

Table 1: BPNFS input for \widetilde{MtnC}_i at the i^{th} collection center.

$i = 1$	$i = 2$	$i = 3$
$< (4, 5, 6, 7, 8; 0.7), (6, 7, 8, 9, 10; 0.4),$ $(1, 3, 5, 7, 9; 0.6), (5, 6, 7, 8, 9; -0.6),$ $(2, 4, 6, 8, 10; -0.7), (1, 2, 3, 4, 5; -0.4) >$	$< (5, 6, 7, 8, 9; 0.5), (6, 8, 10, 12, 14; 0.2),$ $(2, 3, 4, 5, 6; 0.4), (8, 9, 10, 11, 12; -0.4),$ $(5, 6, 7, 8, 9; -0.3), (4, 5, 6, 7, 8; -0.3) >$	$< (2, 4, 6, 8, 10; 0.2), (3, 4, 5, 6, 7; 0.5),$ $(6, 7, 8, 9, 10; 0.5), (7, 8, 9, 10, 11; -0.6),$ $(4, 6, 8, 10, 12; -0.3), (1, 2, 3, 4, 5; -0.5) >$

Table 2: BPNFS input for \widetilde{ColC}_i at the i^{th} collection center.

$i = 1$	$i = 2$	$i = 3$
$< (1, 2, 3, 4, 5; 0.6), (1, 5, 2, 2, 5, 3, 2, 5; 0.4),$ $(3, 4, 5, 6, 7; 0.5), (1, 2, 3, 4, 5; -0.7)$ $(4, 5, 6, 7, 8; -0.3), (2, 4, 6, 8, 10; -0.4) >$	$< (3, 4, 5, 6, 7; 0.9), (1, 3, 5, 7, 9; 0.3),$ $(4, 4, 5, 5, 5, 5, 6; 0.2), (5, 5, 5, 6, 6, 5, 7; -0.2),$ $(3, 3, 5, 4, 4, 5, 5; -0.5), (4, 5, 6, 7, 8; -0.8) >$	$< (2, 3, 4, 5, 6; 0.4), (1, 2, 3, 4, 5; 0.3),$ $(4, 5, 6, 7, 8; 0.7), (3, 4, 5, 6, 7; -0.2),$ $(4, 5, 6, 7, 8; -0.8), (1, 2, 3, 4, 5; -0.3) >$

Table 3: BPNFS input for \widetilde{SegC}_j at the j^{th} extraction and recycling center.

$j = 1$	$j = 2$	$j = 3$
$< (0, 1, 0, 2, 0, 3, 0, 4, 0, 5; 0.2), (0, 5, 1, 1, 5, 2, 2, 5; 0.5),$ $(0, 25, 0, 35, 0, 45, 0, 55, 0, 65; 0.1), (1, 5, 1, 6, 1, 7, 1, 8, 1, 9; -0.3),$ $(1, 1, 2, 1, 4, 1, 6, 1, 8; -0.4), (0, 5, 0, 6, 0, 7, 0, 8, 0, 9; -0.8) >$	$< (1, 2, 1, 3, 1, 4, 1, 5, 1, 6; 0.2), (1, 2, 3, 4, 5; 0.6),$ $(1, 5, 1, 7, 1, 9, 2, 1, 2, 3; 0.7), (0, 5, 0, 6, 0, 7, 0, 8, 0, 9; -0.4),$ $(2, 2, 1, 2, 2, 3, 2, 4; -0.5), (0, 1, 0, 2, 0, 3, 0, 4, 0, 5; -0.6) >$	$< (0, 5, 0, 6, 0, 7, 0, 8, 0, 9; 0.8), (1, 1, 1, 1, 2, 1, 3, 1, 4; 0.5),$ $(1, 8, 1, 9, 2, 2, 1, 2, 2; 0.2), (2, 2, 2, 2, 4, 2, 6, 2, 8; -0.3),$ $(0, 2, 0, 3, 0, 4, 0, 5, 0, 6; -0.6), (1, 1, 1, 1, 3, 1, 5, 1, 7, 1, 9; -0.4) >$
$j = 4$	$j = 5$	
$< (1, 1, 3, 1, 5, 1, 7, 1, 9; 0.4), (0, 2, 0, 3, 0, 4, 0, 5, 0, 6; 0.6),$ $(1, 8, 2, 2, 2, 4, 2, 6; 0.8), (1, 5, 1, 6, 1, 7, 1, 8, 1, 9; -0.3),$ $(0, 4, 0, 5, 0, 6, 0, 7, 0, 9; -0.5), (1, 2, 1, 3, 1, 4, 1, 5, 1, 6; -0.6) >$	$(1, 2, 1, 3, 1, 4, 1, 5, 1, 6; 0.5), (2, 3, 2, 4, 2, 5, 2, 6, 2, 7; 0.3),$ $(0, 2, 0, 3, 0, 4, 0, 5, 0, 6; 0.6), (2, 4, 2, 5, 2, 6, 2, 7, 2, 8; -0.3),$ $(1, 9, 2, 2, 1, 2, 2, 3; -0.5), (1, 5, 1, 6, 1, 7, 1, 8, 1, 9; -0.7) >$	

Table 4: BPNFS input for \widetilde{ExC}_j at the j^{th} extraction and recycling center.

$j = 1$	$j = 2$	$j = 3$
$< (7, 8, 9, 10, 11; 0.6), (2, 3, 4, 5, 6; 0.4),$ $(8, 2, 8, 4, 8, 6, 8, 8, 9; 0.7), (4, 4, 5, 5, 5, 5, 6; -0.3),$ $(7, 8, 9, 10, 11; -0.4), (6, 6, 5, 7, 7, 5, 8; -0.3) >$	$< (1, 1, 1, 5, 12, 12, 5, 13; 0.6), (9, 9, 2, 9, 4, 9, 6, 9, 8; 0.5),$ $(9, 10, 11, 12, 13; 0.8), (14, 5, 14, 6, 14, 7, 14, 8, 14, 9; -0.5),$ $(6, 6, 5, 7, 7, 5, 8; -0.7), (10, 11, 12, 13, 14; -0.8) >$	$< (9, 10, 11, 12, 13; 0.5), (10, 5, 11, 11, 5, 12, 12, 5; 0.6),$ $(12, 12, 2, 12, 4, 12, 6, 12, 8; 0.8), (13, 14, 15, 16, 17; -0.6),$ $(15, 2, 15, 4, 15, 6, 15, 8, 16; -0.3), (4, 5, 6, 7, 8; -0.4) >$
$j = 4$	$j = 5$	
$< (1, 1, 1, 3, 1, 5, 1, 7, 1, 9; 0.5), (7, 8, 9, 10, 11; 0.3),$ $(8, 9, 10, 11, 12; 0.4), (9, 9, 2, 9, 4, 9, 6, 9, 8; -0.7),$ $(2, 3, 4, 5, 6; -0.3), (1, 5, 1, 6, 1, 7, 1, 8, 1, 9; -0.5) >$	$< (4, 5, 6, 7, 8; 0.6), (15, 16, 17, 18, 19; 0.5),$ $(2, 3, 4, 5, 6; 0.7), (3, 5, 4, 4, 5, 5, 5; -0.5),$ $(10, 11, 12, 13, 14; -0.3), (6, 7, 8, 9, 10; -0.4) >$	

Table 5: BPNFS input for \widetilde{ReC}_j at the j^{th} extraction and recycling center.

$j = 1$	$j = 2$	$j = 3$
$< (5, 6, 7, 8, 9; 0.1), (2, 3, 4, 5, 6; 0.7),$ $(1, 1, 1, 2, 1, 3, 1, 4, 1, 5; 0.4), (0, 5, 0, 6, 0, 7, 0, 8, 0, 9; -0.6),$ $(3, 3, 5, 4, 4, 5, 5; -0.8), (4, 5, 6, 7, 8; -0.3) >$	$< (3, 4, 5, 6, 7; 0.9), (1, 2, 3, 4, 5; 0.4),$ $(5, 5, 1, 5, 2, 5, 3, 5, 4; 0.6), (3, 3, 2, 3, 4, 3, 6, 3, 8; -0.5),$ $(2, 3, 4, 5, 6; -0.5), (4, 5, 6, 7, 8; -0.7) >$	$< (4, 5, 6, 7, 8; 0.6), (1, 2, 3, 4, 5; 0.2),$ $(3, 4, 5, 6, 7; 0.6), (1, 5, 1, 6, 1, 7, 1, 8, 1, 9; -0.3),$ $(4, 4, 1, 4, 2, 4, 3, 4, 4; -0.5), (0, 1, 0, 2, 0, 3, 0, 4, 0, 5; -0.7) >$
$j = 4$	$j = 5$	
$< (4, 1, 4, 2, 4, 3, 4, 4, 5; 0.7), (1, 5, 1, 6, 1, 7, 1, 8, 1, 9; 0.4),$ $(6, 6, 1, 6, 2, 6, 3, 6, 4; 0.3), (3, 3, 2, 3, 4, 3, 6, 3, 8; -0.5),$ $(1, 5, 1, 6, 1, 7, 1, 8, 1, 9; -0.6), (2, 2, 1, 2, 3, 2, 4, 2, 5; -0.4) >$	$< (1, 2, 3, 4, 5; 0.5), (1, 5, 1, 6, 1, 7, 1, 8, 1, 9; 0.4),$ $(3, 3, 5, 4, 4, 5, 5; 0.6), (4, 5, 6, 7, 8; -0.3),$ $(3, 4, 5, 6, 7; -0.7), (6, 7, 8, 9, 10; -0.4) >$	

Table 6: BPNFS input for \widetilde{TcrC}_{ijk} from the i^{th} collection center to the j^{th} extraction and recycling center via k^{th} conveyance.

