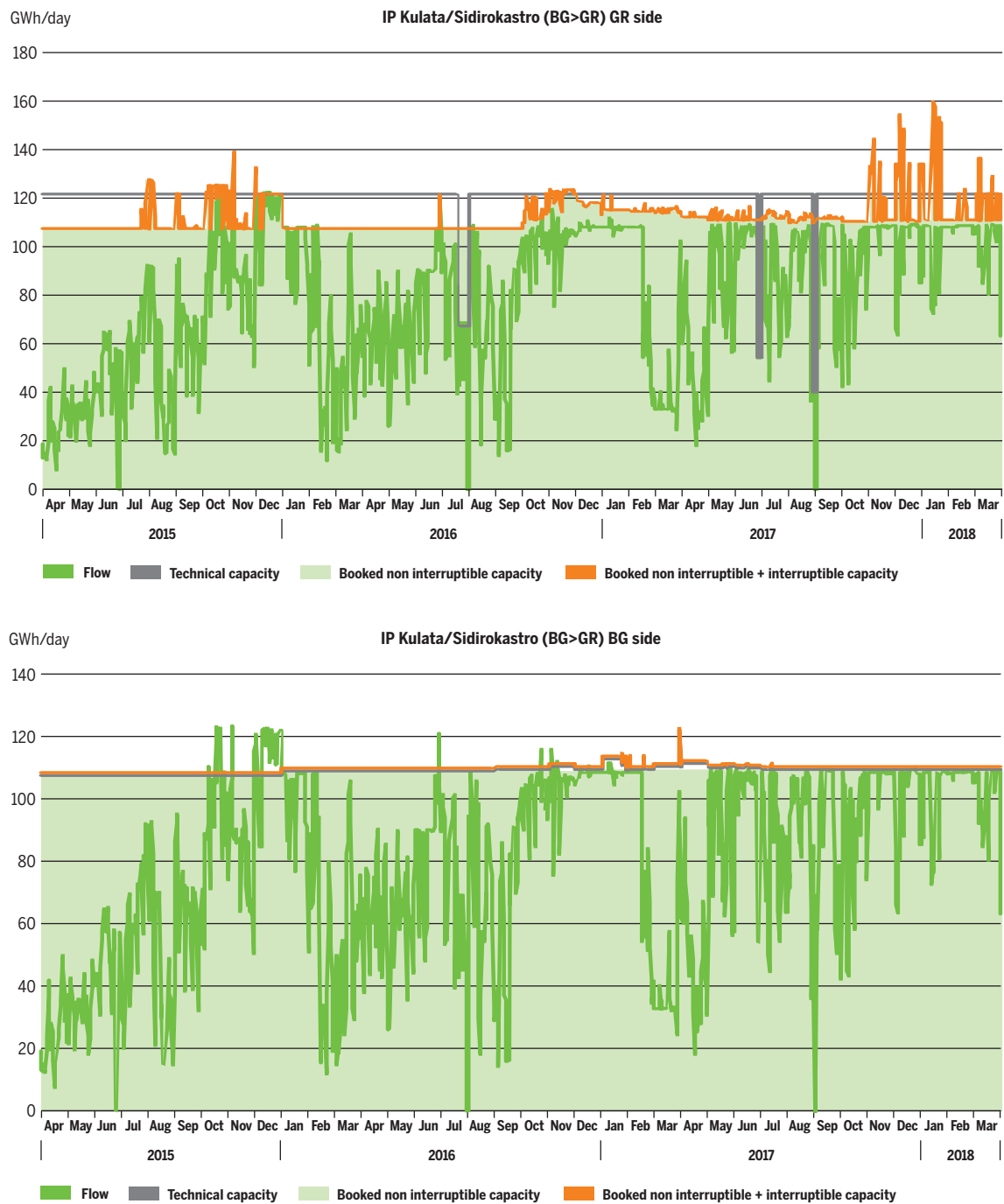


Figure C.12.2: Kulata/Sidirokastro (BG>GR): Flows and booked capacity vs. technical capacity (daily)

NEGRU VODA 1 (TRANSGAZ>BULGARTRANGAZ) BIDIRECTIONAL

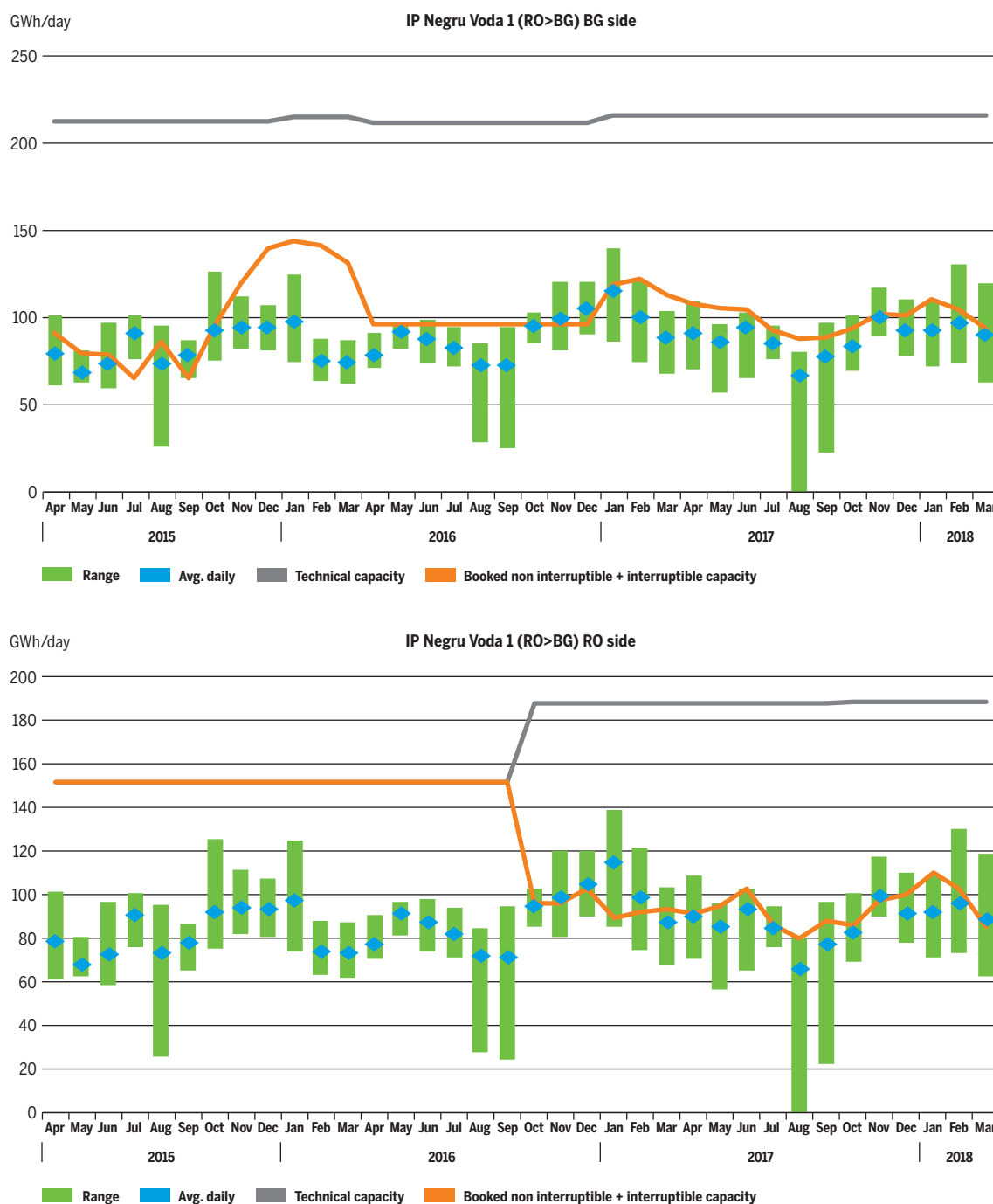


Figure C.13.1: Negru Voda 1 (RO>BG): Flows and booked capacity vs. technical capacity (monthly)

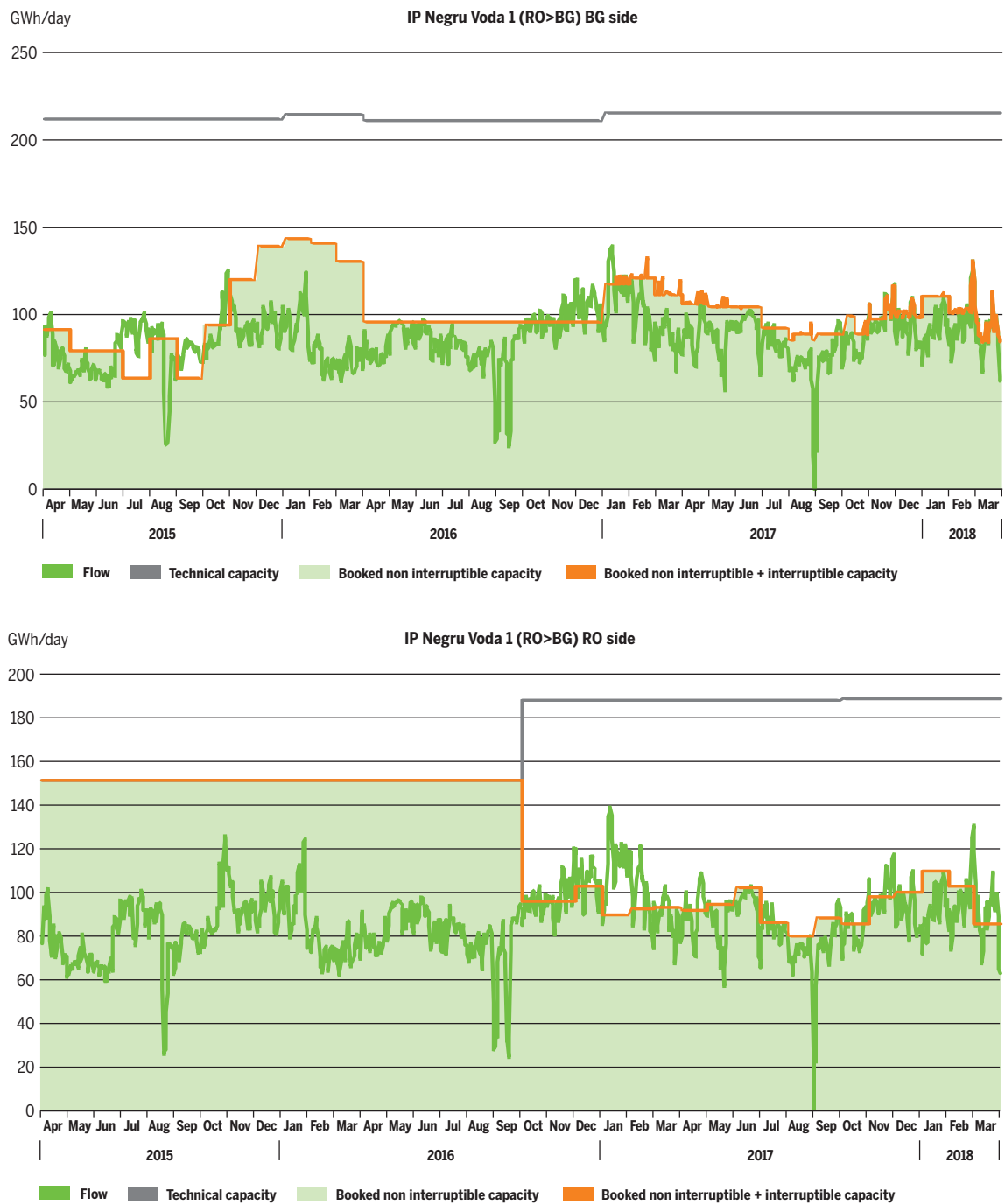


Figure C.13.2: Negru Voda 1 (RO>BG): Flows and booked capacity vs. technical capacity (daily)

NEGRU VODA 2 & 3 (TRANSGAZ>BULGARTRANGAZ) UNIDIRECTIONAL

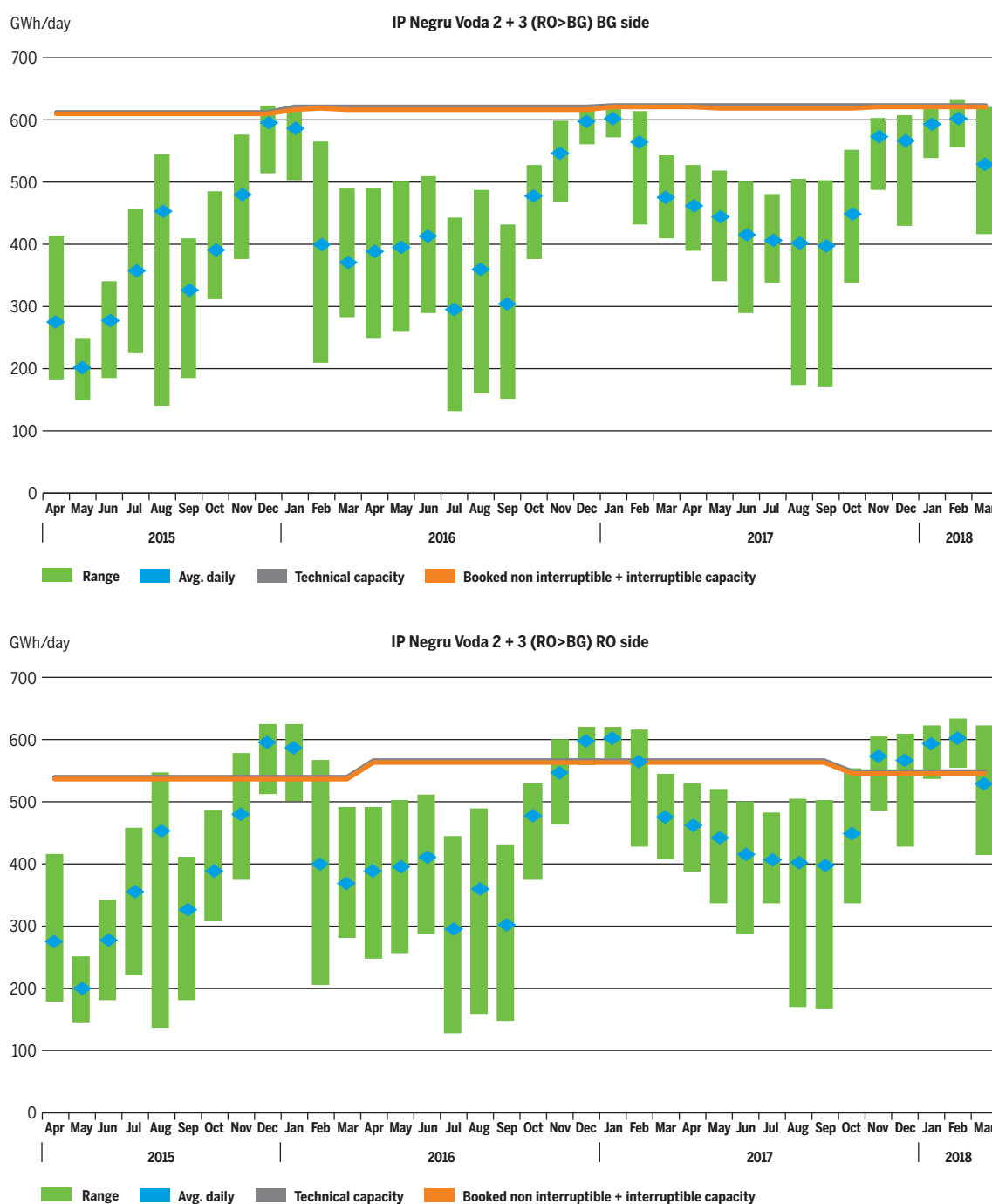


Figure C.14.1: Negru Voda 2 & 3 (RO>BG): Flows and booked capacity vs. technical capacity (monthly)