i	$k = 1$	$k = 2$	$k = 3$	j
1	$< (2, 3, 4, 5, 6; 0.6), (5, 6, 7, 8, 9; 0.7),$ $(9, 10, 11, 12, 13; 0.2), (4, 5, 6, 7, 8; -0.5),$ $(5, 5, 6, 5, 7, 8, 5, 9, 5; -0.4), (6, 7, 8, 9, 10; -0.6) >$	$< (6, 7, 8, 9, 10; 0.7), (8, 9, 10, 11, 12; 0.5),$ $(4, 4, 5, 5, 5, 6; 0.3), (9, 10, 11, 12, 13; -0.6),$ $(8, 8, 5, 9, 9, 5, 10; -0.8), (7, 8, 9, 10, 11; -0.2) >$	$< (10, 11, 12, 13, 14; 0.5), (9, 9, 5, 10, 10, 5, 11; 0.6),$ $(5, 6, 7, 8, 9; 0.3), (6, 7, 8, 9, 10; -0.3),$ $(10, 10, 5, 11, 11, 5, 12; -0.7), (6, 7, 8, 9, 10; -0.5) >$	1
	$< (5, 6, 7, 8, 9; 0.5), (4, 6, 8, 10, 12; 0.7),$ $(9, 10, 11, 12, 13; 0.3), (8, 10, 12, 14, 16; -0.6),$ $(7, 8, 9, 10, 11; -0.7), (10, 11, 12, 13, 14; -0.3) >$	$< (12, 12, 1, 12, 2, 12, 3, 12, 4; 0.5), (4, 5, 6, 7, 8; 0.6),$ $(6, 6, 5, 7, 7, 5, 8; 0.8), (6, 7, 8, 9, 10; -0.4),$ $(5, 6, 7, 8, 9; -0.6), (11, 11, 5, 12, 12, 5, 13; -0.5) >$	$< (10, 11, 12, 13, 14; 0.4), (8, 9, 10, 11, 12; 0.3),$ $(3, 4, 5, 6, 7; 0.8), (5, 6, 7, 8, 9; -0.6),$ $(9, 10, 11, 12, 13; -0.3), (10, 10, 5, 11, 11, 5, 12; -0.8) >$	2
	$< (7, 8, 9, 10; 1; 0.2), (8, 5, 8, 6, 8, 7, 8, 8; 9; 0.6),$ $(10, 10, 5, 11, 11, 5, 12; 0.5), (10, 12, 14, 16, 18; -0.7),$ $(4, 5, 6, 7, 8; -0.4), (9, 11, 13, 15, 17; -0.1) >$	$< (12, 12, 5, 13, 13, 5, 14; 0.6), (5, 6, 7, 8, 9; 0.3),$ $(4, 5, 6, 7, 8; 0.4), (5, 5, 6, 6, 5, 7; -0.5),$ $(6, 7, 8, 9, 10; -0.3), (12, 6, 12, 7, 12, 8, 12, 9, 13; -0.8) >$	$< (6, 7, 8, 9; 0.6), (12, 12, 5, 13, 13, 5, 14; 0.4),$ $(9, 10, 11, 12, 13; 0.6), (4, 5, 6, 7, 8; -0.3),$ $(7, 8, 9, 10, 11; -0.7), (12, 12, 1, 12, 2, 12, 3, 12, 4; -0.6) >$	3
	$< (7, 8, 9, 10, 11; 0.8), (3, 4, 5, 6, 7; 0.4),$ $(10, 10, 5, 11, 11, 5, 12; 0.6), (6, 7, 8, 9, 10; -0.5),$ $(12, 12, 2, 12, 4, 12, 6, 12, 8; -0.4), (8, 9, 10, 11, 12; -0.4) >$	$< (10, 11, 12, 13, 14; 0.6), (5, 6, 7, 8, 9; 0.4),$ $(7, 7, 2, 7, 4, 7, 6, 7, 8; 0.2), (12, 12, 3, 12, 6, 12, 9, 13, 2; -0.3),$ $(7, 8, 9, 10, 11; -0.5), (10, 11, 12, 13, 14; -0.7) >$	$< (6, 7, 8, 9, 10; 0.7), (4, 6, 8, 10, 12; 0.5),$ $(1, 2, 3, 4, 5; 0.2), (11, 4, 11, 6, 11, 8, 12, 12, 2; -0.6),$ $(3, 3, 5, 4, 4, 5, 5, -0.1), (4, 5, 6, 7, 8; -0.4) >$	4
	$< (4, 6, 8, 10, 12; 0.4), (7, 8, 9, 10, 11; 0.8),$ $(10, 10, 5, 11, 11, 5, 12; 0.6), (7, 9, 11, 13, 15; -0.3),$ $(6, 7, 8, 9, 10; -0.3), (12, 5, 13, 13, 5, 14, 14, 5; -0.5) >$	$< (10, 10, 5, 11, 11, 5, 12; 0.3), (6, 7, 8, 9, 10; 0.5),$ $(4, 5, 6, 7, 8; 0.6), (12, 1, 12, 3, 12, 5, 12, 7, 12, 9; -0.3),$ $(5, 6, 7, 8, 9; -0.6), (8, 9, 10, 11, 12; -0.7) >$	$< (7, 8, 9, 10, 11; 0.6), (3, 4, 5, 6, 7; 0.2),$ $(5, 5, 6, 6, 5, 7, 0.4), (5, 6, 7, 8, 9; -0.8),$ $(3, 5, 7, 9, 11; -0.3), (11, 11, 1, 11, 2, 11, 3, 11, 4; -0.5) >$	5
2	$< (10, 11, 12, 13, 14; 0.5), (7, 8, 9, 10, 11; 0.2),$ $(10, 10, 2, 10, 4, 10, 6, 10, 8; 0.4), (6, 7, 8, 9, 10; -0.6),$ $(5, 6, 6, 5, 7, 7, 5; -0.3), (7, 2, 7, 4, 7, 6, 7, 8; -0.2) >$	$< (9, 10, 11, 12, 13; 0.3), (10, 10, 5, 11, 11, 5, 12; 0.6),$ $(5, 6, 7, 8, 9; 0.7), (12, 12, 4, 12, 8, 13, 2, 13, 6; -0.2),$ $(9, 10, 11, 12, 13; -0.4), (9, 9, 5, 10, 10, 5, 11; -0.6) >$	$< (6, 8, 9, 10, 11; 0.6), (3, 4, 5, 6, 7; 0.4),$ $(5, 5, 6, 5, 7, 5, 8, 5, 9; 0.1), (4, 5, 6, 7, 8; -0.9),$ $(6, 7, 8, 9, 10; -0.4), (4, 5, 5, 5, 6, 6, 5; -0.3) >$	1
	$< (7, 8, 9, 10, 11; 0.6), (5, 7, 9, 11, 13, 0.4),$ $(10, 10, 5, 11, 11, 5, 12; 0.5), (4, 5, 6, 7, 8; -0.3),$ $(7, 5, 8, 5, 10, 5, 11, 5; -0.4), (8, 8, 5, 9, 9, 5, 10; -0.5) >$	$< (7, 8, 9, 10, 11; 0.6), (4, 4, 5, 5, 5, 5, 6; 0.4),$ $(5, 6, 7, 8, 9; 0.2), (6, 6, 5, 7, 7, 5, 8; -0.7),$ $(7, 7, 8, 8, 5, 9; -0.3), (10, 11, 12, 13, 14; -0.5) >$	$< (8, 9, 10, 11, 12; 0.5), (6, 5, 7, 7, 5, 8, 5; 0.6),$ $(6, 7, 8, 9, 10; 0.7), (7, 8, 9, 10, 11; -0.3),$ $(10, 5, 11, 11, 5, 12, 12, 12, 3, 12, 4, 12, 5, 12, 6; -0.7) >$	2
	$< (8, 9, 10, 11, 12; 0.5), (10, 11, 12, 13, 14; 0.3),$ $(7, 7, 5, 8, 8, 5, 9; 0.1), (9, 10, 11, 12, 13; -0.5),$ $(12, 12, 5, 13, 13, 5, 14; -0.4), (9, 10, 11, 12, 13; -0.3) >$	$< (7, 8, 9, 10, 11; 0.5), (8, 9, 10, 11, 12; 0.4),$ $(3, 4, 5, 6, 7; 0.1), (6, 6, 4, 6, 8, 7, 2, 7, 6; -0.8),$ $(5, 6, 7, 8, 9; -0.3), (11, 12, 13, 14, 15; -0.4) >$	$< (7, 8, 9, 10, 11; 0.8), (3, 4, 5, 6, 7, 0.3),$ $(10, 1, 10, 2, 10, 3, 10, 4, 10, 5; 0.5), (5, 6, 7, 8, 9; -0.4),$ $(2, 5, 3, 4, 5, 5, 5, 6, 5; -0.3), (3, 4, 5, 6, 7; -0.4) >$	3
	$< (5, 6, 7, 8, 9; 0.6), (8, 9, 10, 11, 12; 0.7),$ $(9, 9, 5, 10, 10, 5, 11; 0.3), (7, 8, 9, 10, 11; -0.3),$ $(8, 9, 10, 11, 12; -0.6), (9, 5, 10, 10, 5, 11, 11, 5; -0.1) >$	$< (8, 10, 12, 14, 16; 0.5), (3, 4, 5, 6, 7; 0.1),$ $(6, 8, 6, 9, 7, 7, 1, 7, 2; 0.3), (5, 6, 7, 8, 9; -0.6),$ $(6, 7, 8, 9, 10; -0.7), (11, 5, 12, 12, 5, 13, 13, 5; -0.3) >$	$< (4, 5, 6, 7, 8; 0.5), (8, 9, 10, 11, 12; 0.4),$ $(5, 5, 6, 6, 5, 7, 7, 5; 0.6), (6, 7, 8, 9, 10; -0.8),$ $(4, 4, 5, 5, 5, 5, 6; -0.3), (7, 8, 9, 10, 11; -0.6) >$	4
	$< (3, 5, 7, 9, 11; 0.8), (2, 4, 6, 8, 10; 0.4),$ $(6, 7, 8, 9, 10; 0.2), (4, 5, 6, 7, 8; -0.6),$ $(7, 8, 9, 10, 11; -0.1), (9, 10, 11, 12, 13; -0.4) >$	$< (6, 7, 8, 9, 10; 0.7), (9, 10, 11, 12, 13; 0.2),$ $(8, 5, 9, 9, 5, 10, 10, 5; 0.4), (7, 5, 8, 8, 5, 9, 9, 5; -0.6),$ $(10, 11, 12, 13, 14; -0.3), (8, 10, 12, 14, 16; -0.4) >$	$< (6, 7, 8, 9, 10; 0.8), (5, 7, 9, 11, 13; 0.4),$ $(6, 6, 5, 7, 7, 5, 8; 0.6), (9, 10, 11, 12, 13; -0.9),$ $(6, 8, 10, 12, 14; -0.6), (7, 8, 9, 10, 11; -0.5) >$	5
3	$< (8, 9, 10, 11, 12; 0.7), (8, 5, 9, 9, 5, 10; 0.4),$ $(10, 11, 12, 13, 14; 0.3), (10, 11, 12, 13, 14; -0.4),$ $(6, 5, 7, 7, 5, 8, 8, 5; -0.5), (9, 10, 11, 12, 13; -0.6) >$	$< (8, 8, 5, 9, 9, 5, 10; 0.8), (10, 11, 12, 13, 14; 0.4),$ $(7, 7, 5, 8, 8, 5, 9; 0.3), (9, 10, 11, 12, 13; -0.5),$ $(5, 6, 7, 8, 9; -0.1), (9, 9, 5, 10, 10, 5, 11; -0.3) >$	$< (5, 7, 9, 11, 13; 0.7), (8, 9, 10, 11, 12; 0.4),$ $(7, 8, 9, 10, 11; 0.3), (6, 5, 7, 7, 5, 8, 8, 5; -0.6),$ $(9, 10, 11, 12, 13; -0.3), (10, 11, 12, 13, 14; -0.4) >$	1
	$< (10, 11, 12, 13, 14; 0.6), (6, 7, 8, 9, 10; 0.4),$ $(8, 9, 10, 11, 12; 0.5), (5, 5, 6, 6, 5, 7; -0.5),$ $(7, 8, 9, 10, 11; -0.4), (8, 9, 10, 11, 12; -0.3) >$	$< (8, 9, 10, 11, 12; 0.5), (5, 6, 7, 8, 9; 0.3),$ $(9, 10, 11, 12, 13; 0.4), (12, 13, 14, 15, 16; -0.9),$ $(6, 5, 7, 5, 8, 5, 10, 5; -0.3), (5, 5, 6, 6, 5, 7, 7, 5; -0.6) >$	$< (7, 9, 11, 13, 14; 0.7), (8, 9, 10, 11, 12; 0.4),$ $(10, 10, 5, 11, 11, 5, 12; 0.5), (6, 5, 7, 7, 5, 8, 8, 5; -0.6),$ $(3, 4, 5, 6, 7; -0.1), (7, 8, 9, 10, 11; -0.4) >$	2
	$< (6, 7, 8, 9, 10; 0.4), (8, 9, 10, 11, 12; 0.1),$ $(10, 10, 5, 11, 11, 5, 12; 0.6), (7, 8, 9, 10, 11; -0.5),$ $(10, 11, 12, 13, 14; -0.7), (8, 9, 10, 11, 12; -0.3) >$	$< (10, 11, 12, 13, 14; 0.6), (9, 5, 10, 10, 5, 11, 11, 5; 0.2),$ $(6, 7, 8, 9, 10; 0.2), (9, 10, 11, 12, 13; -0.7),$ $(10, 10, 5, 11, 11, 5, 12; -0.5), (11, 12, 13, 14, 15; -0.4) >$	$< (6, 5, 7, 7, 5, 8, 5; 0.3), (6, 7, 8, 9, 10; -0.7),$ $(5, 6, 7, 8, 9; -0.7), (7, 7, 5, 8, 8, 5, 9; -0.4) >$	3
	$< (7, 8, 9, 10, 11; 0.6), (5, 6, 7, 8, 9; 0.4),$ $(3, 5, 7, 9, 11; 0.3), (9, 10, 11, 12, 13; -0.4),$ $(7, 5, 8, 8, 5, 9, 5; -0.7), (9, 10, 11, 12, 13; -0.4) >$	$< (7, 8, 9, 10, 11; 0.4), (4, 6, 8, 10, 12; 0.3),$ $(5, 6, 7, 8, 9; 0.7), (10, 11, 12, 13, 14; -0.5),$ $(4, 5, 6, 7, 8; -0.4), (13, 13, 5, 14, 14, 5, 15; -0.7) >$	$< (6, 7, 8, 9, 10; 0.4), (7, 8, 9, 10, 11; 0.5),$ $(4, 6, 8, 10, 12; 0.3), (3, 5, 7, 9, 11; -0.7),$ $(5, 6, 7, 8, 9; -0.4), (9, 10, 11, 12, 13; -0.5) >$	4
	$< (6, 7, 8, 9, 10; 0.6), (5, 5, 6, 5, 7, 5, 8, 5, 9; 0.5),$ $(6, 8, 10, 12, 14; 0.3), (3, 5, 7, 9, 11; -0.4),$ $(9, 11, 13, 15, 17; -0.5), (10, 11, 12, 13, 14; -0.9) >$	$< (8, 5, 9, 5, 10, 5, 12, 5; 0.8), (10, 11, 12, 13, 14; 0.4),$ $(5, 6, 7, 8, 9; 0.6), (4, 5, 6, 7, 8; -0.3),$ $(9, 10, 11, 12, 13, -0.7), (8, 5, 9, 10, 5, 10, 5, 11, 11, 5; -0.5) >$	$< (7, 8, 9, 10, 11; 0.3), (3, 5, 7, 9, 11; 0.5),$ $(6, 7, 8, 9, 10; 0.7), (2, 4, 6, 8, 10; -0.6),$ $(4, 5, 6, 7, 8; -0.3), (6, 7, 8, 9, 10; -0.4) >$	5

Table 7: BPNFS input for $\widetilde{TrpC}_{j|k'}$ from the j^{th} extraction and recycling center to the l^{th} pharmaceutical company via k'^{th} conveyance.

j	$k' = 1$	$k' = 2$	$k' = 3$	l
1	$< (3, 4, 5, 6, 7; 0.5), (2, 5, 3, 5, 4, 5, 5, 5, 6, 5; 0.6), (6, 7, 8, 9, 10; 0.4), (7, 8, 9, 10, 11; -0.3), (4, 6, 8, 10, 12; -0.7), (3, 5, 7, 9, 11; -0.8) >$	$< (3, 4, 5, 6, 7; -0.6), (4, 6, 8, 10, 12; -0.5), (2, 5, 3, 5, 4, 5, 5, 5, 6, 5; 0.5), (4, 5, 6, 7, 8, 0.3), (4, 4, 5, 5, 5, 5, 6, 0.7), (2, 2, 5, 3, 3, 5, 4; -0.4) >$	$< (1, 3, 5, 7, 9; 0.7), (3, 5, 4, 5, 5, 5, 5, 6, 5, 7, 5; 0.4), (2, 4, 6, 8, 10; 0.5), (1, 5, 3, 5, 5, 5, 7, 5, 9, 5; -0.3), (3, 5, 7, 9, 11; -0.6), (2, 3, 4, 5, 6; -0.4) >$	1
	$< (2, 5, 3, 3, 5, 4, 4, 5; 0.7), (4, 5, 5, 5, 6, 5, 7, 5, 8, 5; 0.4), (3, 4, 5, 6, 7; 0.3), (2, 5, 3, 5, 4, 5, 5, 5, 6, 5; -0.5), (2, 4, 6, 8, 10; -0.4), (4, 5, 6, 7, 8; -0.6) >$	$< (4, 5, 6, 5, 8, 5, 10, 5, 12, 5; 0.4), (5, 7, 9, 11, 13; 0.5), (4, 5, 5, 5, 6, 6, 5; 0.7), (7, 9, 11, 13, 15; -0.3), (2, 4, 6, 8, 10; -0.5), (10, 10, 5, 11, 11, 5, 12; -0.6) >$	$< (3, 5, 4, 5, 5, 5, 6, 5, 7, 5; 0.5), (4, 5, 6, 7, 8; 0.7), (7, 8, 9, 10, 11; 0.6), (3, 4, 5, 6, 7; -0.9), (5, 5, 6, 5, 7, 5, 8, 5, 9, 5; -0.6), (6, 8, 10, 12, 14; -0.5) >$	2
2	$< (2, 5, 3, 5, 4, 5, 5, 6, 5; 0.6), (3, 5, 7, 9, 11; 0.7), (4, 6, 8, 10, 12; 0.8), (5, 7, 9, 11, 13; -0.5), (3, 5, 4, 5, 5, 6, 5, 7, 5; -0.6), (2, 3, 4, 5, 6; -0.4) >$	$< (7, 8, 9, 10, 11; 0.6), (4, 6, 8, 9, 10; 0.4), (2, 3, 4, 5, 6; 0.3), (3, 5, 4, 5, 5, 5, 6, 5, 7, 5; -0.5), (6, 7, 8, 9, 10; -0.7), (5, 7, 9, 11, 13; -0.8) >$	$< (5, 6, 7, 8, 9; 0.4), (2, 4, 6, 8, 10; 0.6), (3, 5, 7, 9, 11; 0.3), (4, 5, 6, 7, 8; -0.6), (2, 3, 4, 5, 6; -0.7), (4, 5, 6, 7, 8; -0.2) >$	1
	$< (2, 5, 4, 5, 6, 5, 8, 5, 10, 5; 0.8), (2, 3, 4, 5, 6; 0.7), (1, 2, 3, 4, 5; 0.3), (3, 5, 5, 6, 5, 8, 9, 5; -0.6), (1, 2, 3, 4, 5; -0.5), (1, 3, 5, 7, 9; -0.2) >$	$< (3, 5, 7, 9, 11; 0.6), (4, 5, 6, 7, 8; 0.5), (5, 5, 5, 6, 5, 7; 0.1), (5, 5, 6, 5, 7, 5, 8, 5, 9, 5; -0.2), (2, 4, 6, 8, 10; -0.5), (6, 7, 8, 9, 10; -0.7) >$	$< (2, 4, 6, 8, 10; 0.7), (2, 5, 3, 5, 4, 5, 5, 6, 5, 7, 5; 0.4), (4, 7, 10, 13, 16; 0.1), (1, 2, 3, 4, 5; -0.5), (3, 5, 7, 9, 11; -0.9), (1, 1, 5, 2, 2, 5, 3; -0.7) >$	2
3	$< (3, 4, 5, 6, 7; 0.5), (4, 5, 5, 5, 6, 5, 7, 5, 8, 5; 0.4), (5, 6, 7, 8, 9; 0.3), (5, 7, 9, 11, 13; -0.6), (2, 4, 6, 8, 10; -0.2), (4, 5, 6, 7, 8; -0.5) >$	$< (7, 8, 9, 10, 11; 0.4), (3, 5, 7, 9, 11; 0.8), (4, 5, 6, 7, 8; 0.6), (1, 3, 5, 7, 9; -0.5), (3, 4, 5, 6, 7; -0.4), (2, 3, 4, 5, 6; -0.5) >$	$< (6, 7, 8, 9, 10; 0.5), (4, 5, 6, 7, 8; 0.4), (2, 4, 6, 8, 10; 0.3), (5, 7, 9, 11, 13; -0.5), (5, 6, 7, 8, 9; -0.7), (4, 6, 8, 10, 12; -0.7) >$	1
	$< (2, 4, 6, 8, 10; 0.6), (3, 5, 4, 5, 5, 6, 5, 7, 5; 0.4), (3, 5, 7, 9, 11; 0.7), (4, 6, 8, 10, 12; -0.5), (1, 3, 5, 7, 9; -0.3), (5, 6, 7, 8, 9; -0.5) >$	$< (2, 3, 5, 5, 6, 5, 8; 0.7), (1, 4, 7, 10, 13; 0.8), (3, 4, 5, 6, 7; 0.5), (1, 5, 2, 5, 3, 5, 4, 5, 5; -0.3), (6, 7, 8, 9, 10; -0.4), (5, 6, 7, 8, 9; -0.2) >$	$< (4, 5, 6, 7, 8; 0.5), (3, 5, 7, 9, 11; 0.4), (3, 4, 5, 6, 7; 0.6), (1, 2, 3, 4, 5; -0.7), (4, 6, 8, 10, 12; -0.5), (2, 2, 5, 3, 3, 5, 4; -0.6) >$	2
4	$< (2, 3, 4, 5, 6; 0.4), (4, 6, 8, 10, 12; 0.5), (3, 4, 5, 6, 7; 0.2), (4, 5, 6, 7, 8; -0.5), (5, 6, 7, 8, 9; -0.6), (3, 4, 5, 6, 7; -0.2) >$	$< (4, 5, 6, 7, 8; 0.8), (1, 3, 5, 7, 9; 0.7), (1, 3, 5, 6, 7; 0.5), (3, 5, 4, 5, 5, 5, 6, 5, 7, 5; -0.7), (2, 3, 4, 5, 6; -0.5), (2, 4, 6, 8, 10; -0.3) >$	$< (4, 5, 6, 7, 8; 0.8), (5, 6, 7, 8, 9; 0.6), (2, 4, 6, 8, 10; 0.7), (3, 5, 7, 9, 11; -0.6), (6, 7, 8, 9, 10; -0.7), (5, 6, 7, 8, 9; -0.5) >$	1
	$< (5, 7, 9, 11, 13; 0.1), (2, 5, 4, 5, 6, 5, 8, 5, 10, 5; 0.2), (3, 5, 7, 9, 11; 0.4), (5, 6, 7, 8, 9; -0.3), (3, 5, 4, 5, 5, 6, 5, 7, 5; -0.7), (4, 6, 8, 10, 12; -0.6) >$	$< (4, 5, 6, 7, 8; 0.6), (1, 3, 5, 7, 9; 0.3), (4, 5, 6, 7, 8; 0.5), (3, 5, 7, 9, 11; -0.6), (2, 4, 6, 8, 10; -0.8), (3, 4, 5, 6, 7; -0.5) >$	$< (4, 5, 6, 7, 8; 0.7), (2, 4, 6, 8, 10; 0.5), (6, 7, 8, 9, 10; 0.3), (3, 5, 4, 5, 5, 5, 6, 5, 7, 5; -0.5), (1, 3, 5, 7, 8; -0.6), (4, 6, 8, 10, 12; -0.3) >$	2
5	$< (5, 5, 6, 5, 7, 5, 8, 5, 9, 5; 0.5), (3, 5, 7, 9, 11; 0.6), (5, 6, 7, 8, 9; 0.3), (2, 4, 6, 8, 10; -0.4), (3, 4, 5, 6, 7; -0.7), (5, 6, 7, 8, 9; -0.3) >$	$< (1, 3, 5, 7, 9; 0.4), (4, 5, 5, 6, 5, 7, 5, 8, 5; 0.6), (5, 6, 7, 8, 9; 0.2), (3, 4, 5, 6, 7; -0.4), (4, 6, 8, 10, 12; -0.5), (2, 2, 5, 3, 3, 5, 4; -0.2) >$	$< (3, 4, 5, 6, 7; 0.3), (2, 4, 6, 8, 10; 0.6), (6, 7, 8, 9, 10; 0.3), (2, 5, 3, 5, 4, 5, 5, 6, 5; -0.5), (4, 5, 6, 7, 8; -0.4), (2, 4, 6, 8, 10; -0.7), (4, 5, 6, 7, 8; -0.6) >$	1
	$< (3, 4, 5, 6, 7; 0.5), (5, 7, 9, 11, 13; 0.3), (5, 6, 7, 8, 9; 0.4), (6, 5, 7, 5, 8, 5, 9, 5, 10, 5; -0.2), (2, 4, 6, 8, 10; -0.4), (5, 6, 7, 8, 9; -0.6) >$	$< (4, 5, 6, 7, 8; 0.8), (2, 4, 6, 8, 10; 0.6), (5, 6, 7, 8, 9; 0.3), (2, 5, 3, 5, 4, 5, 5, 6, 5; -0.4), (5, 6, 7, 8, 9; -0.6), (3, 4, 5, 6, 7; -0.5) >$	$< (4, 5, 6, 7; 0.3), (2, 4, 6, 8, 10; 0.6), (3, 5, 7, 9, 11; 0.5), (4, 5, 6, 7, 8; -0.4), (1, 2, 3, 4, 5; -0.7) >$	2

Table 9: BPNFS input for \widetilde{SegT}_j at the j^{th} extraction and recycling center.

$j = 1$	$j = 2$	$j = 3$
$< (0.002, 0.003, 0.004, 0.005, 0.006; 0.8),$ $(0.0002, 0.0003, 0.0004, 0.0005, 0.0006; 0.4),$ $(0.001, 0.003, 0.005, 0.007, 0.009; 0.1),$ $(0.0005, 0.0006, 0.0007, 0.0008, 0.0009; -0.7),$ $(0.002, 0.003, 0.004, 0.005, 0.006; -0.4),$ $(0.0001, 0.0003, 0.0005, 0.0007, 0.0009; -0.3) >$	$< (0.005, 0.01, 0.015, 0.02, 0.025; 0.4),$ $(0.001, 0.003, 0.005, 0.007, 0.009; 0.5),$ $(0.009, 0.0095, 0.01, 0.0105, 0.011; 0.8),$ $(0.002, 0.004, 0.006, 0.008, 0.01; -0.2),$ $(0.001, 0.0015, 0.002, 0.0025, 0.003; -0.5),$ $(0.001, 0.003, 0.005, 0.007, 0.009; -0.6) >$	$< (0.001, 0.0015, 0.002, 0.0025, 0.003; 0.7),$ $(0.001, 0.003, 0.005, 0.007, 0.009; 0.4),$ $(0.0005, 0.001, 0.0015, 0.002, 0.0025; 0.2),$ $(0.002, 0.004, 0.006, 0.008, 0.01; -0.1),$ $(0.001, 0.0015, 0.002, 0.0025, 0.003; -0.3),$ $(0.001, 0.003, 0.005, 0.007, 0.009; -0.4) >$
$j = 4$	$j = 5$	
$< (0.002, 0.004, 0.006, 0.008, 0.01; 0.4),$ $(0.0002, 0.0003, 0.0004, 0.0005, 0.0006; 0.6),$ $(0.001, 0.003, 0.005, 0.007, 0.009; 0.8),$ $(0.0005, 0.0006, 0.0007, 0.0008, 0.0009; -0.3),$ $(0.002, 0.003, 0.004, 0.005, 0.006; -0.5),$ $(0.0001, 0.0003, 0.0005, 0.0007, 0.0009; -0.6) >$	$(0.005, 0.01, 0.015, 0.02, 0.025; 0.5),$ $(0.001, 0.003, 0.005, 0.007, 0.009; 0.3),$ $(0.001, 0.002, 0.003, 0.004, 0.005; 0.6),$ $(0.002, 0.004, 0.006, 0.008, 0.01; -0.3),$ $(0.001, 0.0015, 0.002, 0.0025, 0.003; -0.5),$ $(0.001, 0.003, 0.005, 0.007, 0.009; -0.7) >$	

Table 10: BPNFS input for \widetilde{Ext}_j at the j^{th} extraction and recycling center.

$j = 1$	$j = 2$	$j = 3$
$< (0.2, 0.4, 0.6, 0.8, 1; 0.2), (0.2, 0.3, 0.4, 0.5, 0.6; 0.6),$ $(0.4, 0.5, 0.6, 0.7, 0.8; 0.7), (0.1, 0.2, 0.3, 0.4, 0.5; -0.1),$ $(0.2, 0.3, 0.4, 0.5, 0.6; -0.5), (0.1, 0.3, 0.5, 0.7, 0.9; -0.8) >$	$< ((0.5, 0.7, 0.9, 1.1, 1.3; 0.3), (0.3, 0.4, 0.5, 0.6, 0.7; 0.5),$ $(0.3, 0.6, 0.9, 1.2, 1.5; 0.6), (0.6, 0.7, 0.8, 0.9, 1; -0.4),$ $(0.4, 0.6, 0.8, 1, 1.2; -0.7), (0.5, 0.6, 0.7, 0.8, 0.9; -0.8) >$	$< (0.4, 0.5, 0.6, 0.7, 0.8; 0.4), (0.2, 0.3, 0.4, 0.5, 0.6; 0.6),$ $(0.3, 0.5, 0.7, 0.9, 1.1; 0.8), (0.3, 0.4, 0.5, 0.6, 0.7; -0.6),$ $(0.2, 0.4, 0.6, 0.8, 1; -0.3), (0.3, 0.4, 0.5, 0.6, 0.7; -0.4) >$
$j = 4$	$j = 5$	
$< (0.1, 0.3, 0.5, 0.7, 0.9; 0.7), (0.2, 0.3, 0.4, 0.5, 0.6; 0.3),$ $(0.3, 0.4, 0.5, 0.6, 0.7; 0.4), (0.3, 0.4, 0.5, 0.6, 0.7; -0.6),$ $(0.2, 0.4, 0.6, 0.8, 1; -0.3), (0.2, 0.3, 0.4, 0.5, 0.6; -0.5) >$	$< (0.6, 0.7, 0.8, 0.9, 1; 0.3), (0.4, 0.6, 0.8, 1, 1.2; 0.5),$ $(0.5, 0.6, 0.7, 0.8, 0.9; 0.7), (0.6, 0.8, 1, 1.2, 1.4; -0.4),$ $(0.4, 0.5, 0.6, 0.7, 0.8; -0.3), (0.3, 0.4, 0.5, 0.6, 0.7; -0.6) >$	

Table 11: BPNFS input for \widetilde{Ret}_j at the j^{th} extraction and recycling center.