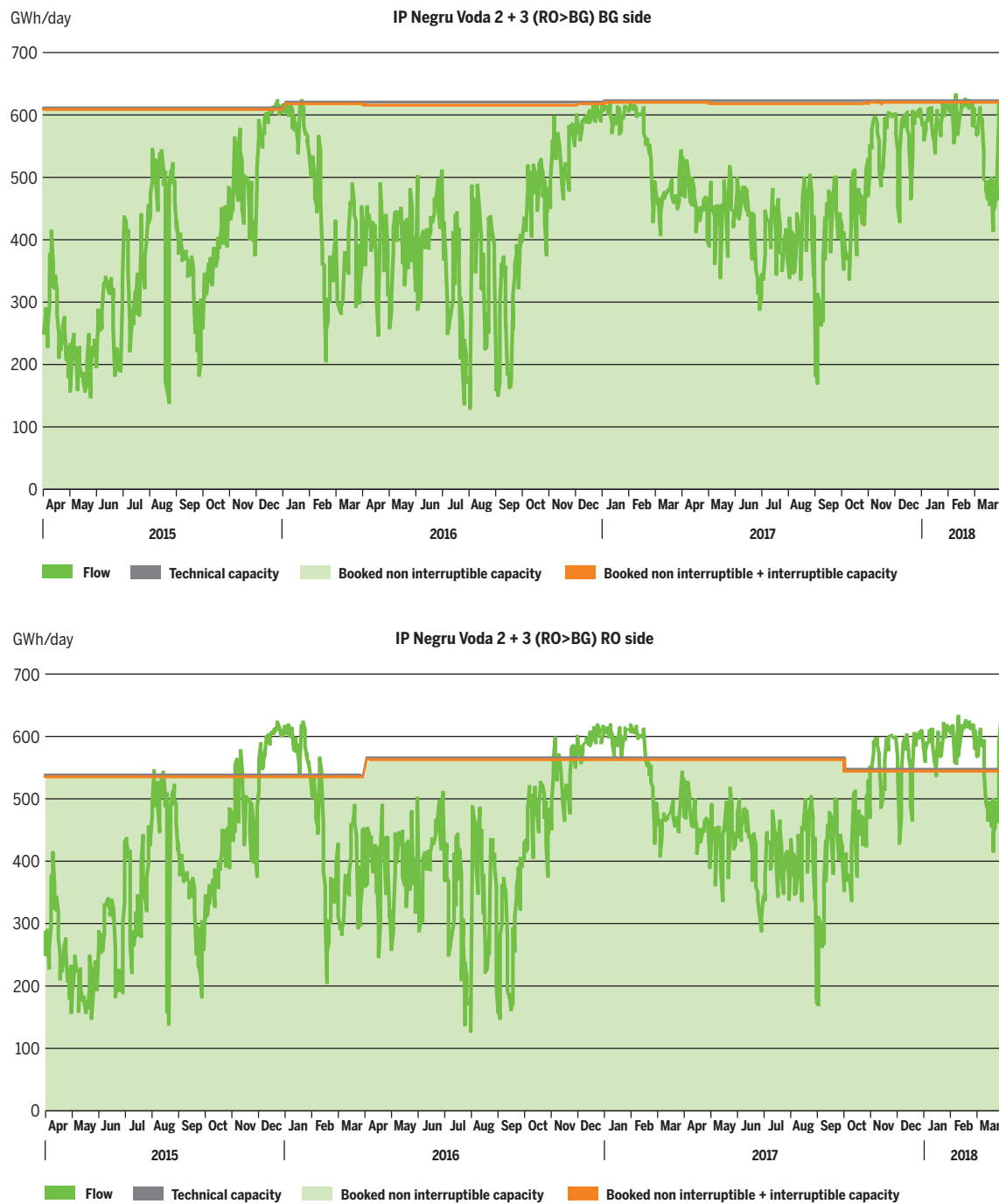


Figure C.14.2: Negru Voda 2 & 3 (RO>BG): Flows and booked capacity vs. technical capacity (daily)

RUSE/GIURGIU (TRANSGAZ>BULGARTRANGAZ) UNIDIRECTIONAL

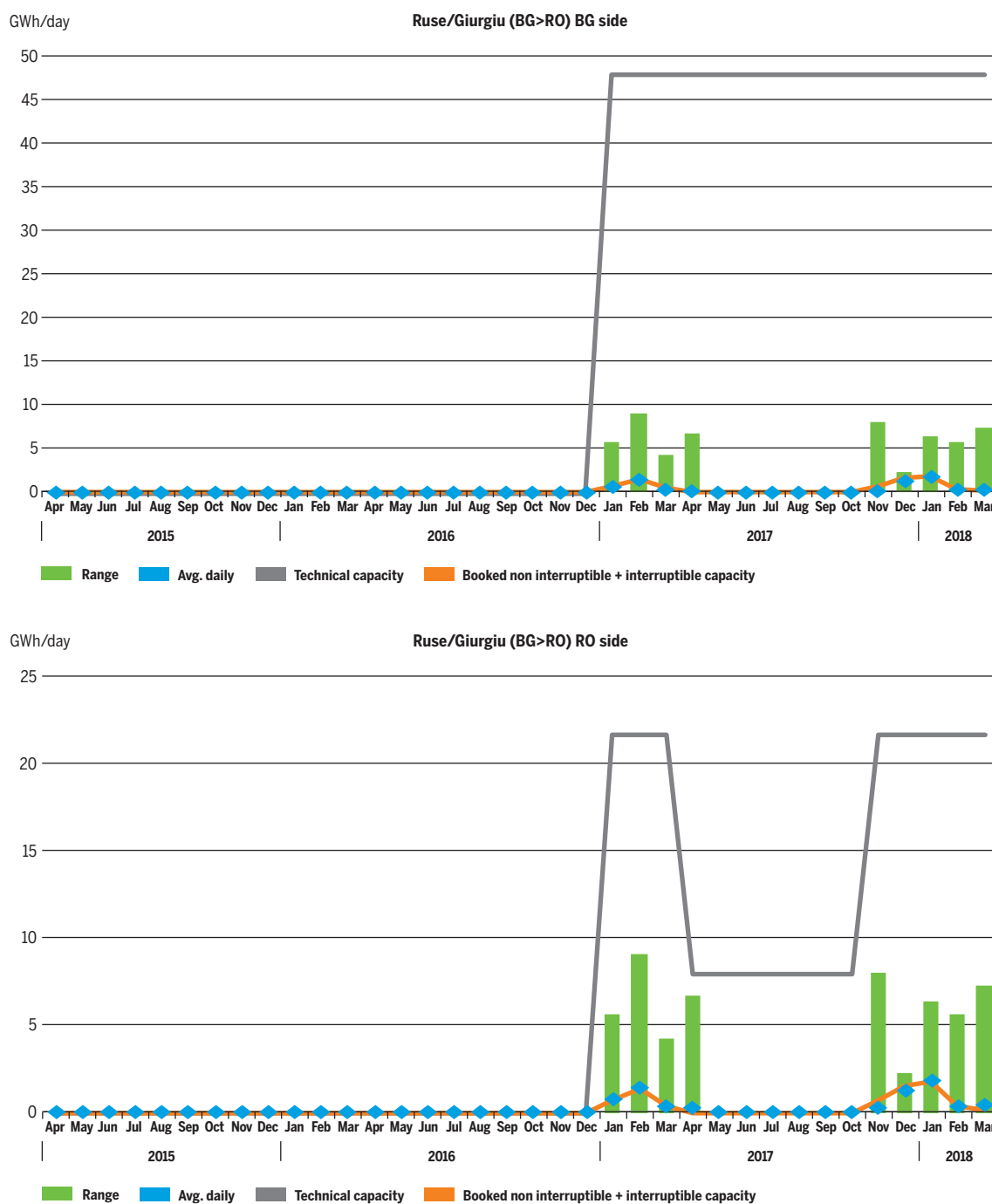


Figure C.15.1: Ruse/Giurgiu: Flows and booked capacity vs. technical capacity (monthly)

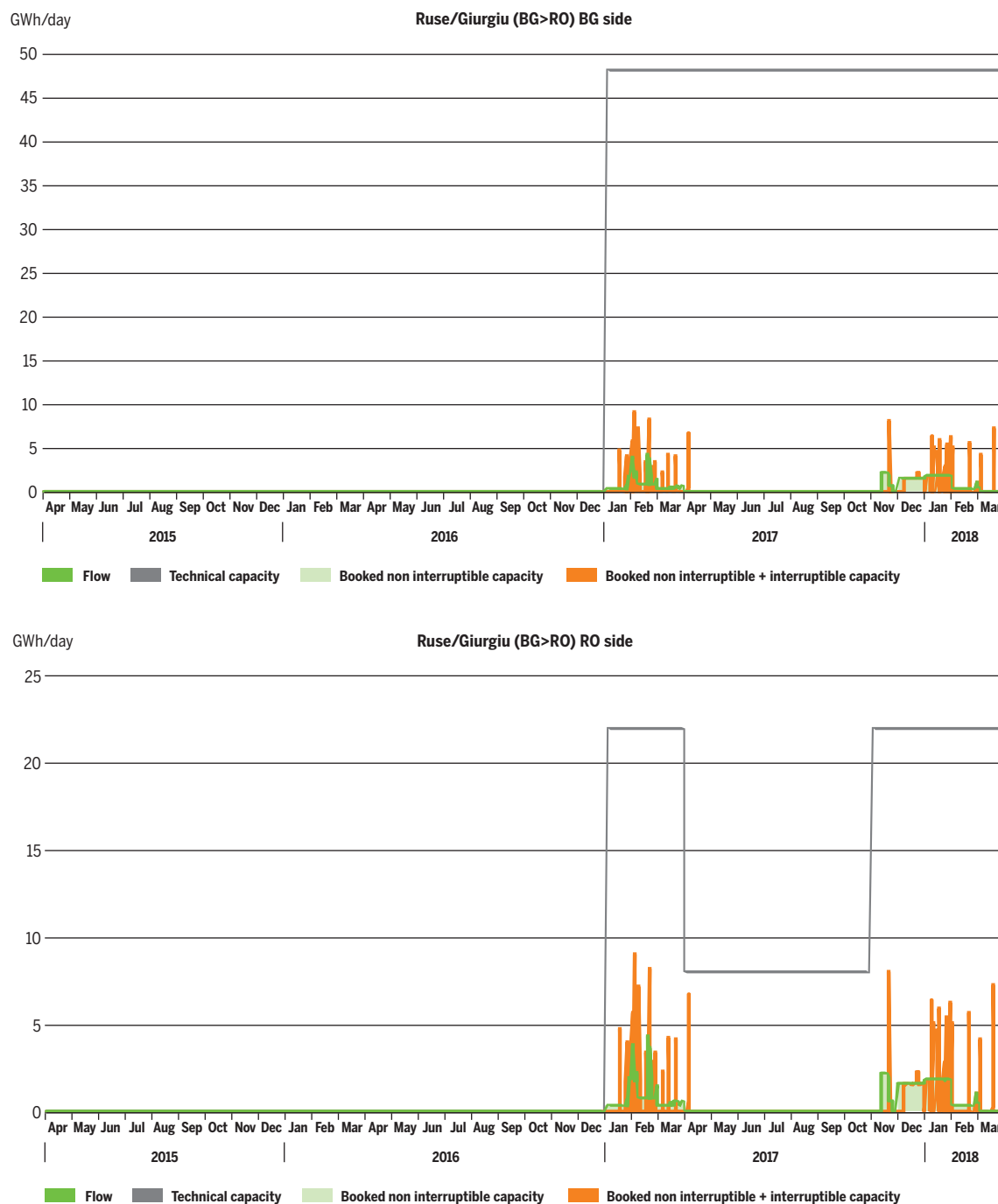


Figure C.15.2: Ruse/Giurgiu: Flows and booked capacity vs. technical capacity (daily)

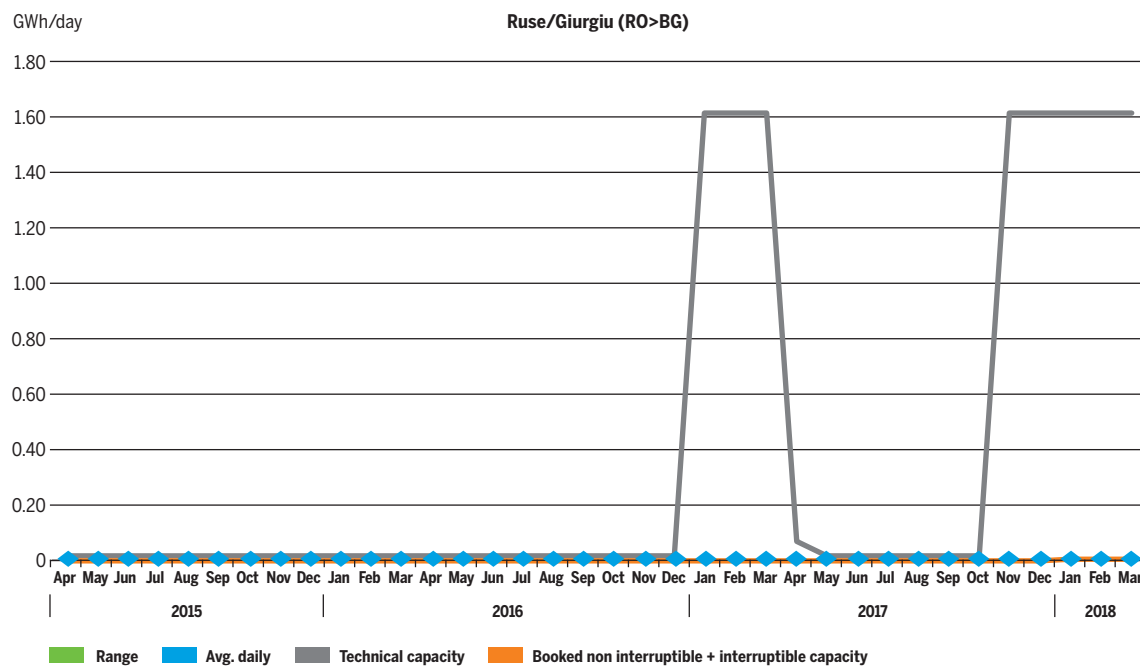


Figure C.15.3: Ruse/Giurgiu: Flows and booked capacity vs. technical capacity (monthly)

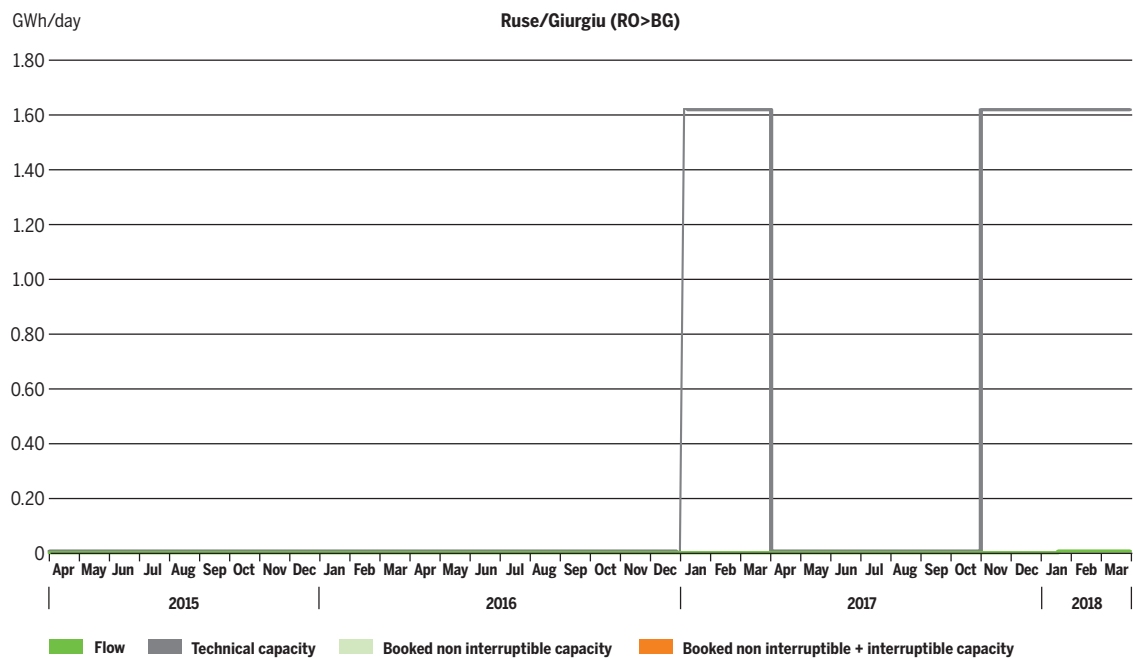


Figure C.15.4: Ruse/Giurgiu: Flows and booked capacity vs. technical capacity (daily)

CSANÁDPALOTA (FGSZ>TRANSGAZ) BIDIRECTIONAL

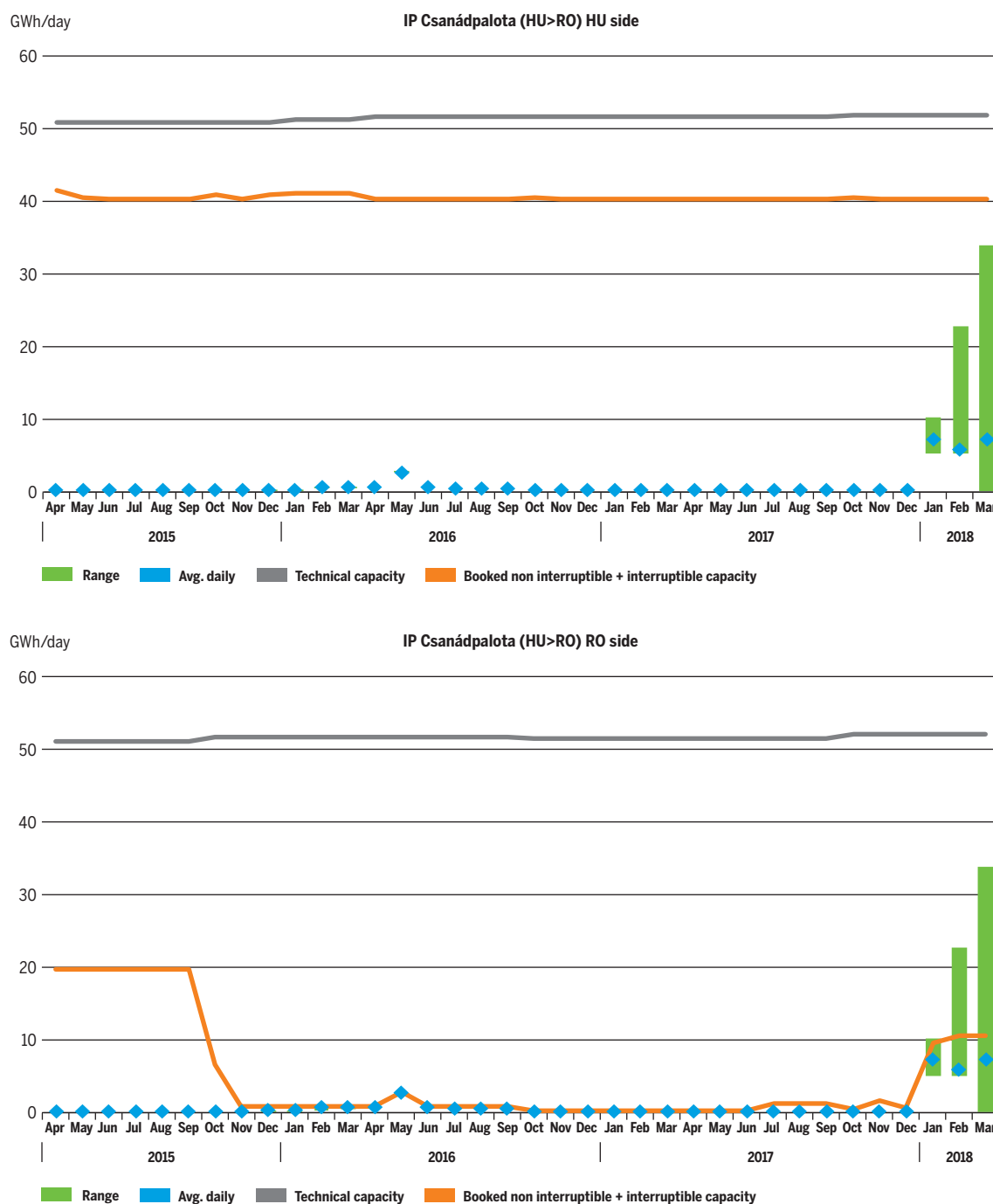


Figure C.16.1: Csanádpalota (HU>RO): Flows and booked capacity vs. technical capacity (monthly)