$j = 1$	$j = 2$	$j = 3$
$< (0.3, 0.4, 0.5, 0.6, 0.7; 0.4), (0.1, 0.2, 0.3, 0.4, 0.5; 0.6),$ $(0.4, 0.5, 0.6, 0.7, 0.8; 0.8), (0.2, 0.3, 0.4, 0.5, 0.6; -0.2),$ $(0.2, 0.4, 0.6, 0.8, 1; -0.8), (0.3, 0.4, 0.5, 0.6, 0.7; -0.4) >$	$< ((0.3, 0.5, 0.7, 0.9, 1.1; 0.8), (0.4, 0.6, 0.8, 1, 1.2; 0.4),$ $(0.5, 0.7, 0.9, 1.1, 1.3; 0.6), (0.4, 0.5, 0.6, 0.7, 0.8; -0.7),$ $(0.5, 0.6, 0.7, 0.8, 0.9; -0.5), (0.3, 0.5, 0.7, 0.9, 1.1; -0.2) >$	$< (0.3, 0.4, 0.5, 0.6, 0.7; 0.6), (0.1, 0.2, 0.3, 0.4, 0.5; 0.2),$ $(0.1, 0.3, 0.5, 0.7, 0.9; 0.6), (0.2, 0.4, 0.6, 0.8, 1; -0.3),$ $(0.1, 0.2, 0.3, 0.4, 0.5; -0.5), (0.3, 0.4, 0.5, 0.6, 0.7; -0.7) >$
$j = 4$	$j = 5$	
$< (0.1, 0.2, 0.3, 0.4, 0.5; 0.3), (0.2, 0.3, 0.4, 0.5, 0.6; 0.6),$ $(0.1, 0.3, 0.5, 0.7, 0.9; 0.8), (0.2, 0.3, 0.4, 0.5, 0.6; -0.1),$ $(0.3, 0.4, 0.5, 0.6, 0.7; -0.5), (0.1, 0.2, 0.3, 0.4, 0.5; -0.6) >$	$< (0.3, 0.5, 0.7, 0.9, 1.1; 0.5), (0.5, 0.6, 0.7, 0.8, 0.9; 0.4),$ $(0.4, 0.5, 0.6, 0.7, 0.8; 0.6), (0.5, 0.7, 0.9, 1.1, 1.3; -0.3),$ $(0.3, 0.4, 0.5, 0.6, 0.7; -0.7), (0.5, 0.6, 0.7, 0.8, 0.9; -0.4) >$	

Table 12: BPNFS input for \widetilde{TcrT}_{ijk} from the i^{th} collection center to the j^{th} extraction and recycling center via k^{th} conveyance.

i	$k = 1$	$k = 2$	$k = 3$	j
1	$< (0.4, 0.5, 0.6, 0.8, 0.3); (0.5, 0.6, 0.7, 0.8, 0.9; 0.2), (0.6, 0.7, 0.8, 0.9, 1; 0.4), (0.3, 0.4, 0.5, 0.6, 0.7; -0.4), (0.3, 0.4, 0.5, 0.6, 0.7; -0.2), (0.6, 0.7, 0.8, 0.9, 1; -0.3) >$	$< (0.3, 0.5, 0.7, 0.9, 1, 1; 0.5); (0.2, 0.4, 0.6, 0.8, 1; 0.2), (0.9, 1, 1, 1, 2, 1, 3; 0.7), (0.4, 0.5, 0.6, 0.7, 0.8; -0.4), (0.1, 0.3, 0.5, 0.7, 0.9; -0.5), (1, 1, 1, 2, 1, 3, 1, 4; -0.1) >$	$< (1, 1, 1, 2, 1, 3, 1, 4; 0.6), (0.4, 0.5, 0.6, 0.7, 0.8; 0.3), (0.7, 0.8, 0.9, 1, 1, 1; 0.5), (0.4, 0.6, 0.8, 1, 1, 2; -0.2), (0.8, 0.9, 1, 1, 1, 2; -0.6), (0.6, 0.7, 0.8, 0.9, 1; -0.4) >$	1
	$< (0.5, 0.6, 0.7, 0.8, 0.9; 0.6), (1, 1, 1, 2, 1, 3, 1, 4; 0.3), (0.2, 0.4, 0.6, 0.8, 1, 1, 1; 0.5), (0.7, 0.8, 0.9, 1, 1, 1; 0.2; -0.7), (0.6, 0.8, 1, 1, 2, 1, 3, 1, 4; -0.6) >$	$< (0.6, 0.7, 0.8, 0.9, 1; 0.6), (0.5, 0.7, 0.9, 1, 1, 1, 3; 0.8), (0.6, 0.8, 1, 1, 2, 1, 4; 0.6), (0.4, 0.5, 0.6, 0.7, 0.8; -0.3), (0.6, 0.7, 0.8, 0.9, 1; -0.6), (1, 1, 1, 2, 1, 3, 1, 4; -0.4) >$	$< (0.5, 0.6, 0.7, 0.8, 0.9; 0.5), (0.4, 0.6, 0.8, 1, 1, 2; 0.7), (0.5, 0.7, 0.9, 1, 1, 1; 0.5), (1, 1, 1, 2, 1, 3, 1, 4; -0.7), (0.6, 0.7, 0.8, 0.9, 1; -0.2), (0.7, 0.8, 0.9, 1, 1, 1; -0.6) >$	2
	$< (0.6, 0.7, 0.8, 0.9, 1; 0.6), (1, 2, 1, 4, 1, 6, 1, 8; 0.2; 0.7), (1, 1, 1, 2, 1, 3, 1, 4; 0.5), (0.7, 0.8, 0.9, 1, 1, 1; -0.4), (1, 1, 1, 2, 1, 3, 1, 4; 0.5), (0.7, 0.8, 0.9, 1, 1, 1; -0.4), (0.6, 0.7, 0.8, 0.9, 1; -0.5), (0.9, 1, 1, 1, 2, 1, 3; -0.3) >$	$< (1, 2, 1, 3, 1, 4, 1, 5, 1, 6; 0.5); (0.9, 1, 1, 1, 2, 1, 3; 0.7), (0.6, 0.7, 0.8, 0.9, 1; -0.6), (0.4, 0.6, 0.8, 1, 1, 2, 1, 4; 0.6), (0.5, 0.7, 0.9, 1, 1, 1, 3; 0.4), (0.4, 0.6, 0.8, 1, 1, 2; -0.6), (1, 1, 2, 1, 4, 1, 6, 1, 8; -0.4), (0.6, 0.8, 1, 1, 2, 1, 4; -0.7) >$	$< (0.5, 0.6, 0.7, 0.8, 0.9; 0.7), (0.6, 0.8, 1, 1, 2, 1, 4; 0.4), (0.8, 0.9, 1, 1, 1, 2; 0.5), (0.3, 0.5, 0.7, 0.9, 1, 1; -0.4), (0.6, 0.7, 0.8, 0.9, 1; -0.6), (1, 1, 1, 2, 1, 3, 1, 4; -0.2) >$	3
	$< (0.7, 0.8, 0.9, 1, 1; 0.6), (0.3, 0.4, 0.5, 0.6, 0.7; 0.4), (0.7, 0.9, 1, 1, 1, 3; 0.6), (0.6, 0.7, 0.8, 0.9, 1; -0.7), (0.8, 1, 1, 2, 1, 4, 1, 6; -0.3), (0.7, 0.9, 1, 1, 1, 3, 1, 5; -0.4) >$	$< (0.6, 0.7, 0.8, 0.9, 1; 0.9), (0.5, 0.7, 0.9, 1, 1, 1, 3; 0.4), (0.4, 0.6, 0.8, 1, 1, 2; 0.5), (0.3, 0.4, 0.5, 0.6, 0.7; -0.6), (0.6, 0.7, 0.8, 0.9, 1; -0.5), (0.4, 0.5, 0.6, 0.7, 0.8; -0.3) >$	$< (0.6, 0.7, 0.8, 0.9, 1; 0.6), (0.6, 0.8, 1, 1, 2, 1, 4; 0.7), (0.5, 0.7, 0.9, 1, 1, 1, 3; 0.4), (0.8, 1, 1, 2, 1, 4, 1, 6; -0.6), (0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9; -0.2) >$	4
	$< (0.2, 0.4, 0.6, 0.8, 1; 0.4), (0.6, 0.7, 0.8, 0.9, 1; -0.3), (0.5, 0.6, 0.7, 0.8, 0.9, 1; -0.3), (0.5, 0.7, 0.9, 1, 1, 1, 3; -0.5) >$	$< (0.9, 1, 1, 1, 2, 1, 3; 0.7), (0.4, 0.6, 0.8, 1, 1, 2; 0.5), (0.2, 0.3, 0.4, 0.5, 0.6; 0.4), (0.8, 1, 1, 2, 1, 4, 1, 6; -0.6), (0.5, 0.7, 0.9, 1, 1, 1, 3; -0.2), (0.6, 0.7, 0.8, 0.9, 1; -0.4) >$	$< (0.8, 0.9, 1, 1, 1, 2; 0.7), (0.3, 0.5, 0.7, 0.9, 1, 1; 0.4), (0.4, 0.5, 0.6, 0.7, 0.8; 0.3), (0.6, 0.7, 0.8, 0.9, 1; -0.5), (0.2, 0.4, 0.6, 0.8, 1; -0.9), (0.3, 0.5, 0.7, 0.9, 1, 1; -0.6) >$	5
2	$< (1, 1, 1, 3, 1, 5, 1, 7, 1, 9; 0.3), (0.7, 0.8, 0.9, 1, 1; 0.5), (0.4, 0.5, 0.6, 0.7, 0.8; 0.6), (0.5, 0.7, 0.9, 1, 1, 1, 3; -0.4), (0.2, 0.4, 0.6, 0.8, 1; -0.3), (0.8, 0.9, 1, 1, 1, 2; -0.6) >$	$< (1, 1, 1, 2, 1, 3, 1, 4; 0.5), (0.8, 1, 1, 2, 1, 4, 1, 6; 0.6), (0.3, 0.4, 0.5, 0.6, 0.7; 0.3), (0.6, 0.7, 0.8, 0.9, 1; -0.4), (1, 1, 1, 2, 1, 3, 1, 4, 1, 5; -0.6), (0.5, 0.6, 0.7, 0.8, 0.9; -0.2) >$	$< (0.5, 0.6, 0.7, 0.8, 0.9; 0.7), (0.3, 0.4, 0.5, 0.6, 0.7, 0.8; 0.8), (0.2, 0.4, 0.6, 0.8, 1; 0.3), (0.4, 0.5, 0.6, 0.7, 0.8; -0.5), (0.6, 0.7, 0.8, 0.9, 1; -0.7), (0.1, 0.3, 0.5, 0.7, 0.9; -0.2) >$	1
	$< (1, 1, 1, 2, 1, 3, 1, 4; 0.7), (0.7, 0.8, 0.9, 1, 1, 2; 0.3), (1, 1, 2, 1, 4, 1, 6; -0.6), (0.5, 0.7, 0.9, 1, 1, 1, 3; -0.7), (1, 2, 1, 3, 1, 4, 1, 5, 1, 6; -0.3) >$	$< (0.6, 0.7, 0.8, 0.9, 1; 0.5), (0.2, 0.3, 0.4, 0.5, 0.6; 0.6), (0.1, 0.3, 0.5, 0.7, 0.9; 0.7), (0.4, 0.5, 0.6, 0.7, 0.8; -0.3), (0.5, 0.6, 0.7, 0.8, 0.9; -0.6), (0.2, 0.3, 0.4, 0.5, 0.6; -0.3) >$	$< (0.7, 0.8, 0.9, 1, 1; 0.6), (0.3, 0.5, 0.7, 0.9, 1, 1; 0.7), (0.5, 0.6, 0.7, 0.8, 0.9; -0.3), (0.2, 0.4, 0.6, 0.8, 1; -0.6), (0.3, 0.4, 0.5, 0.6, 0.7; -0.2) >$	2
	$< (0.8, 0.9, 1, 1, 1, 2; 0.7), (0.7, 0.8, 0.9, 1, 1, 1, 2; 0.3), (0.6, 0.8, 1, 1, 2, 1, 4, 1, 6; -0.6), (0.5, 0.7, 0.9, 1, 1, 1, 3; -0.7), (1, 2, 1, 3, 1, 4, 1, 5, 1, 6; -0.3) >$	$< (0.4, 0.5, 0.6, 0.7, 0.8; 0.6), (0.8, 0.9, 1, 1, 1, 2; 0.3), (0.3, 0.5, 0.7, 0.9, 1, 1; 0.6), (0.4, 0.6, 0.8, 1, 1, 2; -0.7), (0.5, 0.6, 0.7, 0.8, 0.9; -0.3), (1, 1, 1, 2, 1, 3, 1, 4; -0.7) >$	$< (0.6, 0.7, 0.8, 0.9, 1; 0.3), (0.5, 0.6, 0.7, 0.8, 0.9; -0.9), (0.2, 0.4, 0.6, 0.8, 1; -0.6), (0.3, 0.4, 0.5, 0.6, 0.7; -0.2) >$	3
	$< (0.5, 0.6, 0.7, 0.8, 0.9; 0.7), (0.8, 1, 1, 2, 1, 4, 1, 6; 0.4), (0.7, 0.9, 1, 1, 1, 3, 1, 5; 0.5), (0.7, 0.8, 0.9, 1, 1, 1, 2; 0.3), (0.7, 0.8, 0.9, 1, 1, 1, 2; 1, 3; -0.5) >$	$< (0.8, 1, 1, 2, 1, 4, 1, 6; 0.5), (0.1, 0.3, 0.5, 0.7, 0.9; 0.1), (0.4, 0.5, 0.6, 0.7, 0.8; 0.3), (0.3, 0.5, 0.7, 0.9, 1, 1; -0.6), (0.7, 0.8, 0.9, 1, 1, 1, 2; 1, 3; -0.3) >$	$< (1, 1, 2, 1, 4, 1, 6, 1, 8; 0.6), (0.8, 0.9, 1, 1, 1, 2; 0.7), (1, 1, 1, 3, 1, 5, 1, 7, 1, 9; 0.5), (0.6, 0.7, 0.8, 0.9, 1; -0.8), (1, 2, 1, 4, 1, 6, 1, 8, 2; -0.5), (0.8, 1, 1, 2, 1, 4, 1, 6; -0.3) >$	4
	$< (0.4, 0.6, 0.8, 1, 1, 2, 0.6), (0.5, 0.7, 0.9, 1, 1, 1, 3; 0.4), (0.6, 0.7, 0.8, 0.9, 1, 1, 1, 2; 0.6), (0.5, 0.6, 0.7, 0.8, 0.9, 1, 1, 1, 2; 0.6), (0.5, 0.7, 0.9, 1, 1, 1, 2; 0.6) >$	$< (0.4, 0.5, 0.6, 0.7, 0.8; 0.5), (0.6, 0.7, 0.8, 0.9, 1; 0.6), (0.5, 0.7, 0.9, 1, 1, 1, 3; 0.7), (0.6, 0.8, 1, 1, 2, 1, 4; -0.4), (0.9, 1, 1, 3, 1, 5, 1, 7; -0.6), (0.4, 0.5, 0.6, 0.7, 0.8; -0.8) >$	$< (0.5, 0.6, 0.7, 0.8, 0.9; 0.7), (0.5, 0.7, 0.9, 1, 1, 1, 3; 0.3), (0.4, 0.6, 0.8, 1, 1, 2; 0.5), (0.8, 0.9, 1, 1, 1, 2; -0.9), (0.6, 0.7, 0.8, 0.9, 1; -0.6), (0.7, 0.9, 1, 1, 1, 3, 1, 5; -0.5) >$	5
3	$< (0.9, 1, 1, 1, 2, 1, 3; 0.4), (0.6, 0.7, 0.8, 0.9, 1; 0.7), (1, 2, 1, 4, 1, 6, 1, 8, 2; 0.2), (0.3, 0.5, 0.7, 0.9, 1, 1; -0.6), (1, 4, 1, 5, 1, 6, 1, 7, 1, 8; -0.3), (0.8, 0.9, 1, 1, 1, 2; -0.6) >$	$< (0.8, 0.9, 1, 1, 1, 2; 0.7), (0.6, 0.7, 0.8, 0.9, 1; 0.9), (0.5, 0.6, 0.7, 0.8, 0.9; 0.2), (0.4, 0.6, 0.8, 1, 1, 2; -0.5), (0.4, 0.5, 0.6, 0.7, 0.8; -0.2), (0.8, 1, 1, 2, 1, 4, 1, 6; -0.5) >$	$< (1, 1, 1, 2, 1, 3, 1, 4; 0.5), (0.8, 0.9, 1, 1, 1, 2, 1, 3; -0.2) >$	1
	$< (0.7, 0.8, 0.9, 1, 1, 1; 0.7), (1, 1, 1, 2, 1, 3, 1, 4, 1, 5; 0.3), (0.8, 0.9, 1, 1, 1, 2; 0.3), (0.6, 0.8, 1, 1, 2, 1, 4; -0.7) >$	$< (0.4, 0.5, 0.6, 0.7, 0.8; 0.5), (0.5, 0.6, 0.7, 0.8, 0.9; 0.6), (0.2, 0.4, 0.6, 0.8, 1; 0.7), (0.7, 0.8, 0.9, 1, 1, 1; -0.4), (0.4, 0.5, 0.6, 0.7, 0.8; -0.7), (0.3, 0.5, 0.7, 0.9, 1, 1; -0.9) >$	$< (0.6, 0.7, 0.8, 0.9, 1; 0.6), (0.2, 0.4, 0.6, 0.8, 1; 0.4), (0.3, 0.5, 0.7, 0.9, 1, 1; 0.6), (0.5, 0.6, 0.7, 0.8, 0.9; -0.7), (0.7, 0.9, 1, 1, 1, 3, 1, 5; -0.4), (0.4, 0.6, 0.8, 1, 1, 2; -0.2) >$	2
	$< (0.5, 0.7, 0.9, 1, 1, 1; 0.6), (0.8, 0.9, 1, 1, 1, 2; 0.5), (0.7, 0.8, 0.9, 1, 1, 1, 2; 0.3), (0.7, 0.8, 0.9, 1, 1, 1, 2; 0.3), (0.5, 0.7, 0.9, 1, 1, 1, 2; 0.3) >$	$< (0.4, 0.7, 0.9, 1, 1, 1, 3; 0.6), (0.8, 0.9, 1, 1, 1, 2; 0.7), (1, 1, 1, 2, 1, 3, 1, 4; -0.4), (0.7, 0.9, 1, 1, 1, 3, 1, 5; -0.6) >$	$< (1, 1, 1, 2, 1, 3, 1, 4; 0.6), (0.6, 0.8, 1, 1, 2, 1, 4; -0.5), (1, 1, 1, 2, 1, 3, 1, 4; -0.6), (0.5, 0.7, 0.9, 1, 1, 1, 3; -0.2) >$	3
	$< (1, 1, 1, 2, 1, 3, 1, 4; 0.5), (1, 1, 2, 1, 4, 1, 6, 1, 8; 0.6), (0.7, 0.8, 0.9, 1, 1, 1, 2; 1, 3; -0.6), (0.9, 1, 1, 3, 1, 5, 1, 7; -0.3), (0.8, 1, 1, 2, 1, 4, 1, 6; -0.2) >$	$< (0.5, 0.6, 0.7, 0.8, 0.9; 0.6), (0.6, 0.8, 1, 1, 2, 1, 4; 0.4), (0.3, 0.4, 0.5, 0.6, 0.7; 0.3), (0.9, 1, 1, 1, 2, 1, 3; -0.6), (0.4, 0.5, 0.6, 0.7, 0.8; -0.3), (0.9, 1, 1, 1, 2, 1, 3; -0.7) >$	$< (0.6, 0.8, 1, 1, 2, 1, 4; 0.1), (0.3, 0.5, 0.7, 0.9, 1, 1; 0.4), (1, 2, 1, 4, 1, 6, 1, 8; 0.6), (0.8, 1, 1, 2, 1, 4, 1, 6; -0.7), (0.5, 0.6, 0.7, 0.8, 0.9, 1; -0.6), (0.7, 0.8, 0.9, 1, 1, 1, 2, 1, 3; -0.7) >$	4
	$< (0.7, 0.8, 0.9, 1, 1; 0.7), (0.4, 0.6, 0.8, 1, 1, 2; 0.4), (0.3, 0.5, 0.7, 0.9, 1, 1; -0.5) >$	$< (0.6, 0.8, 1, 1, 2, 1, 4; 0.9), (0.7, 0.9, 1, 1, 1, 3, 1, 5; 0.6), (0.5, 0.6, 0.7, 0.8, 0.9; 0.4), (0.6, 0.7, 0.8, 0.9, 1; -0.8), (0.9, 1, 1, 1, 2, 1, 3; -0.3), (0.7, 0.8, 0.9, 1, 1, 1, 2, 1, 3; -0.5) >$	$< (0.5, 0.6, 0.7, 0.8, 0.9; -0.3), (0.7, 0.9, 1, 1, 1, 3, 1, 5; -0.4) >$	5

Table 13: BPNFS input for $\widehat{TrpT}_{jlk'}$ from the j^{th} extraction and recycling center to the l^{th} pharmaceutical company via k'^{th} conveyance.

j	$k' = 1$	$k' = 2$	$k' = 3$	l
1	$< (0.3, 0.5, 0.7, 0.9, 1.1; 0.6), (0.4, 0.6, 0.8, 1.1, 1.2; 0.5), (0.6, 0.7, 0.8, 0.9, 1; 0.4), (0.7, 0.8, 0.9, 1.1, 1.1; -0.6), (0.4, 0.6, 0.8, 1.1, 1.2; -0.3), (0.3, 0.5, 0.7, 0.9, 1.1; -0.3) >$	$< (0.8, 0.9, 1.1, 1.1, 1.2; 0.6), (1.1, 1.1, 1.2, 1.3, 1.4; 0.4), (0.4, 0.6, 0.8, 1.1, 1.2; 0.5), (0.5, 0.7, 0.9, 1.1, 1.3; -0.7), (0.4, 0.6, 0.8, 1.1, 1.2; -0.2), (0.9, 1.1, 1.3, 1.5, 1.7; -0.4) >$	$< (0.3, 0.5, 0.7, 0.9, 1.1; 0.8), (0.4, 0.5, 0.6, 0.7, 0.8; 0.5), (0.2, 0.4, 0.6, 0.8, 1; 0.3), (0.6, 0.7, 0.8, 0.9, 1; -0.6), (0.5, 0.6, 0.7, 0.8, 0.9; -0.3), (0.4, 0.5, 0.6, 0.7, 0.8; -0.4) >$	1
	$< (0.3, 0.4, 0.5, 0.6, 0.7; 0.9), (0.2, 0.3, 0.4, 0.5, 0.6; 0.5), (0.3, 0.5, 0.7, 0.9, 1.1; 0.3), (0.2, 0.4, 0.6, 0.8, 1; -0.6), (0.5, 0.6, 0.7, 0.8, 0.9; -0.3), (0.1, 0.2, 0.3, 0.4, 0.5; -0.1) >$	$< (0.4, 0.5, 0.6, 0.7, 0.8; 0.1), (0.5, 0.7, 0.9, 1.1, 1.3; 0.3), (0.4, 0.6, 0.8, 1.1, 1.2; 0.6), (0.7, 0.8, 0.9, 1.1, 1; -0.5), (0.4, 0.6, 0.8, 1.1, 1.2; -0.7), (0.8, 1.1, 2, 1.4, 1.6; -0.6) >$	$< (0.6, 0.7, 0.8, 0.9, 1; 0.4), (0.8, 1.1, 2, 1.4, 1.6; 0.6), (0.7, 0.9, 1.1, 1.3, 1.5; 0.8), (0.5, 0.7, 0.9, 1.1, 1.3; -0.6), (1.1, 2, 1.4, 1.6, 1.8; -0.5) >$	2
2	$< (0.3, 0.4, 0.5, 0.6, 0.7; 0.7), (0.1, 0.3, 0.5, 0.7, 0.9; 0.4), (0.2, 0.4, 0.6, 0.8, 1; 0.3), (0.5, 0.7, 0.9, 1.1, 1.3; -0.8), (0.3, 0.4, 0.5, 0.6, 0.7; -0.5), (0.2, 0.3, 0.4, 0.5, 0.6; -0.3) >$	$< (0.4, 0.6, 0.8, 1.1, 1.2; 0.6), (0.9, 1.1, 1.1, 1.2, 1.3; 0.3), (0.5, 0.6, 0.7, 0.8, 0.9; 0.1), (0.3, 0.5, 0.7, 0.9, 1.1; -0.7), (0.6, 0.7, 0.8, 0.9, 1; -0.3), (0.3, 0.5, 0.7, 0.9, 1.1; -0.5) >$	$< (1.1, 2, 1.4, 1.6, 1.8; 0.6), (0.5, 0.6, 0.7, 0.8, 0.9; 0.5), (0.6, 0.8, 1.1, 2, 1.4; 0.4), (1.1, 1, 1.2, 1.3, 1.4; -0.8), (0.3, 0.5, 0.7, 0.9, 1.1; -0.6), (0.6, 0.7, 0.8, 0.9, 1; -0.2) >$	1
	$< (0.2, 0.4, 0.6, 0.8, 1; 0.8), (0.3, 0.4, 0.5, 0.6, 0.7; 0.7), (0.3, 0.5, 0.7, 0.9, 1.1; 0.3), (0.4, 0.5, 0.6, 0.7, 0.8; -0.6), (0.1, 0.3, 0.5, 0.7, 0.9; -0.5), (0.3, 0.4, 0.5, 0.6, 0.7; -0.2) >$	$< (1.1, 1.1, 1.2, 1.3, 1.4; 0.5), (0.5, 0.7, 0.9, 1.1, 1.3; 0.8), (0.6, 0.8, 1.1, 2, 1.4; 0.6), (1.1, 1.3, 1.5, 1.7, 1.9; -0.4), (0.9, 1.1, 1.3, 1.5, 1.7; -0.6), (0.7, 0.8, 0.9, 1.1, 1; -0.7) >$	$< (0.4, 0.6, 0.8, 1.1, 2; 0.5), (0.5, 0.7, 0.9, 1.1, 1.3; 0.4), (0.4, 0.7, 1.1, 3, 1.6; 0.1), (0.4, 0.5, 0.6, 0.7, 0.8; -0.4), (0.5, 0.7, 0.9, 1.1, 1.3; -0.8), (0.3, 0.4, 0.5, 0.6, 0.7; -0.7) >$	2
3	$< (0.2, 0.3, 0.4, 0.5, 0.6; 0.5), (0.4, 0.5, 0.6, 0.7, 0.8; 0.4), (0.3, 0.4, 0.5, 0.6, 0.7; 0.3), (0.3, 0.4, 0.5, 0.6, 0.7; -0.6), (0.1, 0.3, 0.5, 0.7, 0.9; -0.2), (0.2, 0.3, 0.4, 0.5, 0.6; -0.5) >$	$< (0.8, 0.9, 1.1, 1.1, 1.2; 0.4), (0.5, 0.7, 0.9, 1.1, 1.3; 0.8), (0.6, 0.7, 0.8, 0.9, 1; 0.6), (0.7, 0.9, 1.1, 1.3, 1.5; -0.5), (0.4, 0.5, 0.6, 0.7, 0.8; -0.4), (1.1, 2, 1.4, 1.6, 1.8; -0.5) >$	$< (0.9, 1.1, 1.3, 1.5, 1.7; 0.5), (0.7, 0.9, 1.1, 1.3, 1.5; 0.4), (0.6, 0.8, 1.1, 2, 1.4; 0.3), (0.5, 0.7, 0.9, 1.1, 1.3; -0.5), (1.1, 2, 1.4, 1.6, 1.8; -0.7), (0.4, 0.6, 0.8, 1.1, 2; 0.5), (0.6, 0.8, 1.1, 2, 1.4; -0.2), (0.7, 0.8, 0.9, 1.1, 1; -0.5) >$	1
	$< (0.9, 1.1, 1.2, 1.3; 0.3), (0.7, 0.9, 1.1, 1.3, 1.5; 0.5), (0.5, 0.6, 0.7, 0.8, 0.9; 0.7), (0.6, 0.8, 1.1, 2, 1.4; -0.7), (0.7, 0.8, 0.9, 1.1; -0.3), (1.1, 1.1, 1.2, 1.3, 1.4; -0.5) >$	$< (1.2, 1.4, 1.6, 1.8; 2; 0.3), (0.7, 0.9, 1.1, 1.3, 1.5; 0.8), (0.9, 1.1, 1.3, 1.5, 1.7; 0.6), (0.8, 1.1, 2, 1.4, 1.6; -0.6), (0.7, 0.8, 0.9, 1.1; -0.4), (0.6, 0.7, 0.8, 0.9, 1; -0.2) >$	$< ((0.9, 1.1, 1.2, 1.3; 0.5), (0.5, 0.7, 0.9, 1.1, 1.3; 0.4), (0.3, 0.4, 0.5, 0.6, 0.7; 0.6), (1, 1.2, 1.4, 1.6, 1.8; -0.7), (0.2, 0.4, 0.6, 0.8, 1; -0.5), (0.5, 0.6, 0.7, 0.8, 0.9; -0.3) >$	2
4	$< (1, 1.2, 1.4, 1.6, 1.8; 0.4), (0.4, 0.6, 0.8, 1.1, 2; 0.5), (0.9, 1.1, 1.2, 1.3; 0.2), (0.7, 0.8, 0.9, 1.1, 1; -0.5), (0.8, 1.1, 2, 1.4, 1.6; -0.6), (1.1, 1.1, 1.2, 1.3, 1.4; -0.2) >$	$< (0.8, 0.9, 1.1, 1.1, 1.2; 0.6), (0.9, 1.1, 1.3, 1.5, 1.7; 0.3), (0.8, 1.1, 2, 1.4, 1.6; 0.5), (1.1, 2, 1.4, 1.6; 0.1), (0.7, 0.9, 1.1, 1.3, 1.5; -0.3) >$	$< (0.5, 0.7, 0.9, 1.1, 1.3; 0.7), (0.8, 0.9, 1.1, 1.2; 0.4), (0.4, 0.6, 0.8, 1.1, 2; 0.5), (0.6, 0.8, 1.1, 2, 1.4; -0.2), (0.7, 0.8, 0.9, 1.1, 1; -0.5) >$	1
	$< (0.9, 1.1, 1.2, 1.3; 0.5), (0.5, 0.7, 0.9, 1.1, 1.3; 0.4), (0.3, 0.4, 0.5, 0.6, 0.7; 0.6), (1, 1.2, 1.4, 1.6, 1.8, -0.7), (0.2, 0.4, 0.6, 0.8, 1; -0.5), (0.5, 0.6, 0.7, 0.8, 0.9; -0.3) >$	$< (1.2, 1.3, 1.4, 1.5, 1.6; 0.9), (0.5, 0.6, 0.7, 0.8, 0.9; 0.6), (0.9, 1.1, 1.3, 1.5, 1.7; 0.5), (0.6, 0.8, 1.1, 2, 1.4; -0.4), (1, 1.1, 1.2, 1.3, 1.4; -0.8), (0.7, 0.8, 0.9, 1.1, 1; -0.5) >$	$< (0.9, 1.1, 1.3, 1.5, 1.7; 0.9), (0.9, 1.1, 1.2, 1.3; 0.6), (0.5, 0.6, 0.7, 0.8, 0.9; 0.4), (1, 1.1, 1.2, 1.3, 1.4; -0.2), (0.7, 0.8, 0.9, 1.1, 1; -0.6), (1, 1.2, 1.4, 1.6, 1.8; -0.5) >$	2
5	$< (1, 1.1, 1.2, 1.3, 1.4; 0.8), (0.7, 0.9, 1.1, 1.3, 1.5; 0.5), (0.7, 0.8, 0.9, 1.1; 0.3), (0.6, 0.8, 1.1, 2, 1.4; -0.1), (1, 1.2, 1.4, 1.6, 1.8; -0.7), (0.6, 0.7, 0.8, 0.9, 1; -0.3) >$	$< (0.6, 0.8, 1.1, 2, 1.4; 0.4), (0.5, 0.6, 0.7, 0.8, 0.9; 0.6), (0.8, 0.9, 1.1, 1.2; 0.9), (0.6, 0.8, 1.1, 2, 1.4; -0.8), (0.7, 0.8, 0.9, 1.1; -0.4), (0.9, 1.1, 1.2, 1.3; 0.2) >$	$< (0.5, 0.6, 0.7, 0.8, 0.9; 0.6), (0.4, 0.6, 0.8, 1.1, 2; 0.3), (0.6, 0.7, 0.8, 0.9, 1; 0.5), (0.6, 0.8, 1.1, 2, 1.4; -0.6), (0.9, 1.1, 1.2, 1.3; -0.2), (0.3, 0.4, 0.5, 0.6, 0.7; -0.4) >$	1
	$< (0.5, 0.6, 0.7, 0.8, 0.9; 0.5), (0.4, 0.6, 0.8, 1.1, 2; 0.3), (1.1, 1.2, 1.3, 1.4; 0.4), (0.5, 0.7, 0.9, 1.1, 1.3; -0.2), (1.1, 1.2, 1.3, 1.4, 1.5; -0.4), (0.4, 0.5, 0.6, 0.7, 0.8; -0.6) >$	$< (0.5, 0.7, 0.9, 1.1, 1.3; 0.7), (0.6, 0.7, 0.8, 0.9, 1; 0.4), (0.4, 0.5, 0.6, 0.7, 0.8; 0.3), (0.5, 0.6, 0.7, 0.8, 0.9; -0.1), (0.3, 0.5, 0.7, 0.9, 1.1; -0.6), (0.6, 0.7, 0.8, 0.9, 1; -0.5) >$	$< (0.5, 0.6, 0.7, 0.8, 0.9; 0.4), (0.1, 0.3, 0.5, 0.7, 0.9; 0.7), (0.2, 0.3, 0.4, 0.5, 0.6; 0.5), (0.4, 0.5, 0.6, 0.7, 0.8; -0.1), (0.2, 0.3, 0.4, 0.5, 0.6; -0.4), (0.4, 0.5, 0.6, 0.7, 0.8; -0.7) >$	2