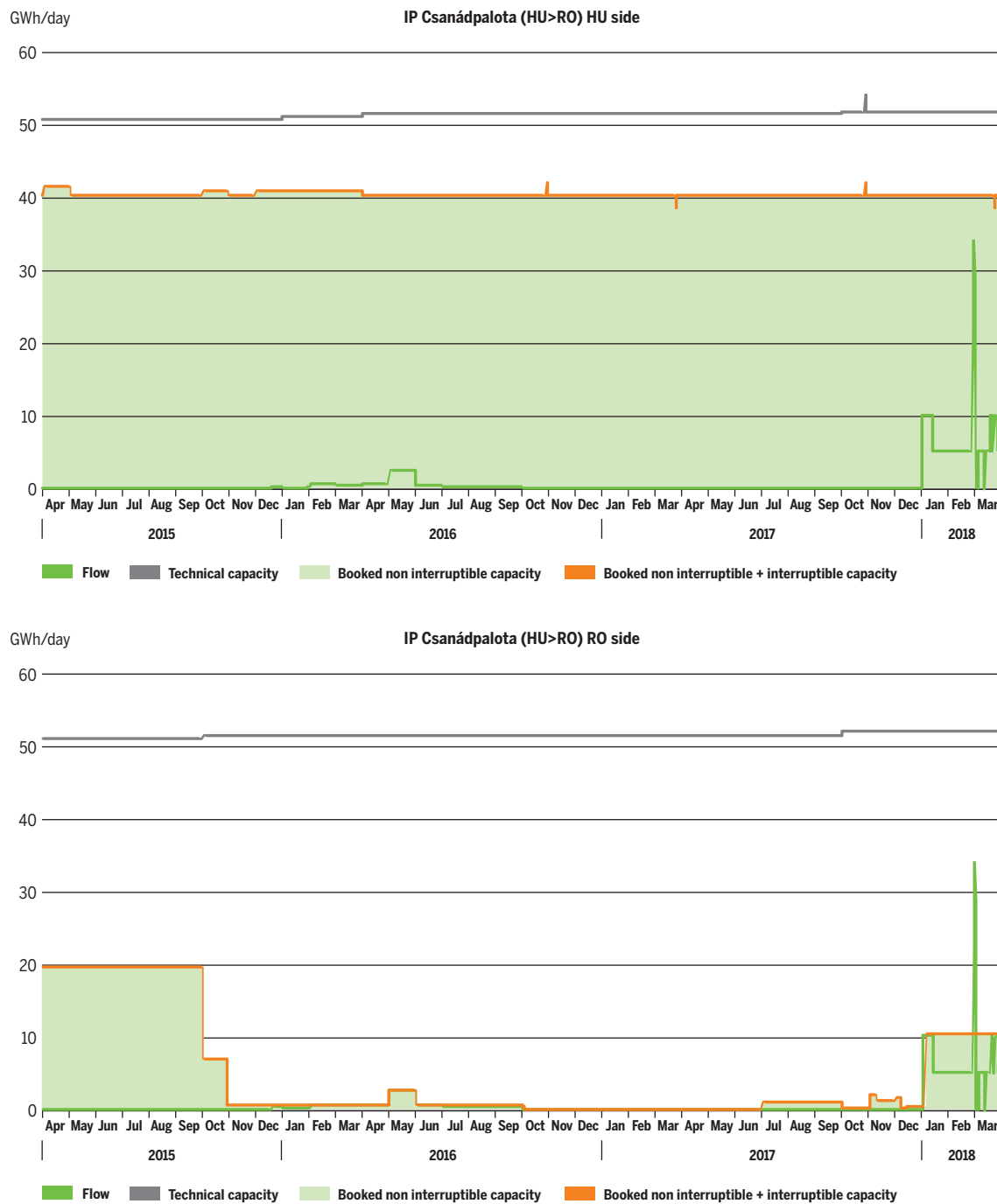


Figure C.16.2: Csanádpalota (HU>RO): Flows and booked capacity vs. technical capacity (daily)

CSANÁDPALOTA (TRANSGAZ >FGSZ) BIDIRECTIONAL

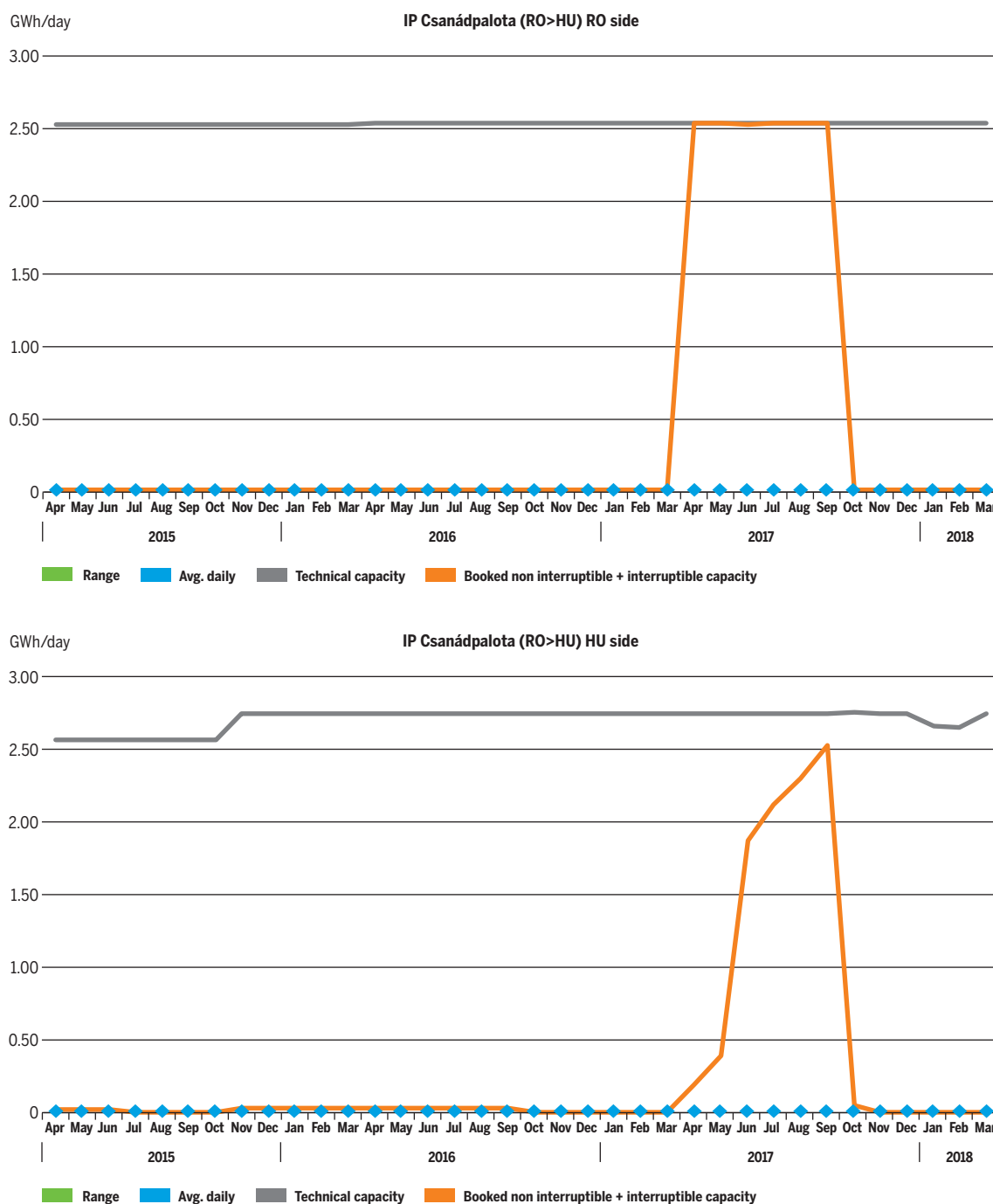


Figure C.17.1: Csanádpalota (RO>HU): Flows and booked capacity vs. technical capacity (monthly)

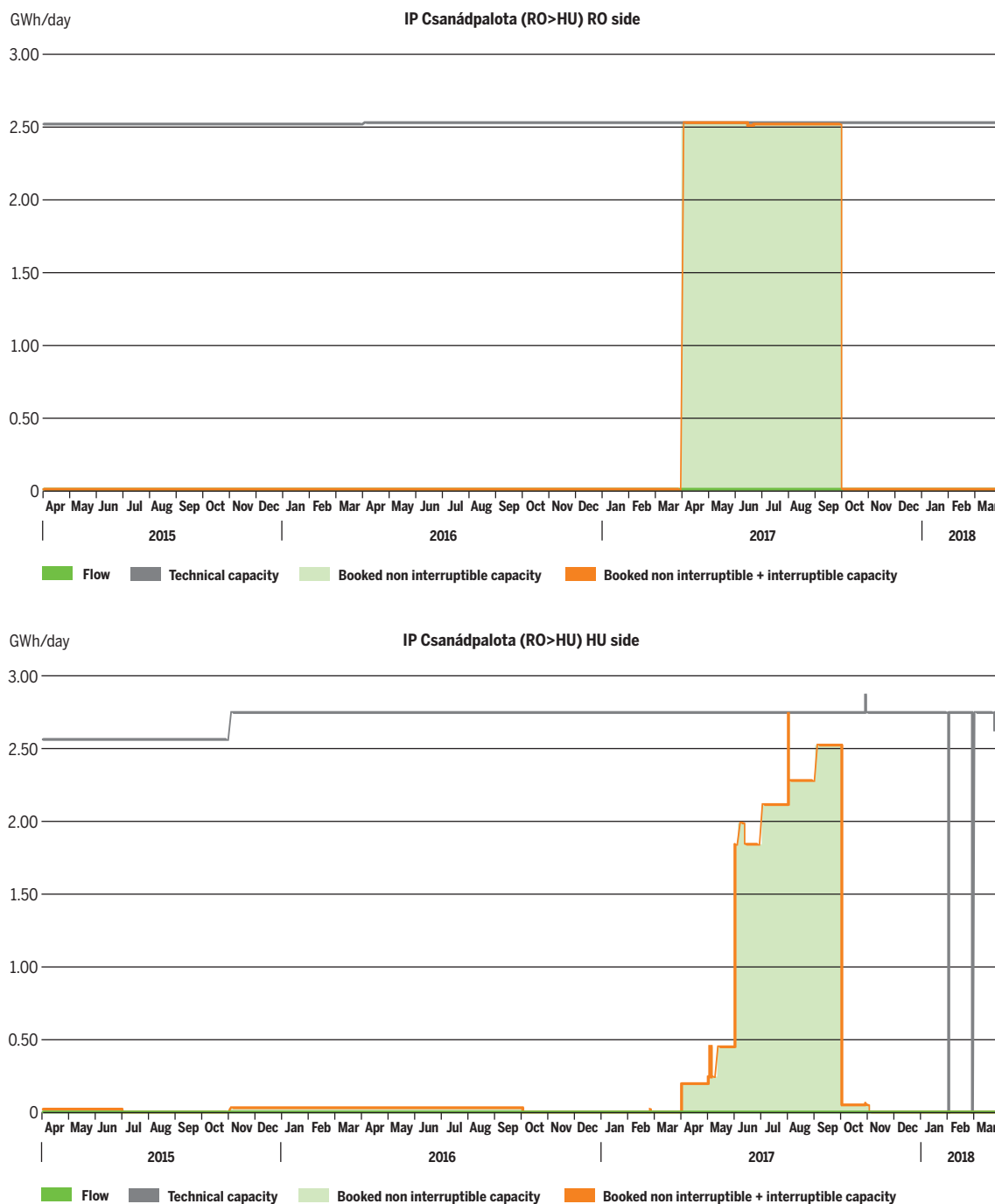


Figure C.17.2: Csanádpalota (RO>HU): Flows and booked capacity vs. technical capacity (daily)

DRAVASZERDAHELY (FGSZ>PLINACRO) BIDIRECTIONAL

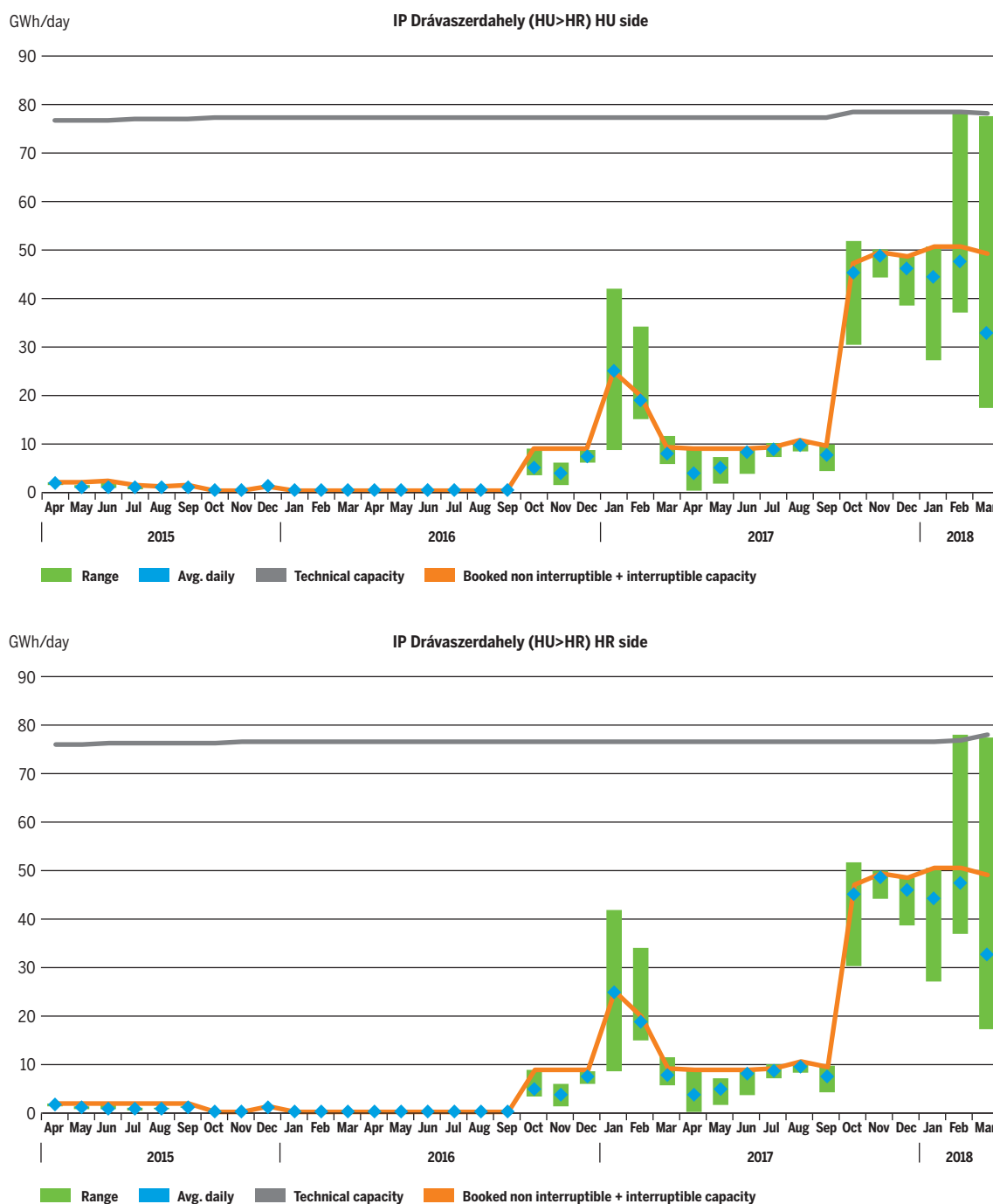


Figure C.18.1: Dravaszerdahely (HU>HR): Flows and booked capacity vs. technical capacity (monthly)