Table 14: BPNFS input for $\widetilde{T^r m T}_{jmk''}$ from the j^{th} extraction and recycling center to the m^{th} manufacturing company via k''^{th} conveyance.

j	$k'' = 1$	$k'' = 2$	$k'' = 3$	m
1	$< (1, 1.1, 1.2, 1.3, 1.4; 0.3), (0.8, 0.9, 1.1, 1.1, 1.2; 0.4), (0.6, 0.8, 1, 1.2, 1.4; 0.6), (0.5, 0.7, 0.9, 1.1, 1.3; -0.5) >$ $(0.9, 1.1, 1.3, 1.5, 1.7; -0.2), (0.7, 0.8, 0.9, 1.1, 1.1; -0.4) >$	$< (0.2, 0.4, 0.6, 0.8, 1; 0.8), (0.5, 0.7, 0.9, 1.1, 1.3; 0.5), (0.7, 0.8, 0.9, 1.1; 0.4), (0.9, 1.1, 1.2, 1.3; -0.6) >$ $(0.5, 0.6, 0.7, 0.8, 0.9; -0.3), (0.4, 0.5, 0.6, 0.7, 0.8; -0.4) >$	$< (0.5, 0.6, 0.7, 0.8, 0.9; 0.7), (1, 1.2, 1.4, 1.6, 1.8; 0.4), (0.9, 1, 1.1, 1.2, 1.3; 0.3), (0.7, 0.8, 0.9, 1, 1.1; -0.5) >$ $(0.6, 0.8, 1, 1.2, 1.4; -0.4), (0.7, 0.9, 1.1, 1.3, 1.5; -0.1) >$	1
	$< (0.4, 0.5, 0.6, 0.7, 0.8; 0.2), (0.2, 0.3, 0.4, 0.5, 0.6; 0.4), (0.4, 0.6, 0.8, 1, 1.2; 0.7), (0.2, 0.3, 0.4, 0.5, 0.6; -0.9) >$ $(0.1, 0.3, 0.5, 0.7, 0.9; -0.2), (0.3, 0.4, 0.5, 0.6, 0.7; -0.6) >$	$< (0.8, 0.9, 1, 1.1, 1.2; 0.5), (0.5, 0.6, 0.7, 0.8, 0.9; 0.3), (0.5, 0.6, 0.7, 0.8, 0.9; 0.2), (0.4, 0.6, 0.8, 1, 1.2; -0.5) >$ $(0.7, 0.9, 1.1, 1.3, 1.5; -0.6), (0.6, 0.7, 0.8, 0.9, 1, 1.1; -0.4) >$	$< (1, 1.1, 1.2, 1.3, 1.4; 0.6), (0.7, 0.9, 1.1, 1.3, 1.5; 0.5), (0.4, 0.5, 0.6, 0.7, 0.8; 0.2), (0.6, 0.7, 0.8, -0.9, 1, 1.1; -0.4), (1, 1.1, 1.2, 1.3, 1.4; -0.6), (0.8, 1, 1.2, 1.4, 1.6; -0.7) >$ $< (0.9, 1.1, 1.3, 1.5, 1.7; 0.8), (1, 1.1, 1.2, 1.3, 1.4; 0.3) >$	2
	$< (0.7, 0.8, 0.9, 1.1, 1.2; 0.3), (0.9, 1.1, 1.2, 1.3; -0.7), (0.3, 0.5, 0.7, 0.9, 1.1; -0.4), (0.5, 0.6, 0.7, 0.8, 0.9; -0.2) >$	$(1, 1.2, 1.4, 1.6, 1.8; 0.3), (0.7, 0.8, 0.9, 1.1, 1.1; -0.8), (0.7, 0.9, 1.1, 1.3, 1.5; -0.5), (0.8, 0.9, 1.1, 1.2; -0.3) >$	$< (0.9, 1, 1.1, 1.2, 1.3; -0.5), (0.8, 0.9, 1, 1.1, 1.2; -0.3) >$ $(0.6, 0.7, 0.8, 0.9, 1.0; 0.6), (0.8, 1.1, 1.2, 1.4, 1.6; -0.3), (0.9, 1, 1.1, 1.2, 1.3; -0.5), (0.8, 0.9, 1, 1.1, 1.2; -0.4) >$	3
	$< (0.6, 0.7, 0.8, 0.9, 1; 0.7), (0.7, 0.8, 0.9, 1.1, 1.1; 0.3), (0.5, 0.7, 0.9, 1.1, 1.3; 0.4), (0.5, 0.6, 0.7, 0.8, 0.9; -0.4), (0.7, 0.8, 0.9, 1.1; -0.6) >$	$< (0.5, 0.7, 0.8, 0.9, 1, 1.3; 0.4), (0.5, 0.6, 0.7, 0.8, 0.9; 0.5), (0.6, 0.7, 0.8, 0.9, 1; 0.6), (0.2, 0.4, 0.6, 0.8, 1; -0.9) >$ $(0.4, 0.5, 0.6, 0.7, 0.8; -0.4), (0.3, 0.4, 0.5, 0.6, 0.7; -0.3) >$	$< (0.7, 0.9, 1.1, 1.3, 1.5; 0.5), (0.4, 0.6, 0.8, 1, 1.2; 0.3), (0.5, 0.6, 0.7, 0.8, 0.9; 0.4), (0.8, 0.9, 1.1, 1.2; -0.5) >$ $(1, 1.1, 1.2, 1.3, 1.4; -0.6), (0.7, 0.8, 0.9, 1.1, 1.1; -0.7) >$	1
2	$< (0.4, 0.5, 0.6, 0.7, 0.8; 0.6), (0.4, 0.6, 0.8, 1, 1.2; 0.3), (0.8, 0.9, 1.1, 1.2; 0.2), (0.5, 0.7, 0.9, 1.1, 1.3; -0.8) >$ $(0.6, 0.8, 1, 1.2, 1.4; -0.6), (0.3, 0.4, 0.5, 0.6, 0.7; -0.4) >$	$< (1, 1.1, 1.2, 1.3, 1.4; 0.3), (0.7, 0.8, 0.9, 1.1, 1.1; 0.5), (0.8, 1, 1.2, 1.4, 1.6; 0.8), (0.6, 0.7, 0.8, 0.9, 1, 1.1; -0.5) >$ $(0.9, 1.1, 1.3, 1.5, 1.7; -0.2), (0.9, 1, 1.1, 1.2, 1.3; -0.1) >$	$< (1, 1.1, 1.2, 1.3, 1.4; 0.5), (1.3, 1.5, 1.7, 1.9, 2.1; 0.7), (0.6, 0.8, 1, 1.2, 1.4; 0.6), (0.9, 1.1, 1.1, 1.2, 1.3; -0.3) >$ $(1.1, 1.3, 1.5, 1.7, 1.9; -0.6), (1.2, 1.3, 1.4, 1.5, 1.6; -0.7) >$	2
	$< (0.4, 0.6, 0.8, 1, 1.2; 0.4), (0.3, 0.4, 0.5, 0.6, 0.7, 0.8), (0.6, 0.7, 0.8, 0.9, 1.1; 0.3), (0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1.1, 1.2; -0.5) >$ $(0.6, 0.7, 0.8, 0.9, 1; -0.6), (0.5, 0.7, 0.9, 1.1, 1.3; -0.3) >$	$< (0.2, 0.3, 0.4, 0.5, 0.6; 0.6), (0.1, 0.3, 0.5, 0.7, 0.9; 0.2), (0.3, 0.4, 0.5, 0.6; 0.7; 0.4), (0.2, 0.4, 0.6, 0.8, 1; -0.7) >$ $(0.3, 0.4, 0.5, 0.6, 0.7; -0.5), (0.4, 0.5, 0.6, 0.7, 0.8; -0.4) >$	$< (0.6, 0.7, 0.8, 0.9, 1; 0.6), (0.5, 0.7, 0.9, 1.1, 1.3; 0.7), (0.7, 0.8, 0.9, 1, 1.1; 0.4), (0.4, 0.5, 0.6, 0.7, 0.8; -0.3) >$ $(0.4, 0.6, 0.8, 1, 1.2; -0.4), (0.2, 0.3, 0.4, 0.5, 0.6; -0.6) >$	3
	$< (0.6, 0.7, 0.8, 0.9, 1; 0.3), (0.4, 0.6, 0.8, 1, 1.2; 0.5), (0.7, 0.9, 1.1, 1.3, 1.5; 0.7), (1, 1.1, 1.2, 1.3, 1.4; -0.1), (0.7, 0.8, 0.9, 1.1, 1.1; -0.6) >$ $< (0.7, 0.8, 0.9, 1.1; -0.4), (0.2, 0.4, 0.6, 0.8, 1; -0.6) >$	$< (0.6, 0.8, 1, 1.2, 1.4; 0.3), (0.5, 0.7, 0.9, 1.1, 1.3; 0.6), (0.5, 0.6, 0.7, 0.8, 0.9; 0.7), (0.7, 0.8, 0.9, 1.1, 1.1; -0.8) >$ $(0.3, 0.4, 0.5, 0.6, 0.7; -0.5), (0.4, 0.6, 0.8, 1, 1.2; -0.4) >$	$< (1.2, 1.3, 1.4, 1.5, 1.6; 0.5), (0.5, 0.6, 0.7, 0.8, 0.9; 0.3), (0.6, 0.8, 1, 1.2, 1.4, 1.6; -0.3) >$ $(1.1, 1.2, 1.3, 1.4; -0.4), (0.7, 0.8, 0.9, 1.1, 1.3; -0.5) >$	1
	$< (0.7, 0.8, 0.9, 1.1, 1.2; 0.3), (0.9, 1.1, 1.2, 1.3; -0.7), (0.3, 0.5, 0.7, 0.9, 1.1; -0.4), (0.5, 0.6, 0.7, 0.8, 0.9; -0.2) >$	$< (0.5, 0.7, 0.8, 0.9, 1, 1.3; 0.4), (0.5, 0.6, 0.7, 0.8, 0.9; 0.5), (0.6, 0.7, 0.8, 0.9, 1; 0.6), (0.2, 0.4, 0.6, 0.8, 1; -0.9) >$ $(0.4, 0.5, 0.6, 0.7, 0.8; -0.4), (0.3, 0.4, 0.5, 0.6, 0.7; -0.3) >$	$< (0.7, 0.9, 1.1, 1.3, 1.5; 0.5), (0.4, 0.6, 0.8, 1, 1.2; 0.3), (0.5, 0.6, 0.7, 0.8, 0.9; 0.4), (0.8, 0.9, 1.1, 1.2; -0.5) >$ $(1, 1.1, 1.2, 1.3, 1.4; -0.6), (0.7, 0.8, 0.9, 1.1, 1.1; -0.7) >$	2
3	$< (0.6, 0.7, 0.8, 0.9, 1.1; 0.7), (0.7, 0.8, 0.9, 1.1, 1.1; 0.3), (0.5, 0.7, 0.9, 1.1, 1.3; 0.4), (0.5, 0.6, 0.7, 0.8, 0.9; -0.4), (0.7, 0.8, 0.9, 1.1; -0.6) >$	$< (0.5, 0.7, 0.8, 0.9, 1, 1.3; 0.4), (0.5, 0.6, 0.7, 0.8, 0.9; 0.5), (0.6, 0.7, 0.8, 0.9, 1; 0.6), (0.2, 0.4, 0.6, 0.8, 1; -0.9) >$ $(0.4, 0.5, 0.6, 0.7, 0.8; -0.4), (0.3, 0.4, 0.5, 0.6, 0.7; -0.3) >$	$< (0.7, 0.9, 1.1, 1.3, 1.5; 0.5), (0.4, 0.6, 0.8, 1, 1.2; 0.3), (0.5, 0.6, 0.7, 0.8, 0.9; 0.4), (0.8, 0.9, 1.1, 1.2; -0.5) >$ $(1, 1.1, 1.2, 1.3, 1.4; -0.6), (0.7, 0.8, 0.9, 1.1, 1.1; -0.7) >$	1
	$< (0.4, 0.5, 0.6, 0.7, 0.8; 0.6), (0.4, 0.6, 0.8, 1, 1.2; 0.3), (0.8, 0.9, 1.1, 1.2; 0.2), (0.5, 0.7, 0.9, 1.1, 1.3; -0.5) >$ $(0.6, 0.8, 1, 1.2, 1.4; -0.6), (0.3, 0.4, 0.5, 0.6, 0.7; -0.4) >$	$< (1, 1.1, 1.2, 1.3, 1.4; 0.3), (0.7, 0.8, 0.9, 1.1, 1.1; 0.5), (0.8, 1, 1.2, 1.4, 1.6; 0.8), (0.6, 0.7, 0.8, 0.9, 1, 1.1; -0.5) >$ $(0.9, 1.1, 1.3, 1.5, 1.7; -0.2), (0.9, 1, 1.1, 1.2, 1.3; -0.1) >$	$< (1, 1.1, 1.2, 1.3, 1.4; 0.5), (1.3, 1.5, 1.7, 1.9, 2.1; 0.7), (0.6, 0.8, 1, 1.2, 1.4, 1.6; -0.3) >$ $(1.1, 1.3, 1.5, 1.7, 1.9; -0.6), (1.2, 1.3, 1.4, 1.5, 1.6; -0.7) >$	2
	$< (0.4, 0.6, 0.8, 1, 1.2; 0.4), (0.3, 0.4, 0.5, 0.6, 0.7, 0.8), (0.6, 0.7, 0.8, 0.9, 1.1; 0.3), (0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1.1, 1.2; -0.5) >$ $(0.6, 0.7, 0.8, 0.9, 1; -0.6), (0.5, 0.7, 0.9, 1.1, 1.3; -0.3) >$	$< (0.2, 0.3, 0.4, 0.5, 0.6; 0.6), (0.1, 0.3, 0.5, 0.7, 0.9; 0.2), (0.3, 0.4, 0.5, 0.6; 0.7; 0.4), (0.2, 0.4, 0.6, 0.8, 1; -0.7) >$ $(0.3, 0.4, 0.5, 0.6, 0.7; -0.5), (0.4, 0.5, 0.6, 0.7, 0.8; -0.4) >$	$< (0.6, 0.7, 0.8, 0.9, 1; 0.6), (0.5, 0.7, 0.9, 1.1, 1.3; 0.7), (0.7, 0.8, 0.9, 1, 1.1; 0.4), (0.4, 0.5, 0.6, 0.7, 0.8; -0.3) >$ $(0.4, 0.6, 0.8, 1, 1.2; -0.4), (0.2, 0.3, 0.4, 0.5, 0.6; -0.6) >$	3
	$< (0.6, 0.7, 0.8, 0.9, 1; 0.3), (0.4, 0.6, 0.8, 1, 1.2; 0.5), (0.7, 0.9, 1.1, 1.3, 1.5; 0.7), (1, 1.1, 1.2, 1.3, 1.4; -0.1), (0.7, 0.8, 0.9, 1.1, 1.1; -0.6) >$ $< (0.7, 0.8, 0.9, 1.1; -0.4), (0.2, 0.4, 0.6, 0.8, 1; -0.6) >$	$< (0.6, 0.8, 1, 1.2, 1.4; 0.3), (0.5, 0.7, 0.9, 1.1, 1.3; 0.6), (0.5, 0.6, 0.7, 0.8, 0.9; 0.7), (0.7, 0.8, 0.9, 1.1, 1.1; -0.8) >$ $(0.3, 0.4, 0.5, 0.6, 0.7; -0.5), (0.4, 0.6, 0.8, 1, 1.2; -0.4) >$	$< (1.2, 1.3, 1.4, 1.5, 1.6; 0.5), (0.5, 0.6, 0.7, 0.8, 0.9; 0.3), (0.6, 0.8, 1, 1.2, 1.4, 1.6; -0.3) >$ $(1.1, 1.2, 1.3, 1.4; -0.4), (0.7, 0.8, 0.9, 1.1, 1.3; -0.5) >$	1
4	$< (0.7, 0.8, 0.9, 1.1, 1.2; 0.3), (0.9, 1.1, 1.2, 1.3; -0.7), (0.3, 0.5, 0.7, 0.9, 1.1; -0.4), (0.5, 0.6, 0.7, 0.8, 0.9; -0.2) >$	$< (0.5, 0.7, 0.9, 1.1, 1.3; 0.4), (0.5, 0.6, 0.7, 0.8, 0.9; 0.5), (0.6, 0.7, 0.8, 0.9, 1; 0.6), (0.2, 0.4, 0.6, 0.8, 1; -0.9) >$ $(0.4, 0.5, 0.6, 0.7, 0.8; -0.4), (0.3, 0.4, 0.5, 0.6, 0.7; -0.3) >$	$< (0.7, 0.9, 1.1, 1.3, 1.5; 0.5), (0.4, 0.6, 0.8, 1, 1.2; 0.3), (0.5, 0.6, 0.7, 0.8, 0.9; 0.4), (0.8, 0.9, 1.1, 1.2; -0.5) >$ $(1, 1.1, 1.2, 1.3, 1.4; -0.6), (0.7, 0.8, 0.9, 1.1, 1.1; -0.7) >$	2
	$< (0.6, 0.7, 0.8, 0.9, 1; 0.7), (0.7, 0.8, 0.9, 1.1, 1.1; 0.3), (0.5, 0.7, 0.9, 1.1, 1.3; 0.4), (0.5, 0.6, 0.7, 0.8, 0.9; -0.4), (0.7, 0.8, 0.9, 1.1; -0.6) >$	$< (0.5, 0.7, 0.8, 0.9, 1, 1.3; 0.4), (0.5, 0.6, 0.7, 0.8, 0.9; 0.5), (0.6, 0.7, 0.8, 0.9, 1; 0.6), (0.2, 0.4, 0.6, 0.8, 1; -0.9) >$ $(0.4, 0.5, 0.6, 0.7, 0.8; -0.4), (0.3, 0.4, 0.5, 0.6, 0.7; -0.3) >$	$< (0.7, 0.9, 1.1, 1.3, 1.5; 0.5), (0.4, 0.6, 0.8, 1, 1.2; 0.3), (0.5, 0.6, 0.7, 0.8, 0.9; 0.4), (0.8, 0.9, 1.1, 1.2; -0.5) >$ $(1, 1.1, 1.2, 1.3, 1.4; -0.6), (0.7, 0.8, 0.9, 1.1, 1.1; -0.7) >$	3
	$< (0.4, 0.5, 0.6, 0.7, 0.8; 0.6), (0.4, 0.6, 0.8, 1, 1.2; 0.3), (0.8, 0.9, 1.1, 1.2; 0.2), (0.5, 0.7, 0.9, 1.1, 1.3; -0.5) >$ $(0.6, 0.8, 1, 1.2, 1.4; -0.6), (0.3, 0.4, 0.5, 0.6, 0.7; -0.4) >$	$< (1, 1.1, 1.2, 1.3, 1.4; 0.3), (0.7, 0.8, 0.9, 1.1, 1.1; 0.5), (0.8, 1, 1.2, 1.4, 1.6; 0.8), (0.6, 0.7, 0.8, 0.9, 1, 1.1; -0.5) >$ $(0.9, 1.1, 1.3, 1.5, 1.7; -0.2), (0.9, 1, 1.1, 1.2, 1.3; -0.1) >$	$< (1, 1.1, 1.2, 1.3, 1.4; 0.5), (1.3, 1.5, 1.7, 1.9, 2.1; 0.7), (0.6, 0.8, 1, 1.2, 1.4, 1.6; -0.3) >$ $(1.1, 1.3, 1.5, 1.7, 1.9; -0.6), (1.2, 1.3, 1.4, 1.5, 1.6; -0.7) >$	2
	$< (0.4, 0.6, 0.8, 1, 1.2; 0.4), (0.3, 0.4, 0.5, 0.6, 0.7, 0.8), (0.6, 0.7, 0.8, 0.9, 1.1; 0.3), (0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1.1, 1.2; -0.5) >$ $(0.6, 0.7, 0.8, 0.9, 1; -0.6), (0.5, 0.7, 0.9, 1.1, 1.3; -0.3) >$	$< (0.2, 0.3, 0.4, 0.5, 0.6; 0.6), (0.1, 0.3, 0.5, 0.7, 0.9; 0.2), (0.3, 0.4, 0.5, 0.6; 0.7; 0.4), (0.2, 0.4, 0.6, 0.8, 1; -0.7) >$ $(0.3, 0.4, 0.5, 0.6, 0.7; -0.5), (0.4, 0.5, 0.6, 0.7, 0.8; -0.4) >$	$< (0.6, 0.7, 0.8, 0.9, 1; 0.6), (0.5, 0.7, 0.9, 1.1, 1.3; 0.7), (0.7, 0.8, 0.9, 1, 1.1; 0.4), (0.4, 0.5, 0.6, 0.7, 0.8; -0.3) >$ $(0.4, 0.6, 0.8, 1, 1.2; -0.4), (0.2, 0.3, 0.4, 0.5, 0.6; -0.6) >$	3
5	$< (0.6, 0.7, 0.8, 0.9, 1; 0.7), (0.7, 0.8, 0.9, 1.1, 1.1; 0.3), (0.5, 0.7, 0.9, 1.1, 1.3; 0.4), (0.5, 0.6, 0.7, 0.8, 0.9; -0.4), (0.7, 0.8, 0.9, 1.1; -0.6) >$	$< (0.5, 0.7, 0.8, 0.9, 1, 1.3; 0.4), (0.5, 0.6, 0.7, 0.8, 0.9; 0.5), (0.6, 0.7, 0.8, 0.9, 1; 0.6), (0.2, 0.4, 0.6, 0.8, 1; -0.9) >$ $(0.4, 0.5, 0.6, 0.7, 0.8; -0.4), (0.3, 0.4, 0.5, 0.6, 0.7; -0.3) >$	$< (0.7, 0.9, 1.1, 1.3, 1.5; 0.5), (0.4, 0.6, 0.8, 1, 1.2; 0.3), (0.5, 0.6, 0.7, 0.8, 0.9; 0.4), (0.8, 0.9, 1.1, 1.2; -0.5) >$ $(1, 1.1, 1.2, 1.3, 1.4; -0.6), (0.7, 0.8, 0.9, 1.1, 1.1; -0.7) >$	2
	$< (0.4, 0.5, 0.6, 0.7, 0.8; 0.6), (0.4, 0.6, 0.8, 1, 1.2; 0.3), (0.8, 0.9, 1.1, 1.2; 0.2), (0.5, 0.7, 0.9, 1.1, 1.3; -0.8) >$ $(0.6, 0.8, 1, 1.2, 1.4; -0.6), (0.3, 0.4, 0.5, 0.6, 0.7; -0.4) >$	$< (1, 1.1, 1.2, 1.3, 1.4; 0.3), (0.7, 0.8, 0.9, 1.1, 1.1; 0.5), (0.8, 1, 1.2, 1.4, 1.6; 0.8), (0.6, 0.7, 0.8, 0.9, 1, 1.1; -0.5) >$ $(0.9, 1.1, 1.3, 1.5, 1.7; -0.2), (0.9, 1, 1.1, 1.2, 1.3; -0.1) >$	$< (1, 1.1, 1.2, 1.3, 1.4; 0.5), (1.3, 1.5, 1.7, 1.9, 2.1; 0.7), (0.6, 0.8, 1, 1.2, 1.4, 1.6; -0.3) >$ $(1.1, 1.3, 1.5, 1.7, 1.9; -0.6), (1.2, 1.3, 1.4, 1.5, 1.6; -0.7) >$	1
	$< (0.4, 0.6, 0.8, 1, 1.2; 0.4), (0.3, 0.4, 0.5, 0.6, 0.7, 0.8), (0.6, 0.7, 0.8, 0.9, 1.1; 0.3), (0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1.1, 1.2; -0.5) >$ $(0.6, 0.7, 0.8, 0.9, 1; -0.6), (0.5, 0.7, 0.9, 1.1, 1.3; -0.3) >$	$< (0.2, 0.3, 0.4, 0.5, 0.6; 0.6), (0.1, 0.3, 0.5, 0.7, 0.9; 0.2), (0.3, 0.4, 0.5, 0.6; 0.7; 0.4), (0.2, 0.4, 0.6, 0.8, 1; -0.7) >$ $(0.3, 0.4, 0.5, 0.6, 0.7; -0.5), (0.4, 0.5, 0.6, 0.7, 0.8; -0.4) >$	$< (0.6, 0.7, 0.8, 0.9, 1; 0.6), (0.5, 0.7, 0.9, 1.1, 1.3; 0.7), (0.7, 0.8, 0.9, 1, 1.1; 0.4), (0.4, 0.5, 0.6, 0.7, 0.8; -0.3) >$ $(0.4, 0.6, 0.8, 1, 1.2; -0.4), (0.2, 0.3, 0.4, 0.5, 0.6; -0.6) >$	2
	$< (0.6, 0.7, 0.8, 0.9, 1; 0.3), (0.4, 0.6, 0.8, 1, 1.2; 0.5), (0.7, 0.9, 1.1, 1.3, 1.5; 0.7), (1, 1.1, 1.2, 1.3, 1.4; -0.1), (0.7, 0.8, 0.9, 1.1, 1.1; -0.6) >$ $< (0.7, 0.8, 0.9, 1.1; -0.4), (0.2, 0.4, 0.6, 0.8, 1; -0.6) >$	$< (0.6, 0.8, 1, 1.2, 1.4; 0.3), (0.5, 0.7, 0.9, 1.1, 1.3; 0.6), (0.5, 0.6, 0.7, 0.8, 0.9; 0.7), (0.7, 0.8, 0.9, 1.1, 1.1; -0.8) >$ $(0.3, 0.4, 0.5, 0.6, 0.7; -0.5), (0.4, 0.6, 0.8, 1, 1.2; -0.4) >$	$< (1.2, 1.3, 1.4, 1.5, 1.6; 0.5), (0.5, 0.6, 0.7, 0.8, 0.9; 0.3), (0.6, 0.8, 1, 1.2, 1.4, 1.6; -0.3) >$ $(1.1, 1.2, 1.3, 1.4; -0.4), (0.7, 0.8, 0.9, 1.1, 1.3; -0.5) >$	3