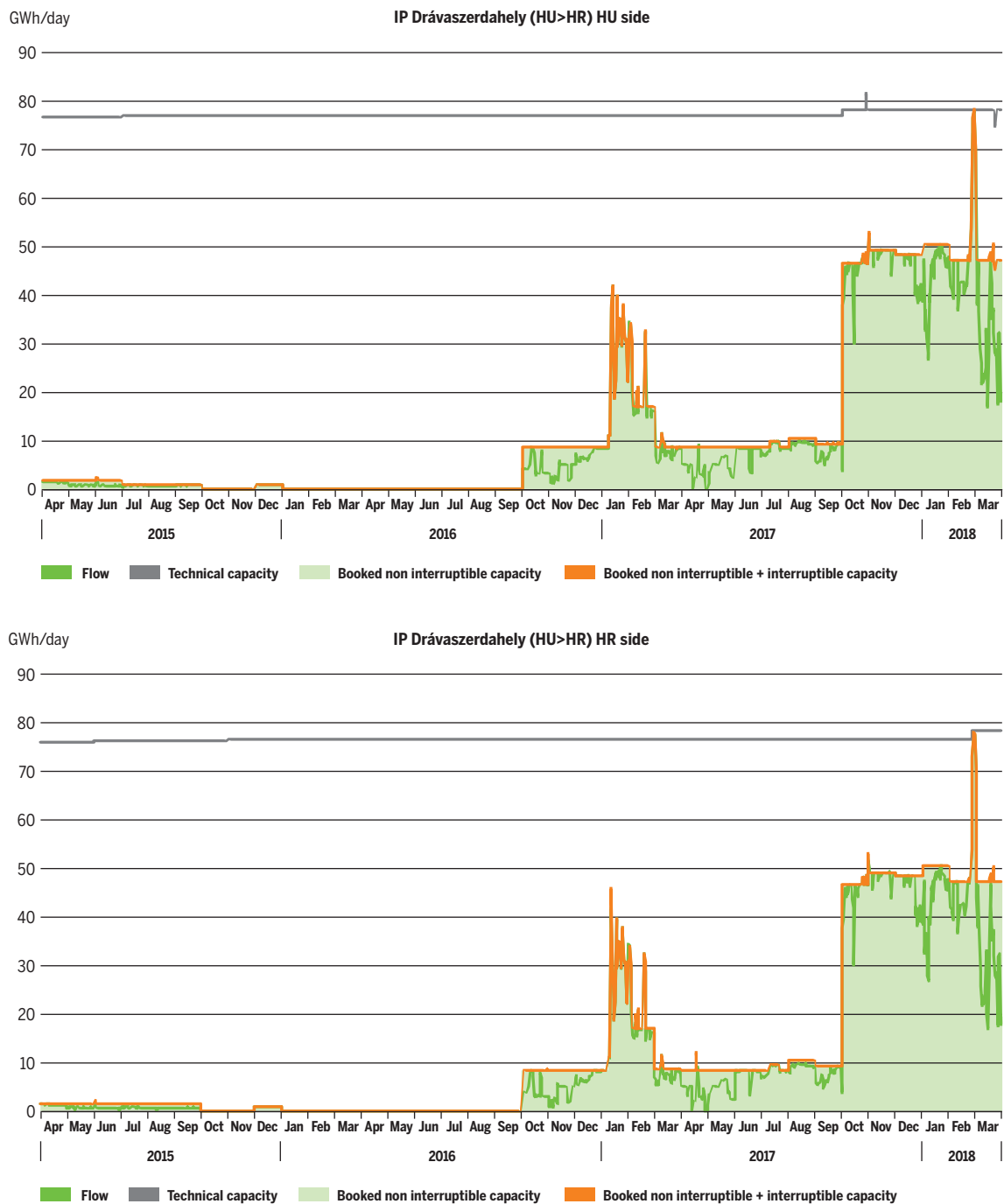


Figure C.18.2: Dravaszerdahely (HU>HR): Flows and booked capacity vs. technical capacity (daily)

DRAVASZERDAHELY (PLINACRO>FGSZ) BIDIRECTIONAL

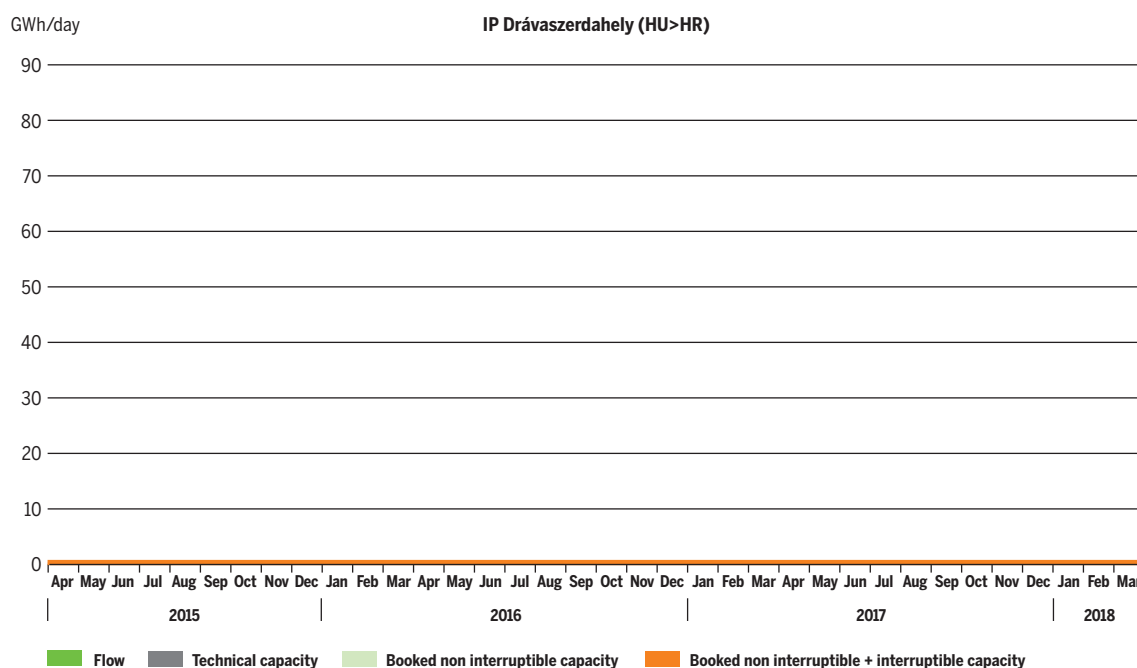
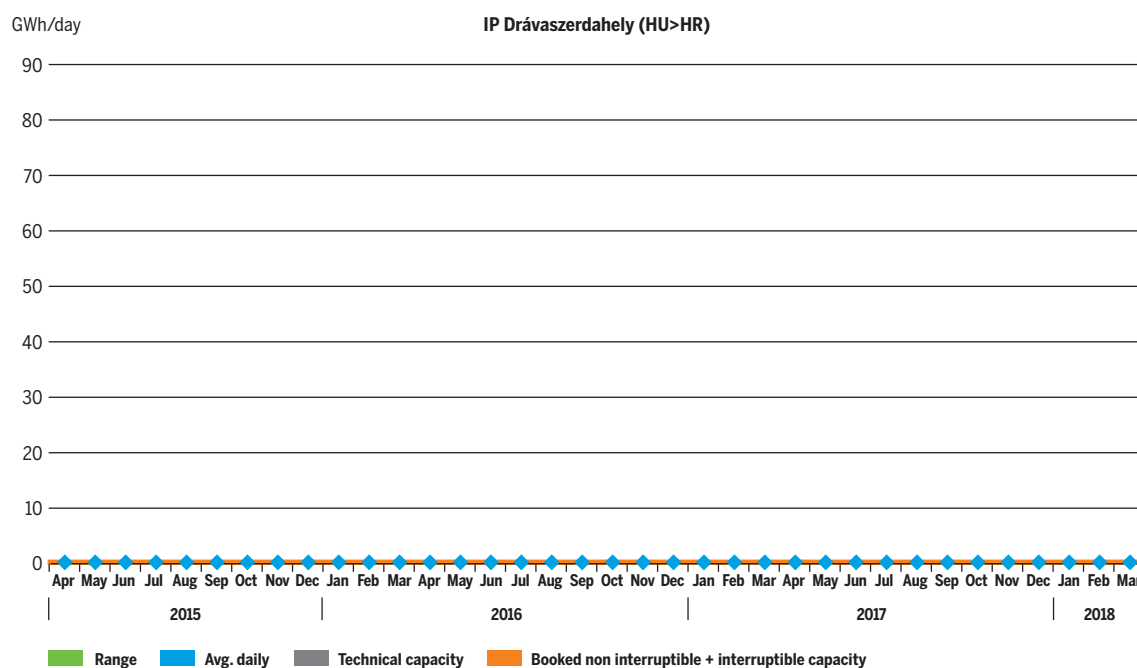


Figure C.19: Dravaszerdahely (HR>HU): Flows and booked capacity vs. technical capacity (monthly and daily)

VEĽKÉ ZLIEVCE (EUSTREAM>MAGYAR GAZ TRANZIT ZRT.) UNIDIRECTIONAL

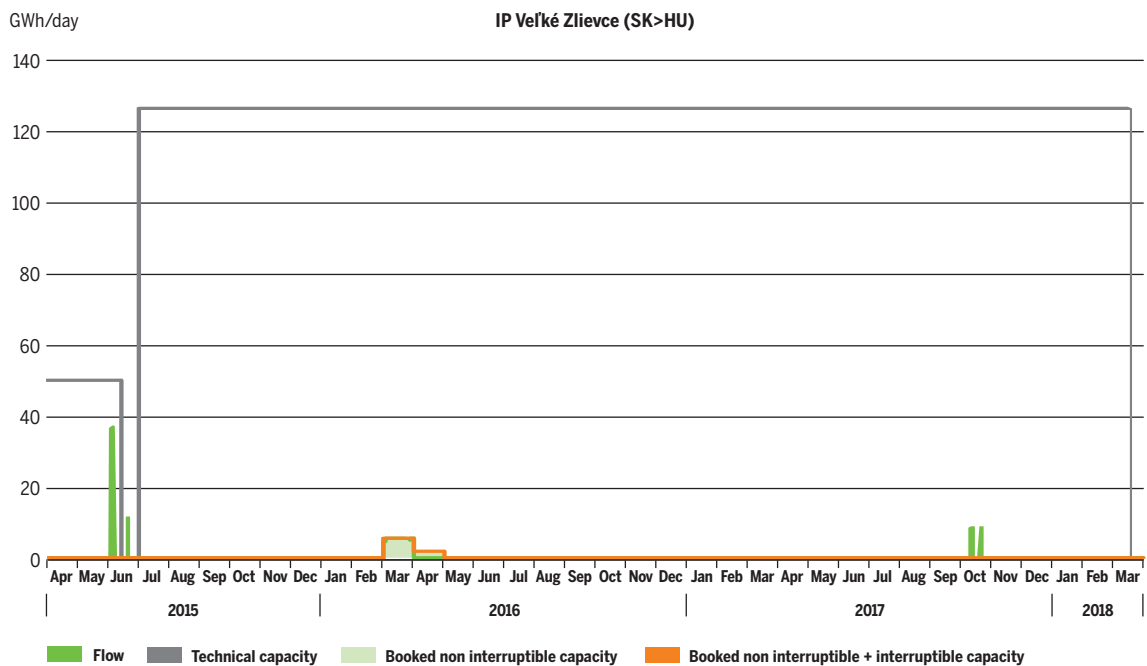
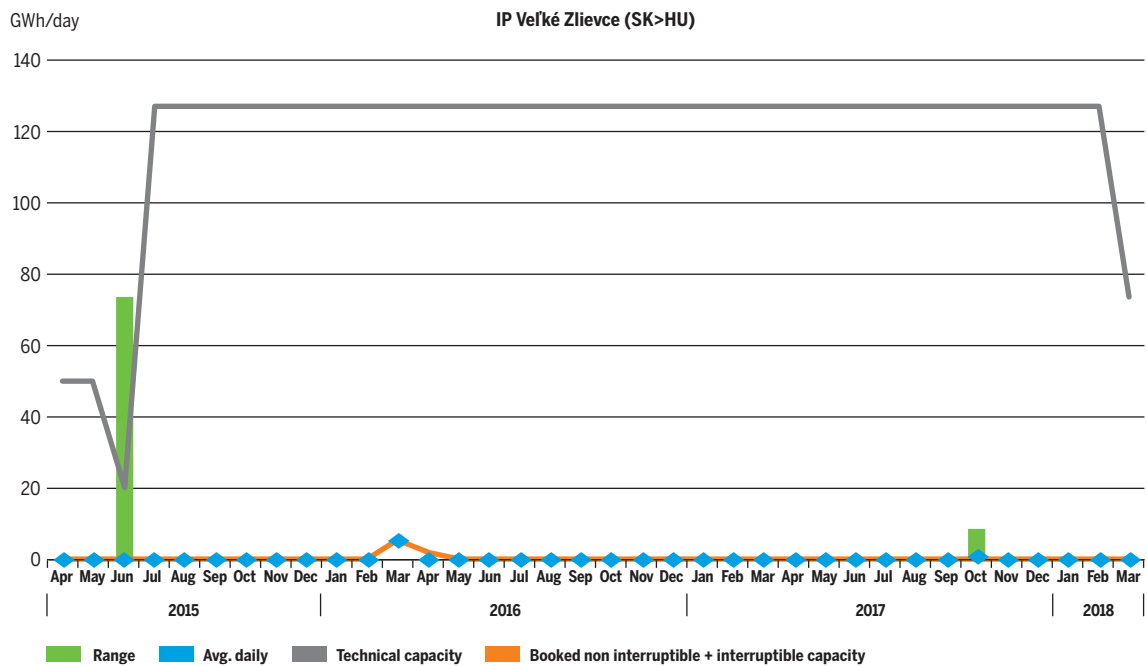


Figure C.20: Veľké Zlievce (SK>HU): Flows and booked capacity vs. technical capacity (monthly and daily)

B CROSS-BORDER IP WITH NON EU COUNTRIES

IMPORT

MAZARA DEL VALLO (TMPC>SNAM RETE GAS)

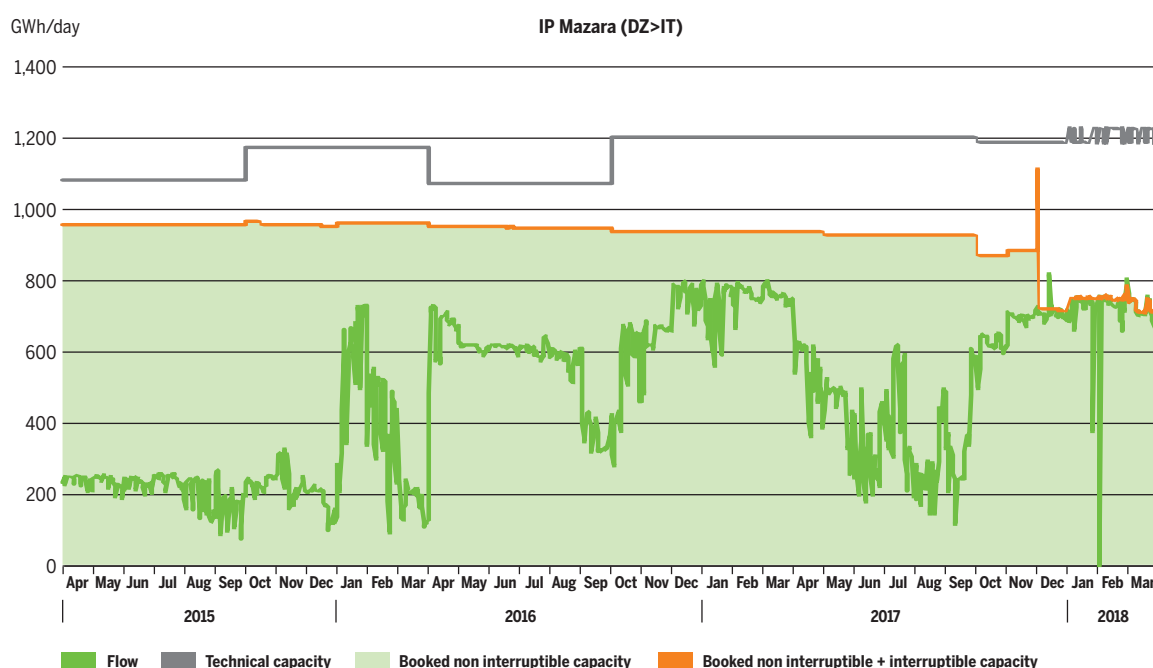
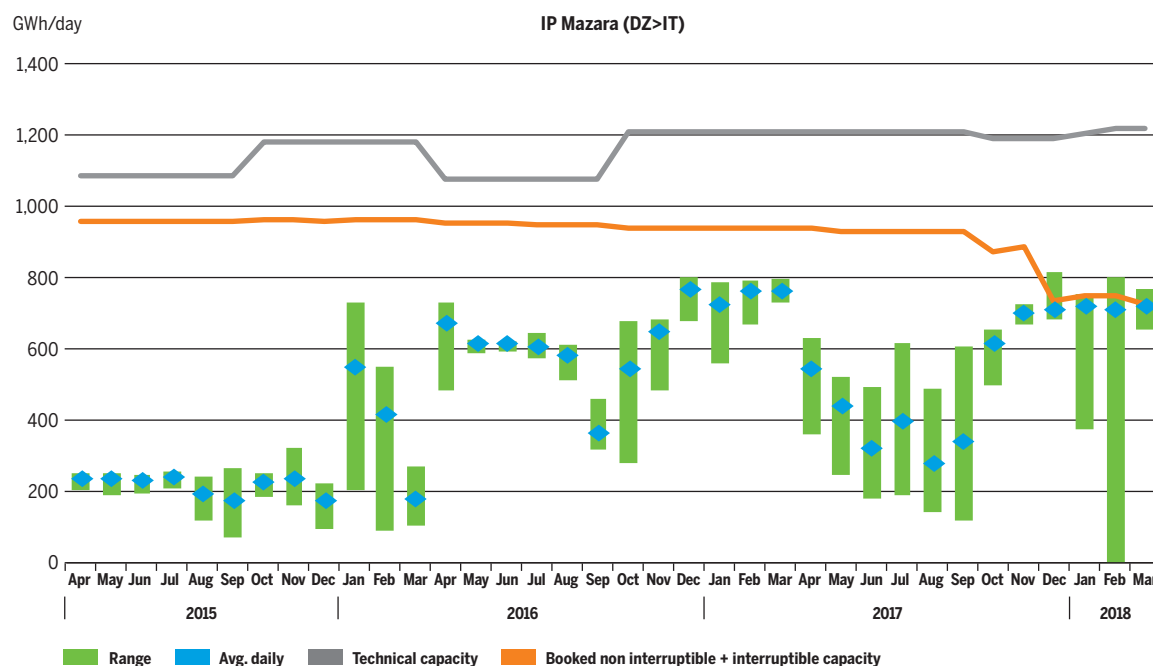


Figure C.21: Mazara del Vallo (DZ>IT): Flows and booked capacity vs. technical capacity (monthly and daily)

PASSO GRIES (SWISSGAS>SNAM RETE GAS)

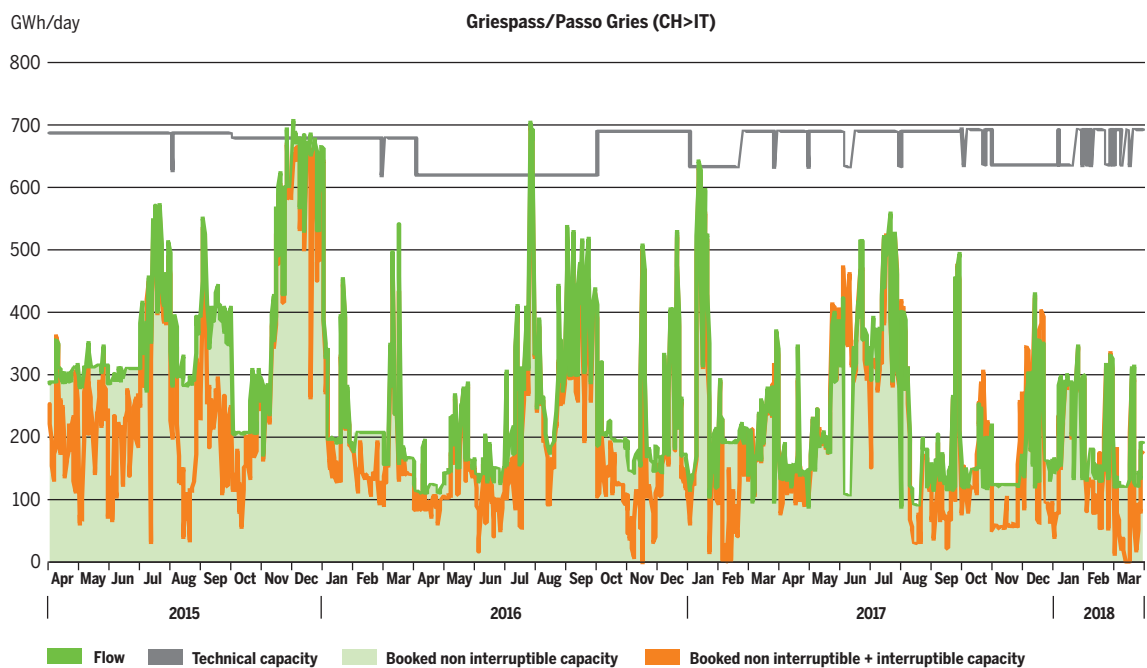
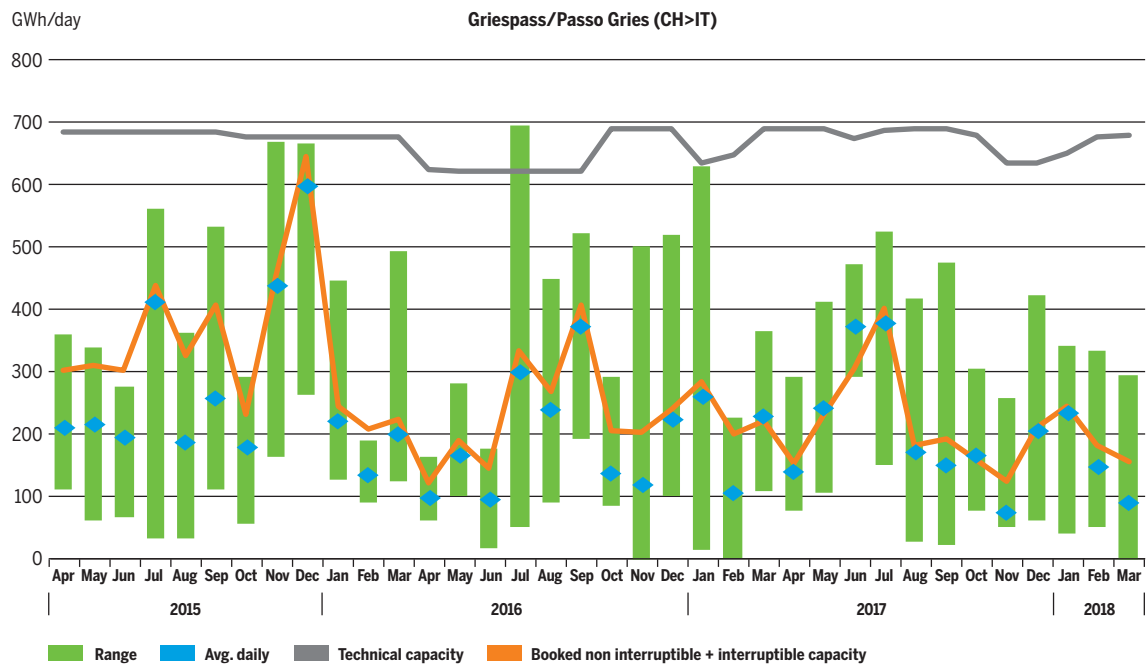


Figure C.22: Passo Gries (CH>IT): Flows and booked capacity vs. technical capacity (monthly and daily)

GELA (GREEN STREAM>SNAM RETE GAS)

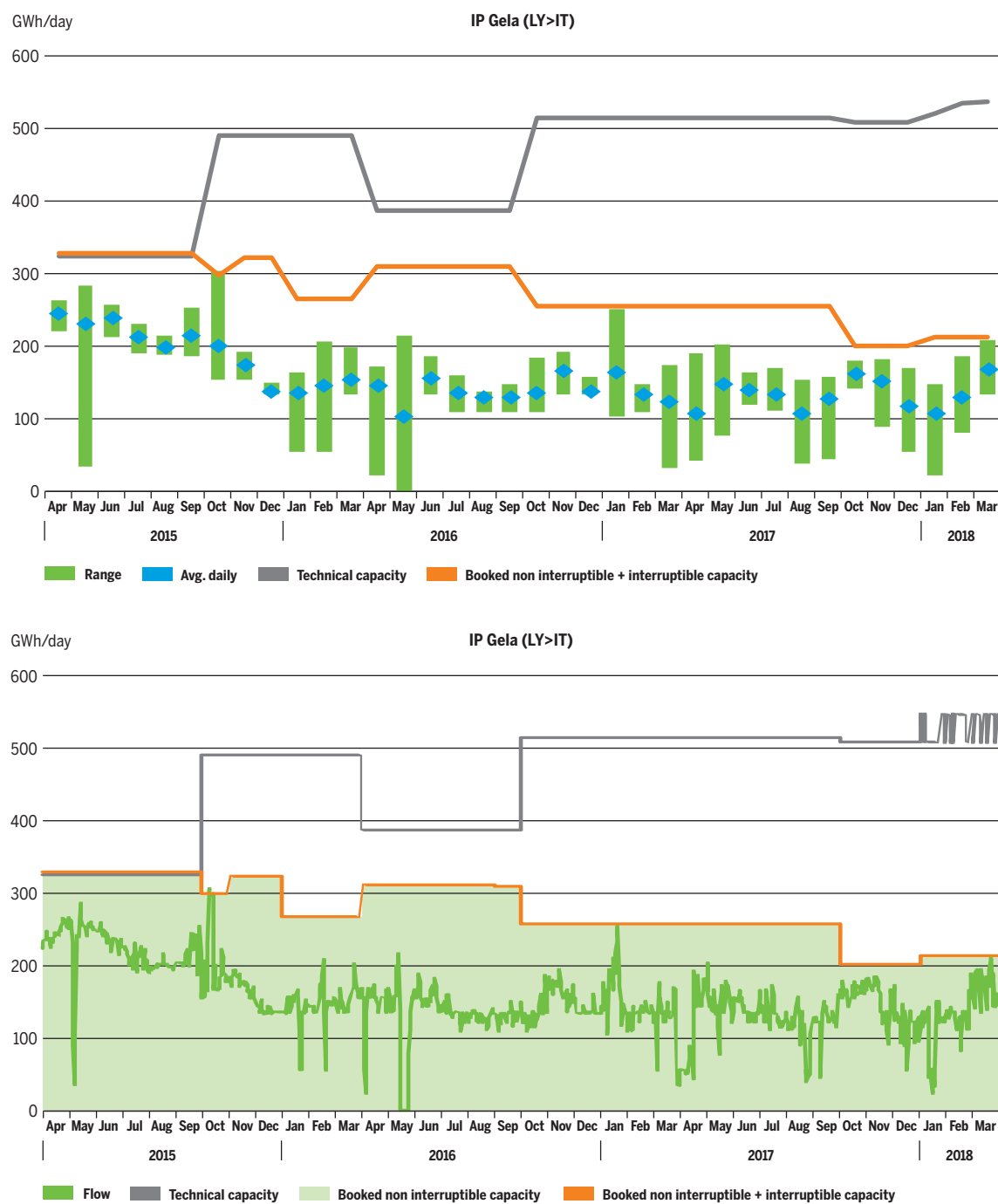


Figure C.23: Gela (LY>IT): Flows and booked capacity vs. technical capacity (monthly and daily)

UZHGOROD/VEĽKE KAPUŠANY (UKRTRANSGAZ>EUSTREAM)

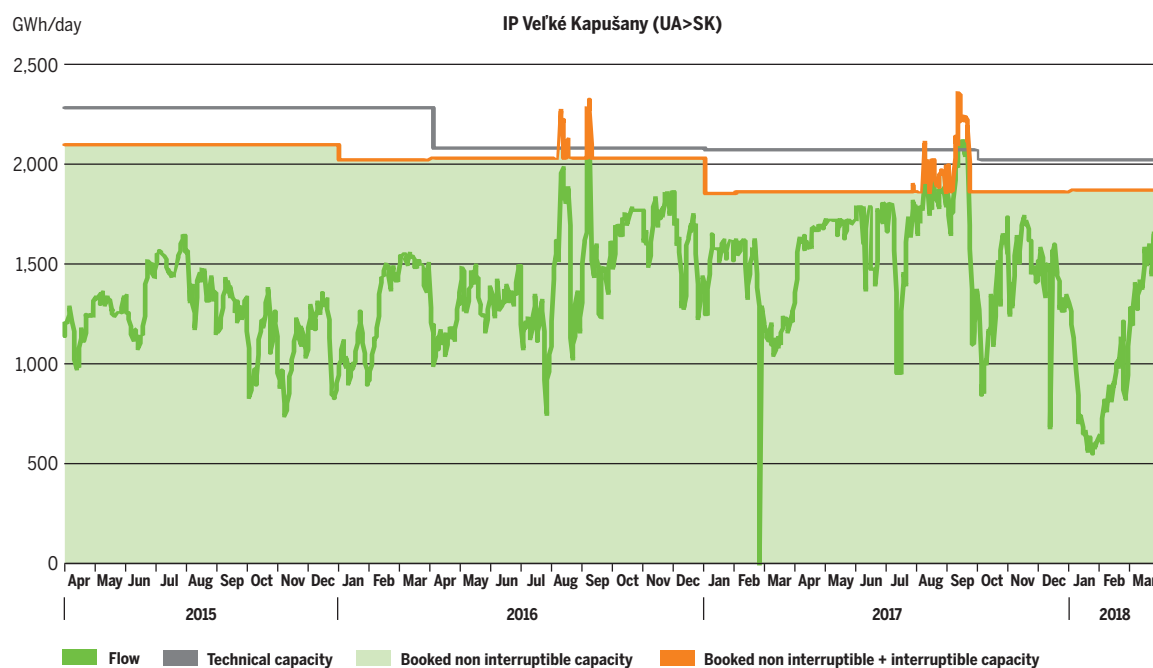
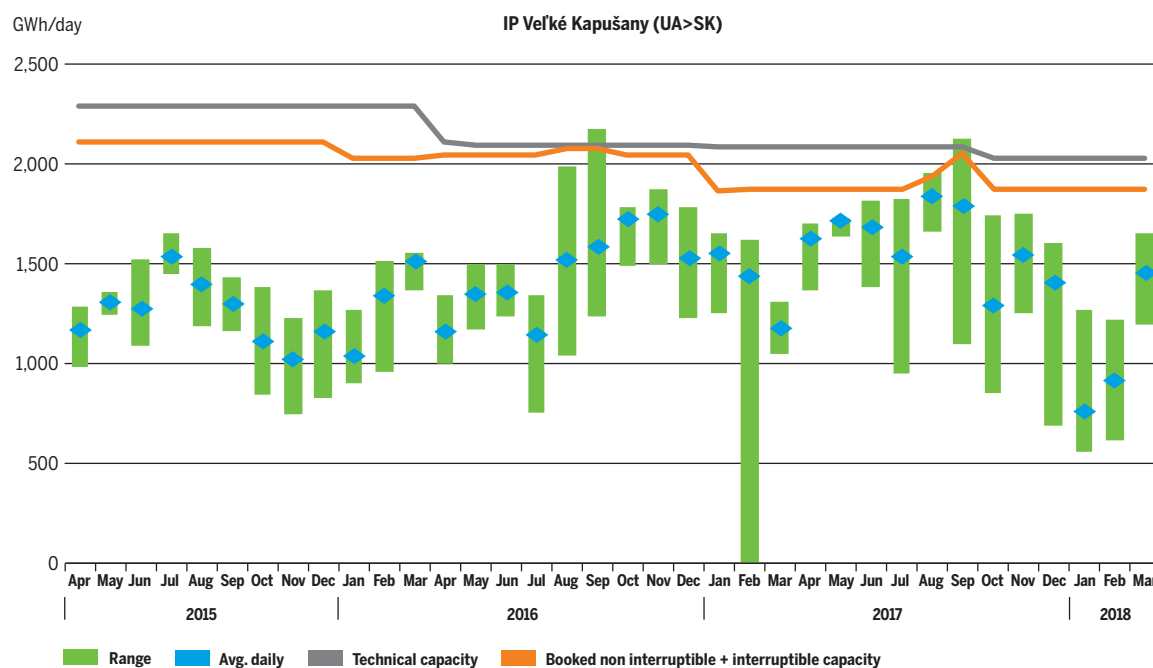


Figure C.24: Uzhgorod/Veľke Kapušany (UA>SK): Flows and booked capacity vs. technical capacity (monthly and daily)

BEREGDARÓC (UKRTRANSGAZ>FGSZ)

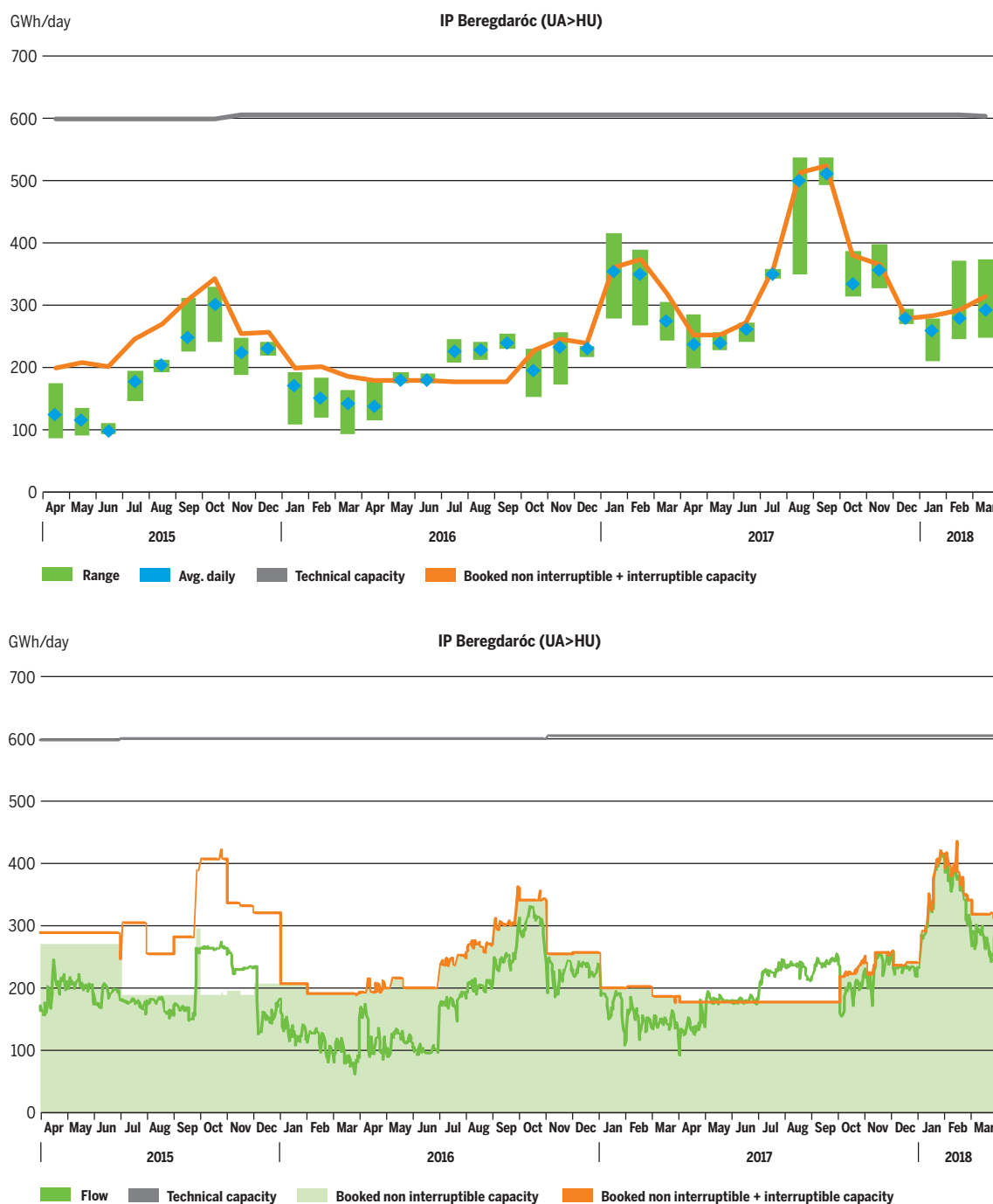


Figure C.25: Berekdaróc (UA>HU): Flows and booked capacity vs. technical capacity (monthly and daily)

MEDIESUL AURIT ISACCEA (UKRTRANSGAZ>TRANSGAZ)

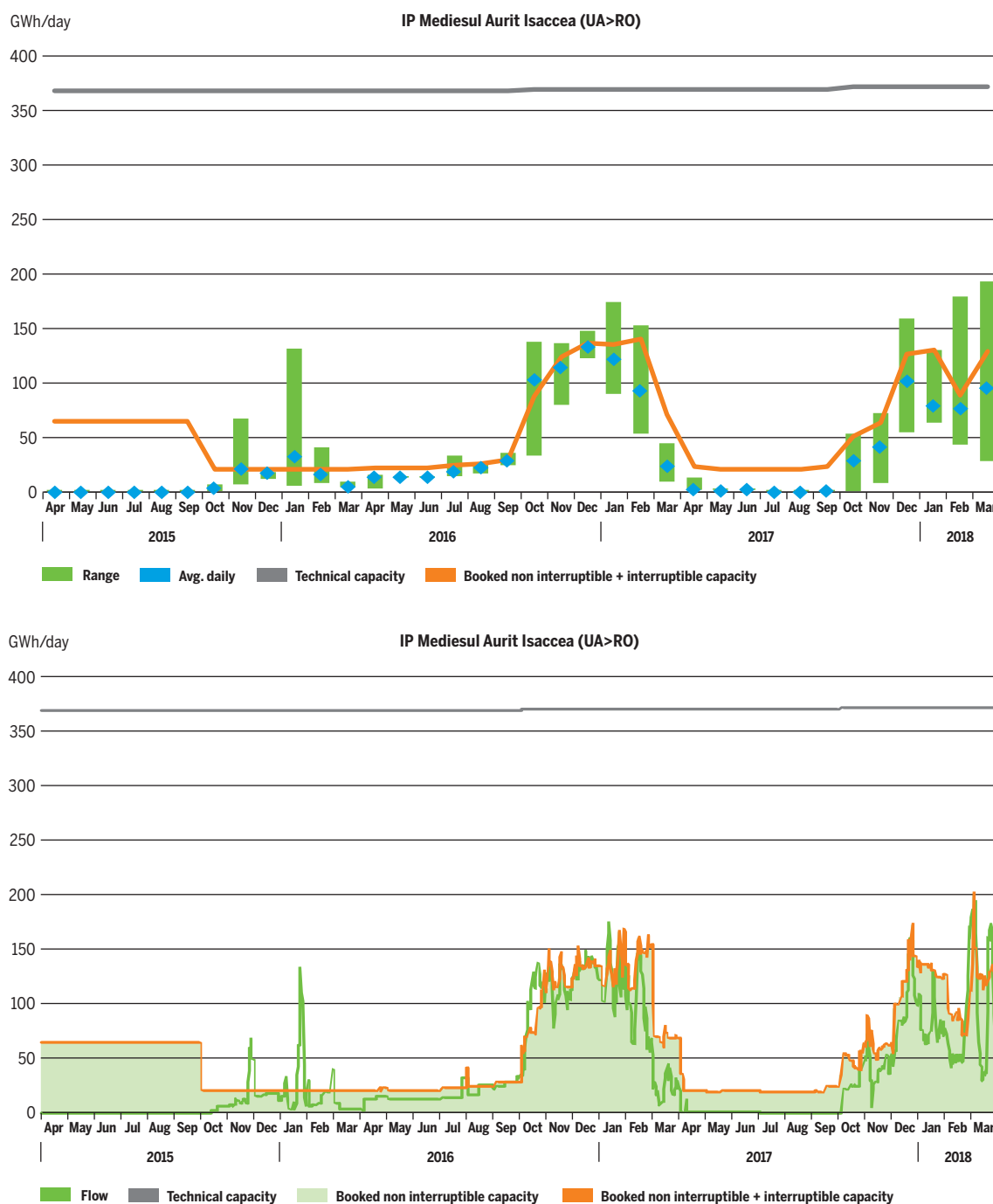


Figure C.26: Mediesul Aurit Isaccea (UA>RO): Flows and booked capacity vs. technical capacity (monthly and daily)

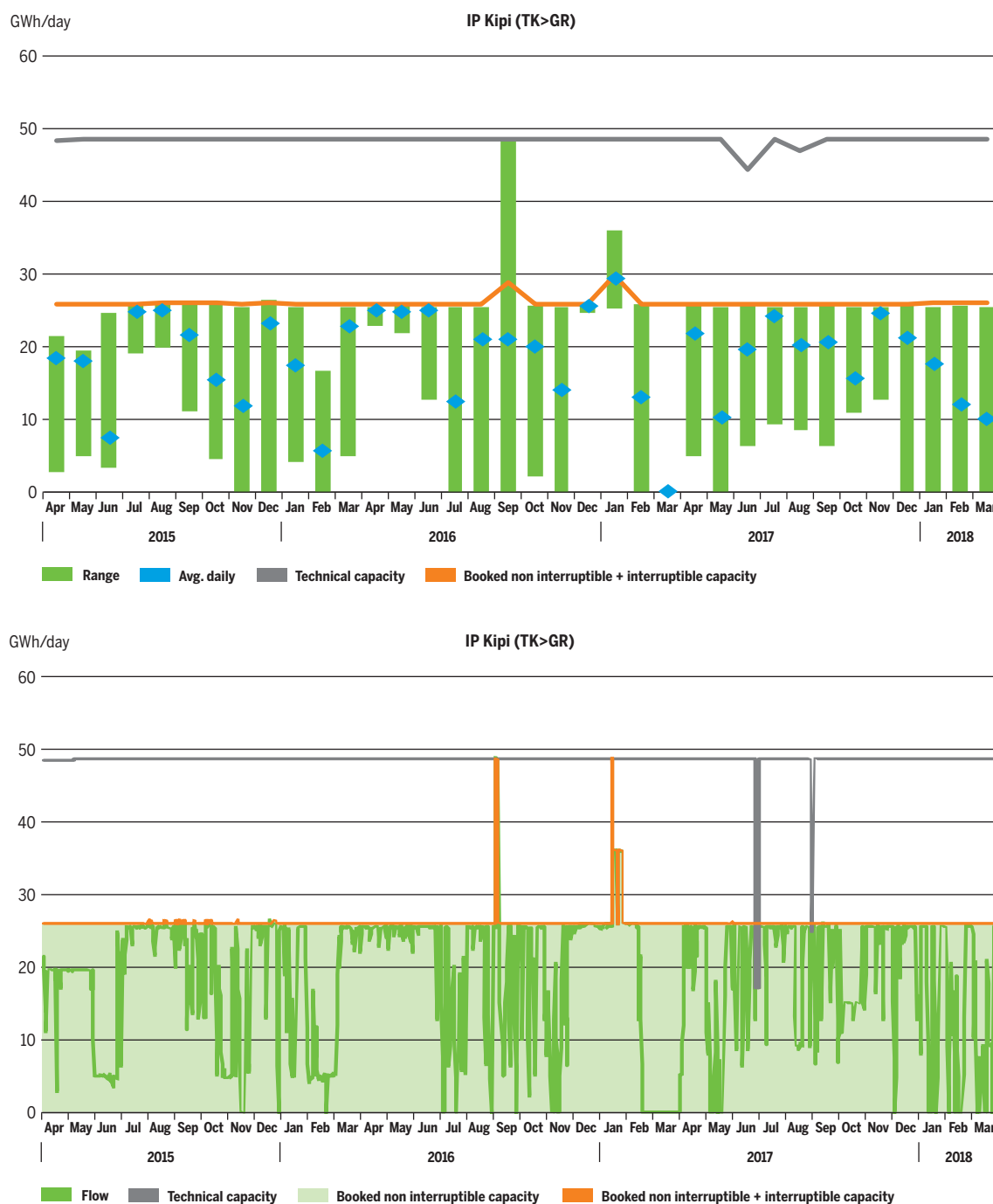


Figure C.27: Kipi (TK>GR): Flows and booked capacity vs. technical capacity (monthly and daily)

EXPORT

BUDINCE (EUSTREAM>UKRTRANSGAZ)

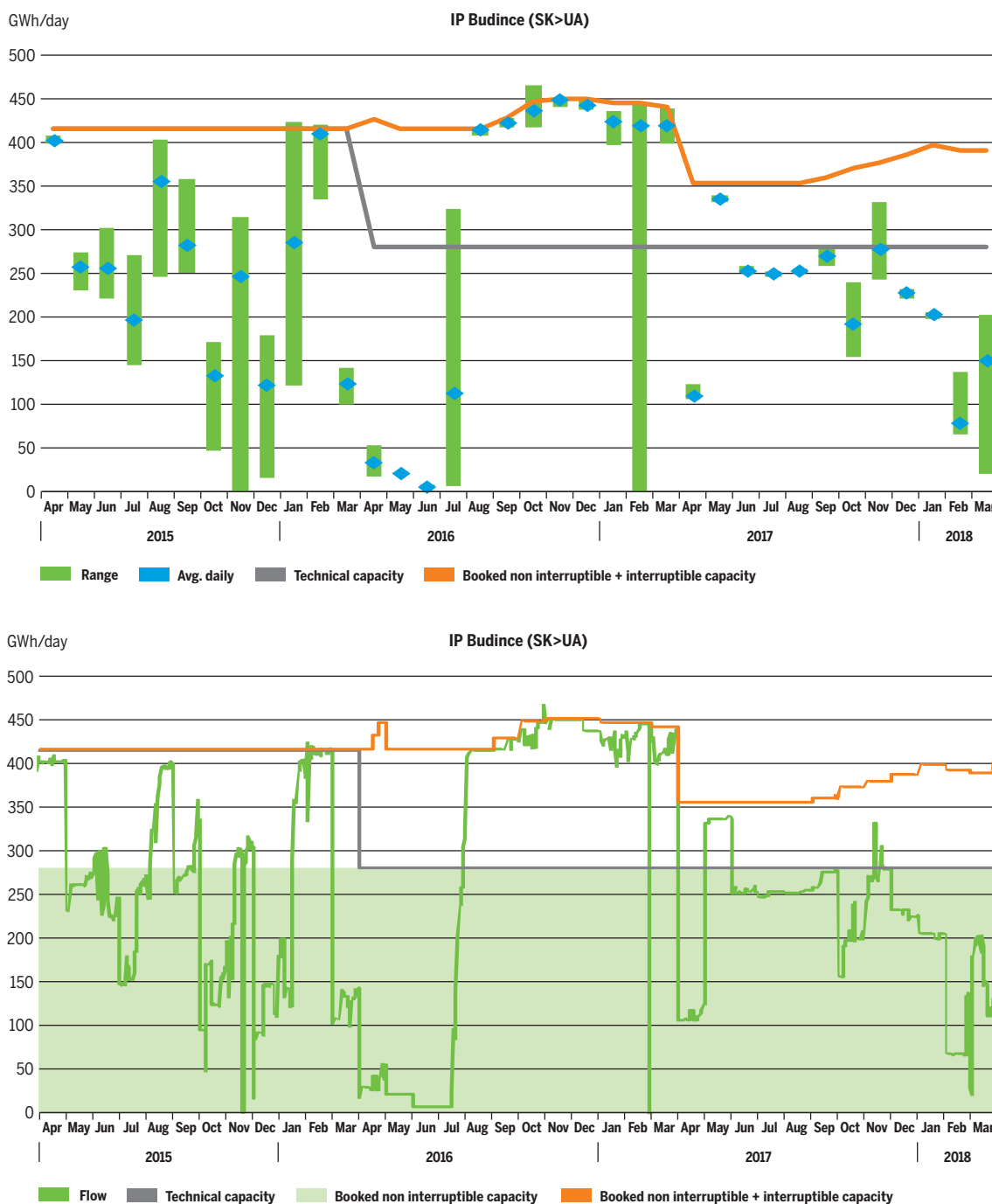


Figure C.28: Budince (SK>UA): Flows and booked capacity vs. technical capacity (monthly and daily)

KISKUNDOROZSMA (FGSZ>SSBIJAGAZ)

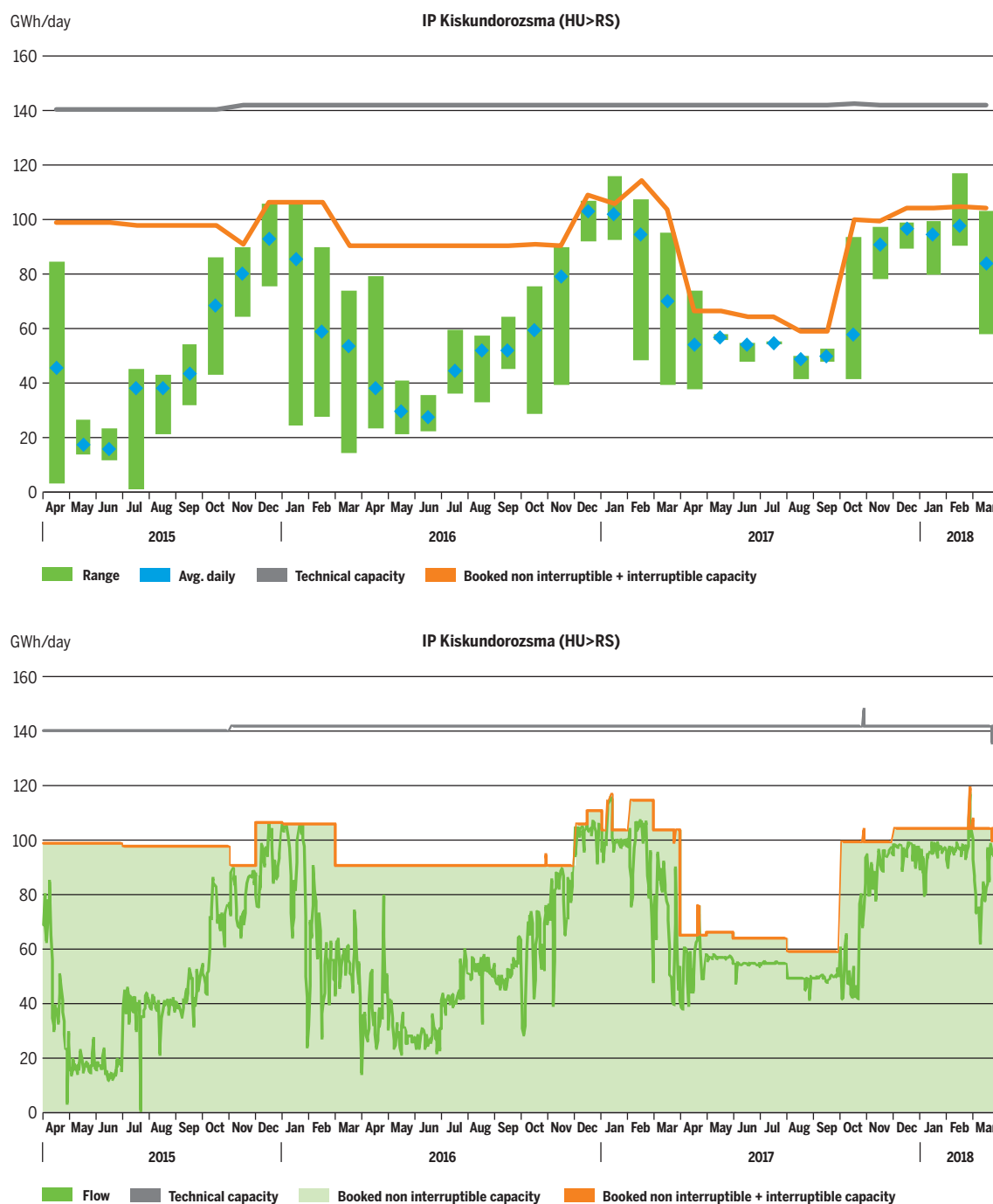


Figure C.29: Kiskundorozsma (HU>RS): Flows and booked capacity vs. technical capacity (monthly and daily)

MALKOCLAR (BULGARTRANGAZ>BOTAŞ)

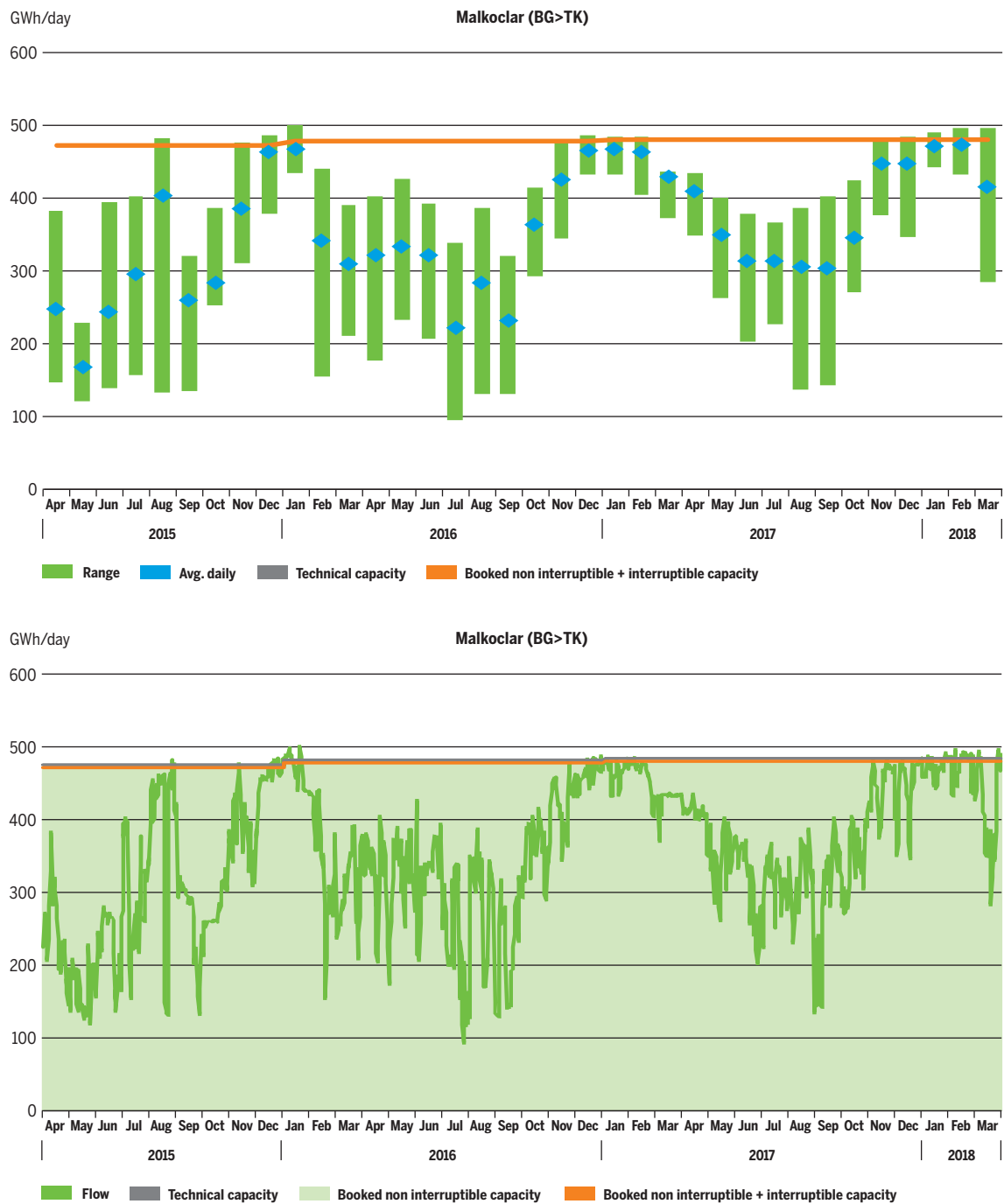


Figure C.30: Malkoclar (BG>TK): Flows and booked capacity vs. technical capacity (monthly and daily)

JIDILOVO (BULGARTRANGAZ>GA-MA)

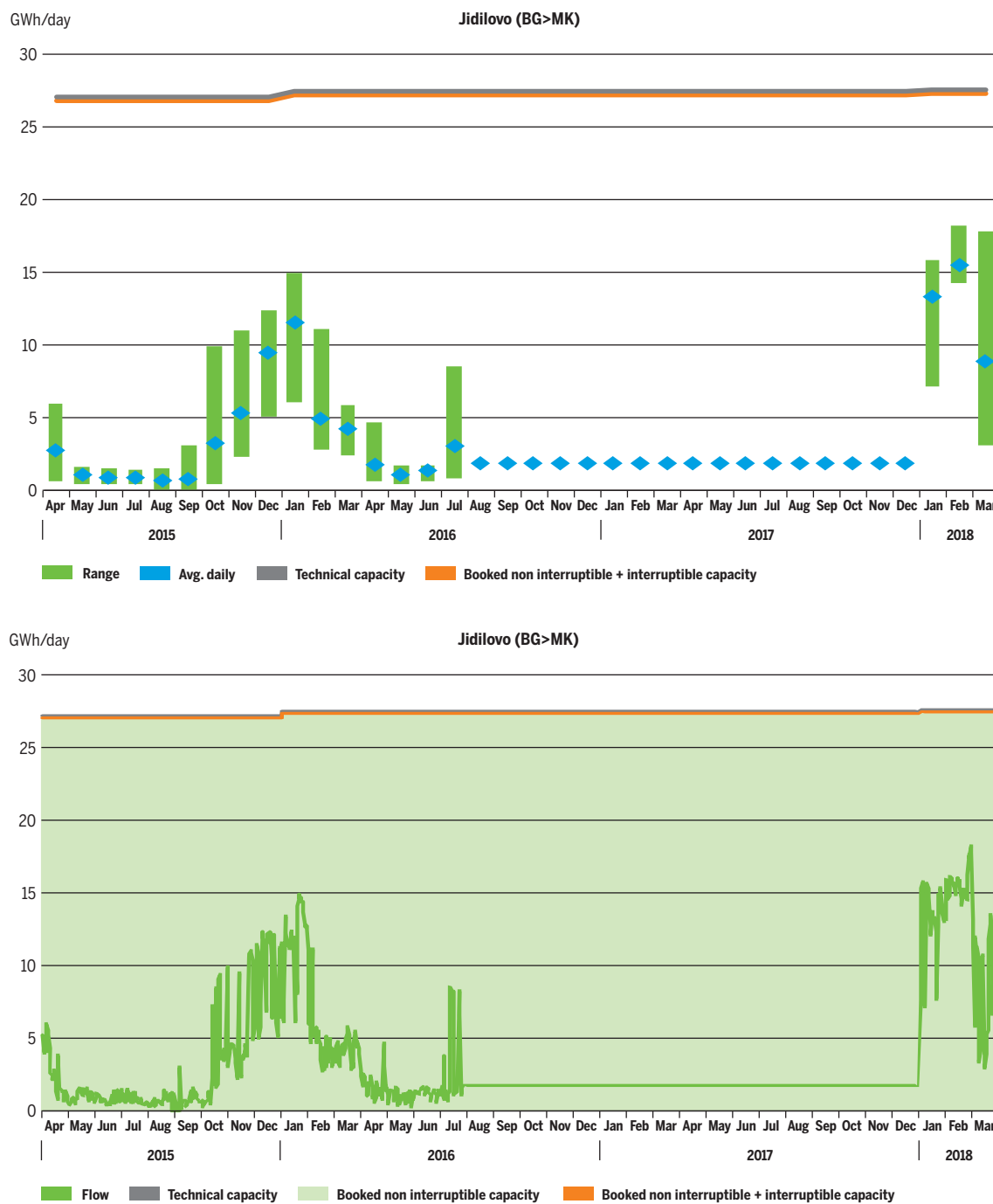


Figure C.31: Jidilovo (BG>MK): Flows and booked capacity vs. technical capacity (monthly and daily)

BEREGDARÓC (FGSZ>UKRTRANGAZ)

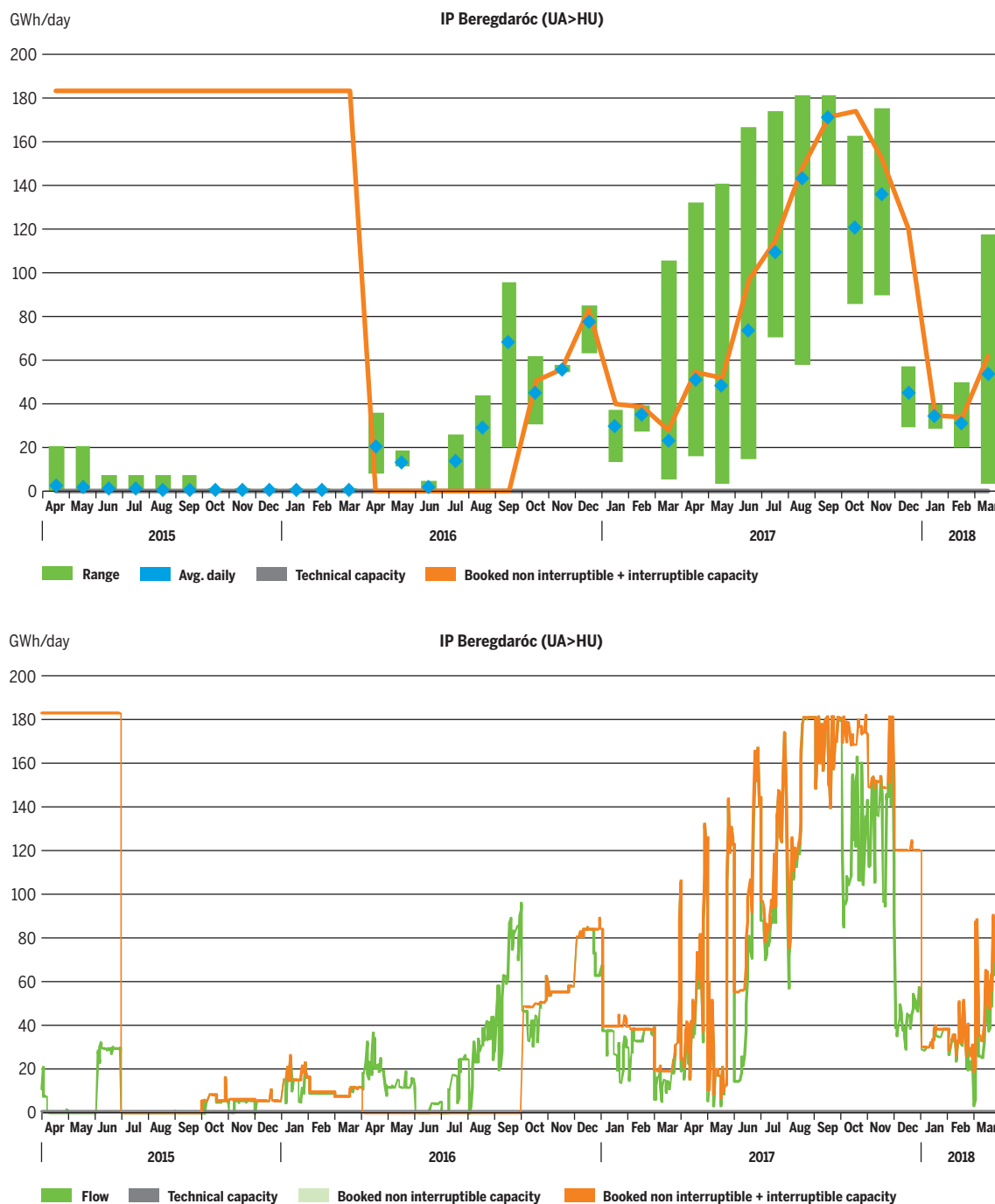


Figure C.31: Beregdaróc (UA>HU): Flows and booked capacity vs. technical capacity (monthly and daily)

PASSO GRIES (SNAM RETE GAS>SWISSGAS)

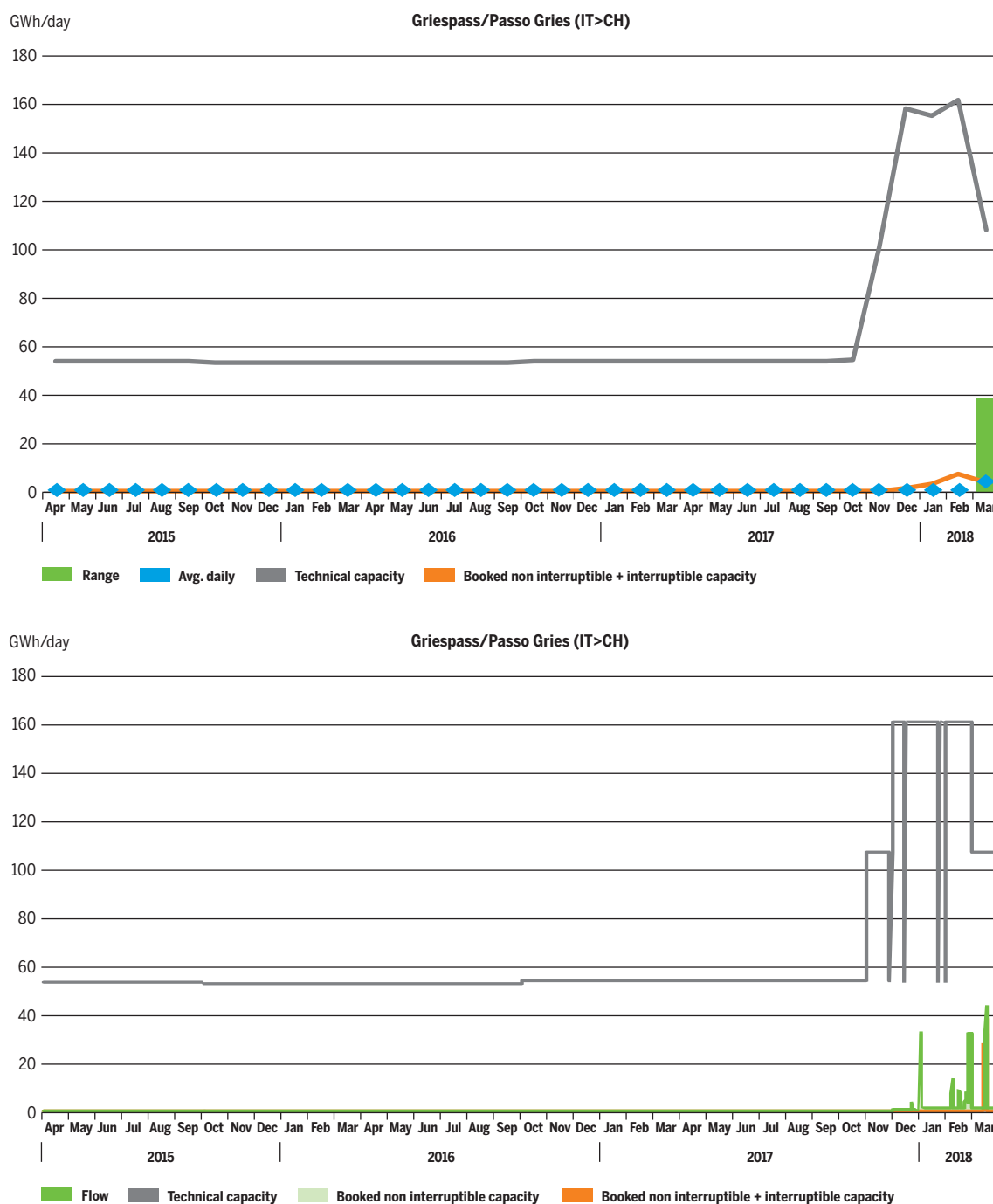


Figure C.32: Passo Gries (IT>CH): Flows and booked capacity vs. technical capacity (monthly and daily)

C LNG ENTRY POINTS

Differently from the dynamics experienced at pipelines interconnection points, at LNG Entry Points gas flows are intrinsically more fluctuating, especially if the punctual, daily values are considered.

More stable indications can be drawn from the analysis of monthly dynamics.

Although the LNG imports are generally more volatile than the pipeline ones, and therefore the terminals may know periods of low utilization, depending on the market conditions, the role of LNG terminals both, on one hand, for security of supply and peak shaving needs and, on the other hand, for the exploitation of possible commercial opportunities cannot be denied or based on the study of a limited time window.

In this paragraph the technical capacity is meant to be the regasification capacity of the terminal which may be different from that of the downstream pipeline infrastructure.

PANIGAGLIA (GNL ITALIA>SNAM RETE GAS)

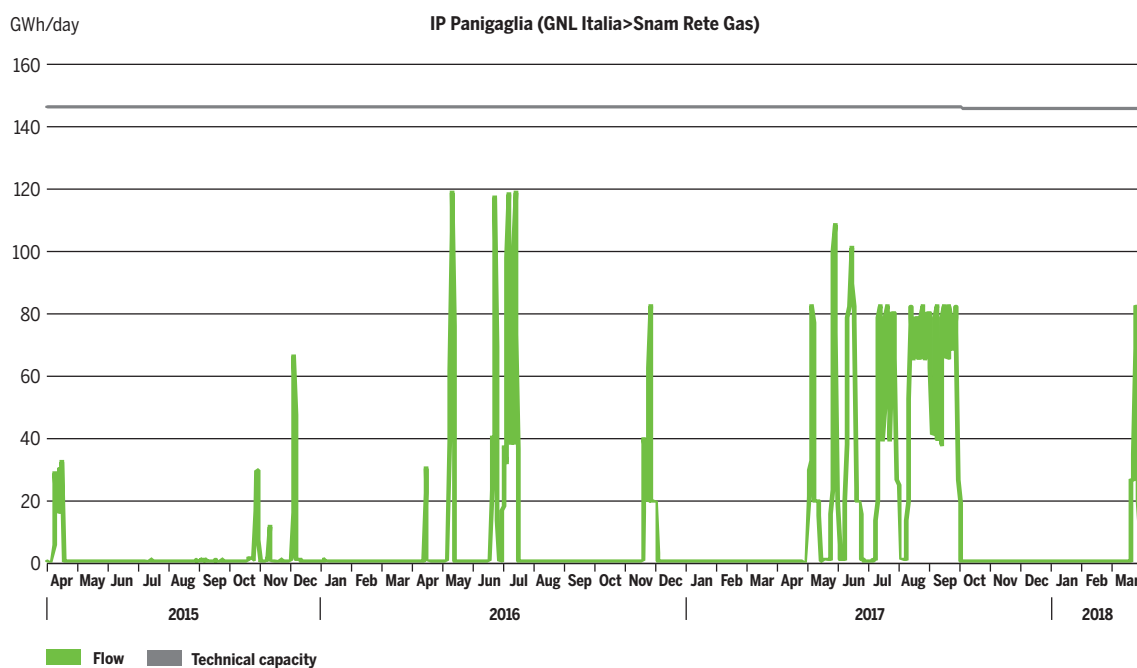
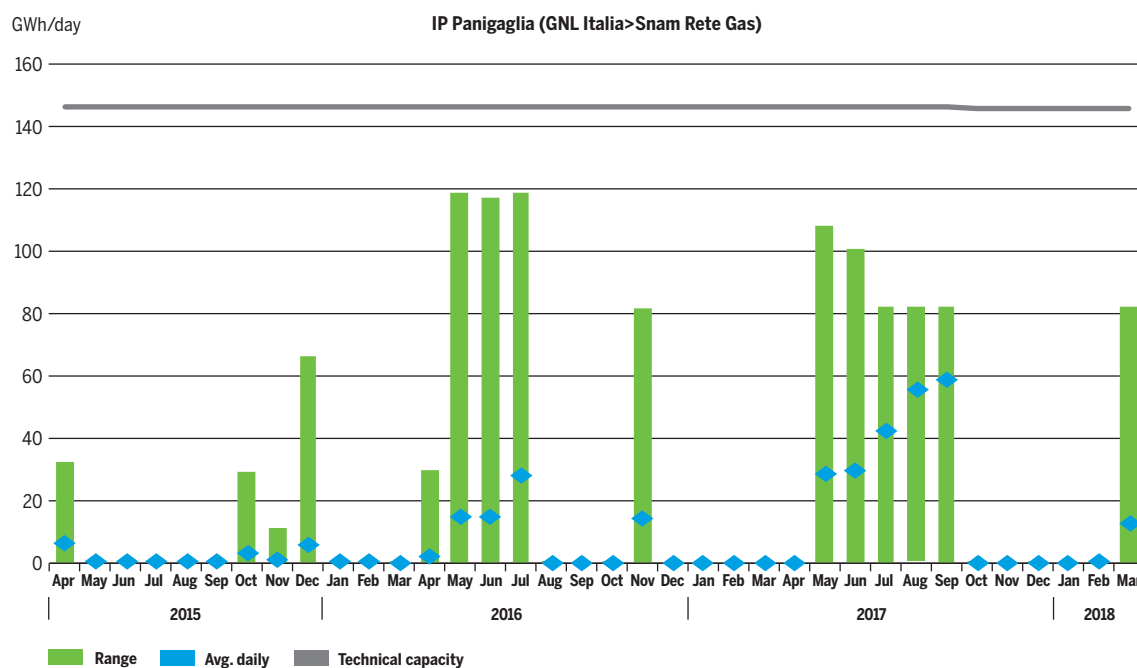


Figure C.33: Panigaglia: Flows and booked capacity vs. technical capacity (monthly and daily)

CAVARZERE (TERMINALE GNL ADRIATICO>SNAM RETE GAS AND INFRASTRUTTURE TRASPORTO GAS)

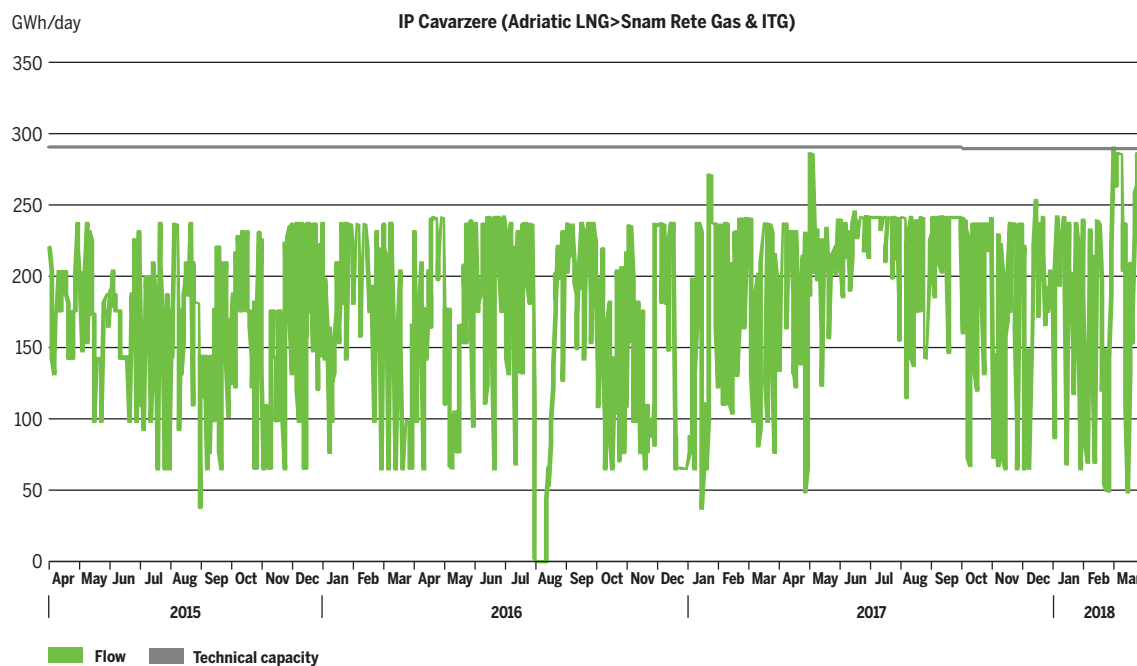
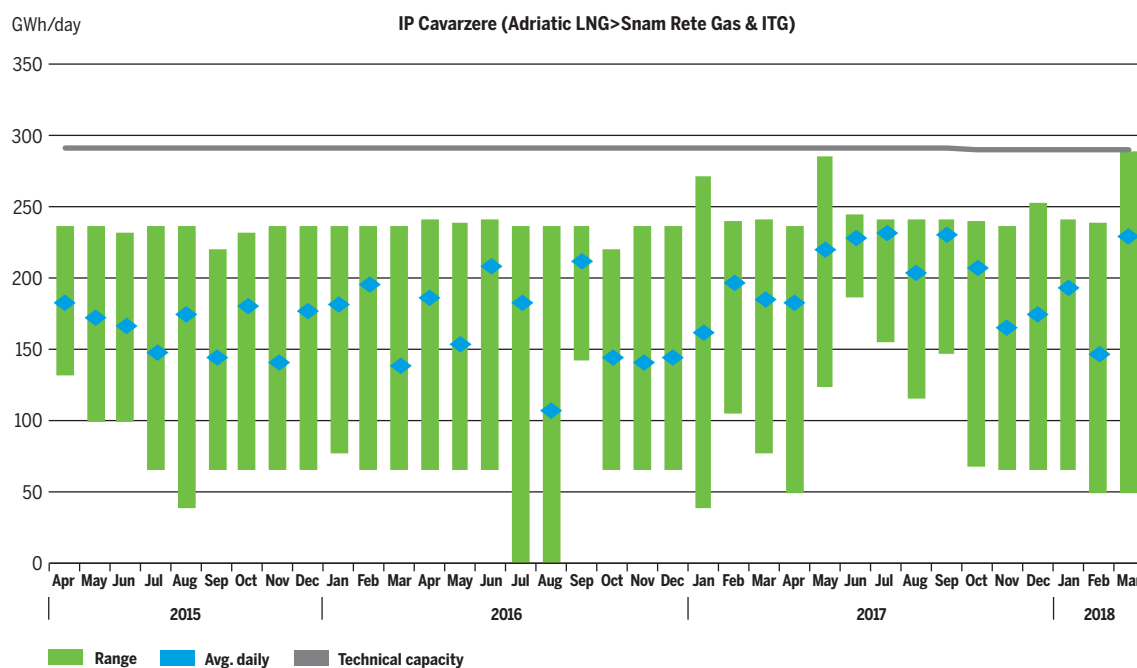


Figure C.34: Cavarzere: Flows and booked capacity vs. technical capacity (monthly and daily)

IP LIVORNO (OLT LNG>SNAM RETE GAS)

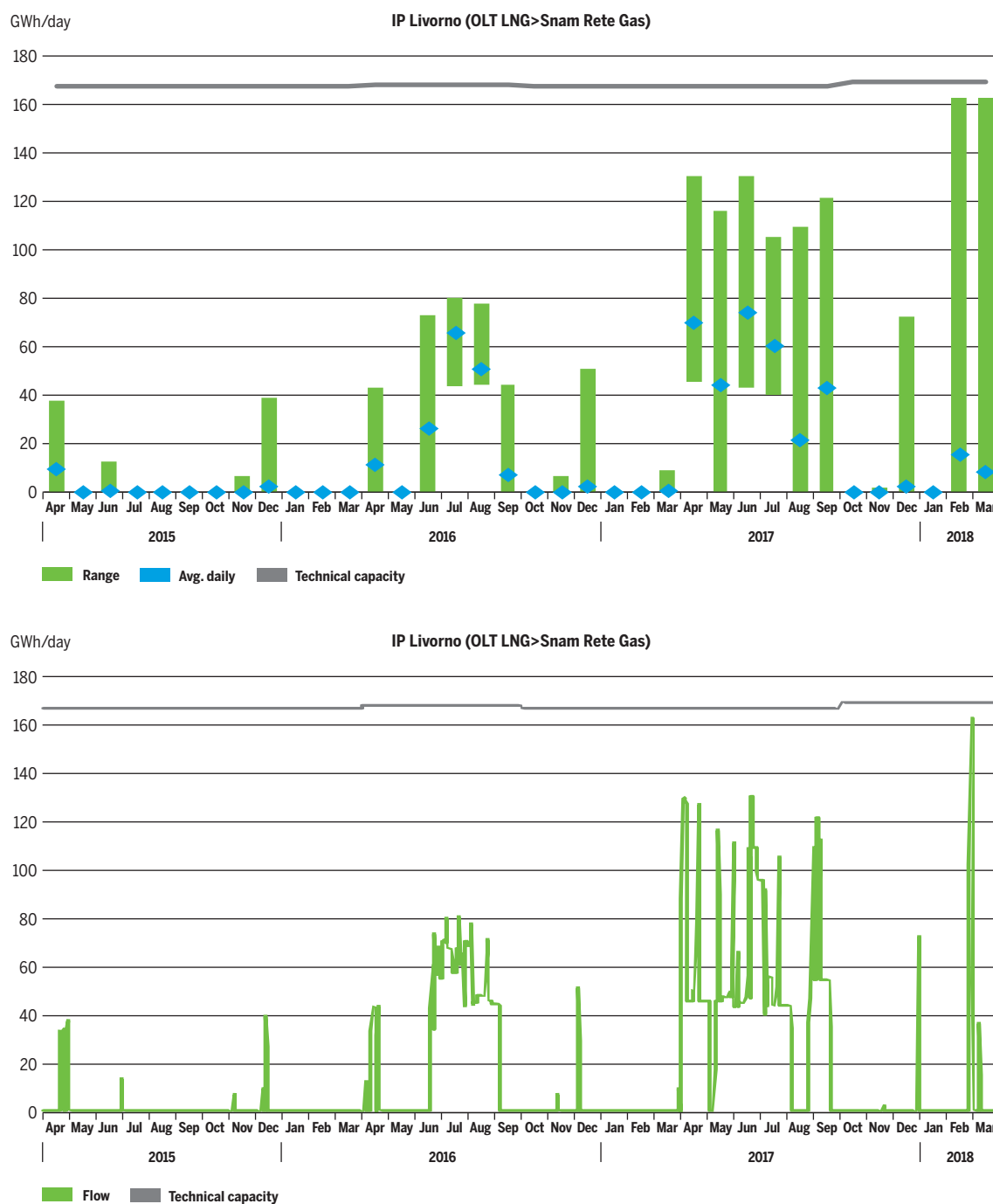


Figure C.35: Livorno: Flows and booked capacity vs. technical capacity (monthly and daily)

REVYTHOUSSA (DESFA)

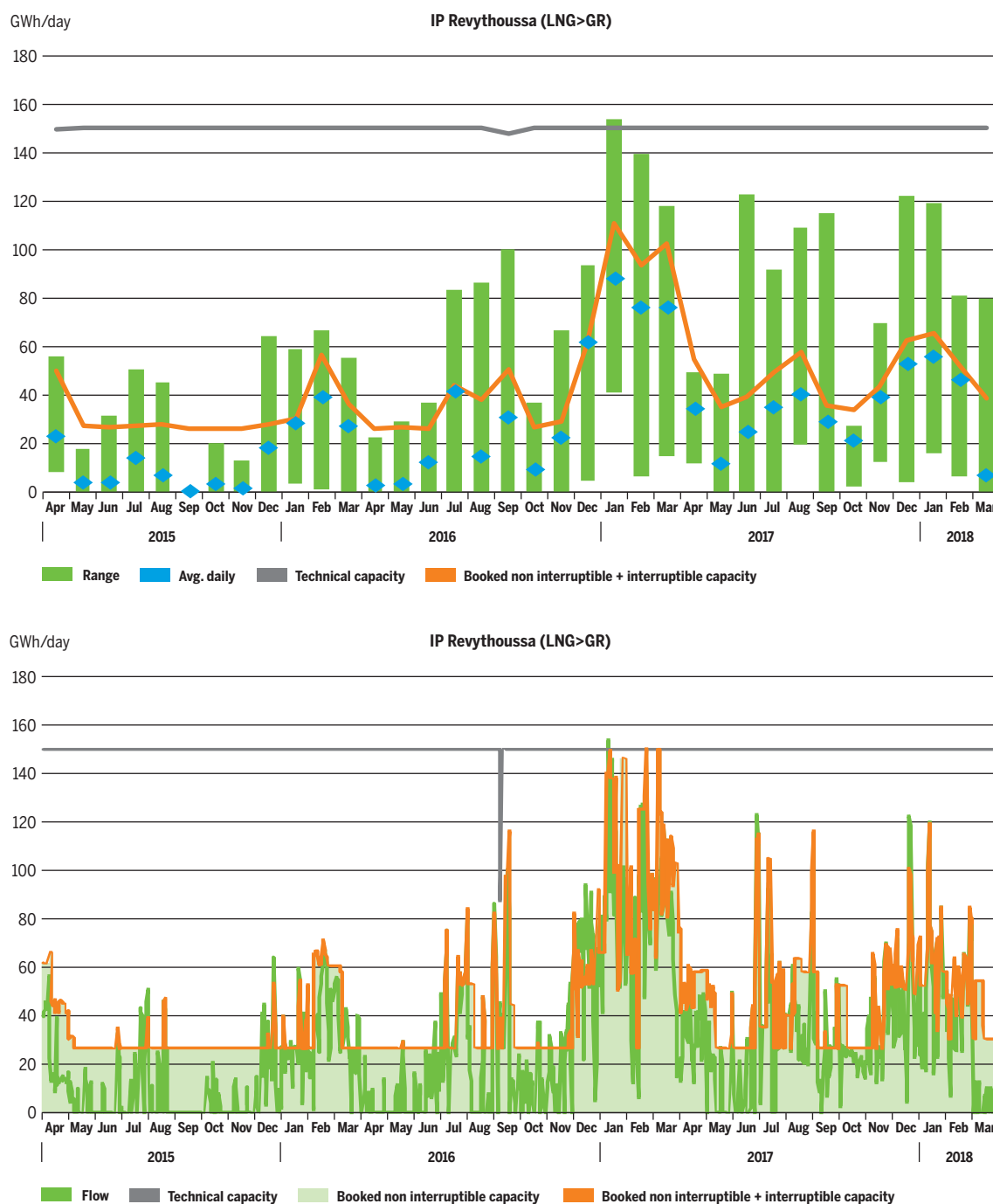


Figure C.36: Revythoussa: Flows and booked capacity vs. technical capacity (monthly and daily)



ENTSOG AISBL
Avenue de Cortenbergh 100 | 1000 Brussels, Belgium
Tel. +32 2 894 51 00

info@entsog.eu | www.entsog.eu