Table 15: BPNFS input for \widehat{ExE}_j at the j^{th} extraction and recycling center.

$j = 1$	$j = 2$	$j = 3$
$< (0.15, 0.16, 0.17, 0.18, 0.19; 0.7), (0.1, 0.12, 0.14, 0.16, 0.18; 0.3),$ $(0.05, 0.06, 0.07, 0.08, 0.09; 0.4), (0.22, 0.24, 0.26, 0.28, 0.3; -0.6),$ $(0.03, 0.04, 0.05, 0.06, 0.07; -0.3), (0.1, 0.11, 0.12, 0.13, 0.14; -0.5) >$	$< (0.2, 0.21, 0.22, 0.23, 0.24; 0.3), (0.1, 0.12, 0.14, 0.16, 0.18; 0.5),$ $(0.1, 0.15, 0.2, 0.25, 0.3; 0.6), (0.22, 0.24, 0.26, 0.28, 0.3; -0.4),$ $(0.13, 0.14, 0.15, 0.16, 0.17; -0.7), (0.1, 0.11, 0.12, 0.13, 0.14; -0.8) >$	$< (0.12, 0.14, 0.16, 0.18, 0.2; 0.4), (0.08, 0.09, 0.1, 0.11, 0.12; 0.6),$ $(0.22, 0.23, 0.24, 0.25, 0.26; 0.8), (0.2, 0.22, 0.24, 0.26, 0.28; -0.6),$ $(0.05, 0.06, 0.07, 0.08, 0.09; -0.3), (0.13, 0.14, 0.15, 0.16, 0.17; -0.4) >$
$j = 4$	$j = 5$	
$< (0.15, 0.16, 0.17, 0.18, 0.19; 0.2), (0.1, 0.12, 0.14, 0.16, 0.18; 0.5),$ $(0.1, 0.11, 0.12, 0.13, 0.14; 0.7), (0.22, 0.24, 0.26, 0.28, 0.3; -0.1),$ $(0.11, 0.12, 0.13, 0.14, 0.15; -0.3), (0.1, 0.11, 0.12, 0.13, 0.14; -0.5) >$	$< (0.2, 0.21, 0.22, 0.23, 0.24; 0.2), (0.1, 0.12, 0.14, 0.16, 0.18; 0.6),$ $(0.1, 0.15, 0.2, 0.25, 0.3; 0.7), (0.22, 0.24, 0.26, 0.28, 0.3; -0.1),$ $(0.13, 0.14, 0.15, 0.16, 0.17; -0.5), (0.1, 0.11, 0.12, 0.13, 0.14; -0.8) >$	

 Table 16: BPNFS input for \widehat{ReE}_j at the j^{th} extraction and recycling center.

$j = 1$	$j = 2$	$j = 3$
$< (0.11, 0.12, 0.13, 0.14, 0.15; 0.4), (0.06, 0.08, 0.1, 0.12, 0.14; 0.7),$ $(0.08, 0.09, 0.1, 0.11, 0.12; 0.8), (0.05, 0.07, 0.09, 0.11, 0.13; -0.6),$ $(0.12, 0.14, 0.16, 0.18, 0.2; -0.6), (0.06, 0.08, 0.1, 0.12, 0.14; -0.5) >$	$< (0.05, 0.06, 0.07, 0.08, 0.09; 0.7), (0.02, 0.04, 0.06, 0.08, 0.1; 0.3),$ $(0.04, 0.05, 0.06, 0.07, 0.08; 0.4), (0.03, 0.04, 0.05, 0.06, 0.07; -0.6),$ $(0.03, 0.05, 0.07, 0.09, 0.11; -0.3), (0.04, 0.06, 0.08, 0.1, 0.12; -0.5) >$	$< (0.08, 0.1, 0.12, 0.14, 0.16; 0.4), (0.06, 0.08, 0.1, 0.12, 0.14; 0.6),$ $(0.04, 0.05, 0.06, 0.07, 0.08; 0.8), (0.05, 0.07, 0.09, 0.11, 0.13; -0.6),$ $(0.02, 0.04, 0.06, 0.08, 0.1; -0.3), (0.09, 0.1, 0.11, 0.12, 0.13; -0.4) >$
$j = 4$	$j = 5$	
$< (0.07, 0.09, 0.11, 0.13, 0.15; 0.2), (0.04, 0.06, 0.08, 0.1, 0.12; 0.5),$ $(0.06, 0.07, 0.08, 0.09, 0.1; 0.7), (0.05, 0.07, 0.09, 0.11, 0.13; -0.1),$ $(0.03, 0.05, 0.07, 0.09, 0.11; -0.3), (0.04, 0.06, 0.08, 0.1, 0.12; -0.5) >$	$< (0.1, 0.12, 0.14, 0.16, 0.18; 0.2), (0.06, 0.08, 0.1, 0.12, 0.14; 0.6),$ $(0.05, 0.06, 0.07, 0.08, 0.09; 0.7), (0.05, 0.07, 0.09, 0.11, 0.13; -0.1),$ $(0.02, 0.04, 0.06, 0.08, 0.1; -0.5), (0.09, 0.1, 0.11, 0.12, 0.13; -0.8) >$	

 Table 17: BPNFS input for $\widehat{TrpE}_{jlk'}$ from the j^{th} extraction and recycling center to the l^{th} pharmaceutical company via k^{th} conveyance.

j	$k' = 1$	$k' = 2$	$k' = 3$	l
1	$< (0.2, 0.21, 0.22, 0.23, 0.24; 0.2), (0.15, 0.17, 0.19, 0.21, 0.23; 0.4),$ $(0.12, 0.13, 0.14, 0.15, 0.16; 0.7), (0.11, 0.12, 0.13, 0.14, 0.15; -0.2),$ $(0.12, 0.14, 0.16, 0.18, 0.2; -0.6), (0.06, 0.08, 0.1, 0.12, 0.14; -0.5) >$	$< (0.3, 0.32, 0.34, 0.36, 0.38; 0.8), (0.23, 0.24, 0.25, 0.26, 0.27; 0.3),$ $(0.41, 0.42, 0.43, 0.44, 0.45; 0.2), (0.25, 0.26, 0.27, 0.28, 0.29; -0.7),$ $(0.45, 0.46, 0.47, 0.48, 0.49; -0.3), (0.12, 0.13, 0.14, 0.15, 0.16; -0.1) >$	$< (0.06, 0.07, 0.08, 0.09, 0.1; 0.4), (0.01, 0.011, 0.012, 0.013, 0.014; 0.5),$ $(0.09, 0.091, 0.092, 0.093, 0.094; 0.7), (0.04, 0.05, 0.06, 0.07, 0.08; -0.6),$ $(0.02, 0.04, 0.06, 0.08, 0.1; -0.3), (0.1, 0.11, 0.12, 0.13, 0.14; -0.4) >$	1
	$< (0.04, 0.05, 0.06, 0.07, 0.08; 0.8), (0.034, 0.036, 0.038, 0.04, 0.042; 0.5),$ $(0.1, 0.12, 0.13, 0.14; 0.3), (0.03, 0.031, 0.032, 0.033, 0.034; -0.6),$ $(0.06, 0.07, 0.08, 0.09, 0.1; -0.3), (0.03, 0.05, 0.07, 0.09, 0.11; -0.1) >$	$< (0.12, 0.13, 0.14, 0.15, 0.16; 0.3), (0.04, 0.07, 0.1, 0.13, 0.16; 0.5),$ $(0.2, 0.21, 0.22, 0.23, 0.24; 0.6), (0.13, 0.14, 0.15, 0.16, 0.17; -0.1),$ $(0.16, 0.17, 0.18, 0.19, 0.2; -0.5), (0.09, 0.1, 0.11, 0.12, 0.13; -0.6) >$	$< (0.23, 0.24, 0.25, 0.26, 0.27; 0.2), (0.21, 0.23, 0.25, 0.27, 0.29; 0.5),$ $(0.15, 0.16, 0.17, 0.18, 0.19; 0.6), (0.15, 0.17, 0.19, 0.21, 0.23; -0.5),$ $(0.19, 0.21, 0.23, 0.25, 0.27; -0.7), (0.22, 0.23, 0.24, 0.25, 0.26; -0.6) >$	2
2	$< (0.1, 0.14, 0.18, 0.22, 0.26; 0.1), (0.2, 0.21, 0.22, 0.23, 0.24; 0.4),$ $(0.13, 0.14, 0.15, 0.16, 0.17; 0.3), (0.1, 0.11, 0.12, 0.13, 0.14; -0.5),$ $(0.06, 0.07, 0.08, 0.09, 0.1; -0.2), (0.09, 0.11, 0.13, 0.15, 0.17; -0.3) >$	$< (0.16, 0.18, 0.2, 0.22, 0.24; 0.6), (0.1, 0.13, 0.16, 0.19, 0.22; 0.3),$ $(0.08, 0.1, 0.12, 0.14, 0.16; 0.1), (0.12, 0.13, 0.14, 0.15, 0.16; -0.7),$ $(0.09, 0.1, 0.11, 0.12, 0.13; -0.3), (0.07, 0.08, 0.09, 0.1, 0.11; -0.5) >$	$< (0.2, 0.21, 0.22, 0.23, 0.24; 0.6), (0.3, 0.31, 0.32, 0.33, 0.34; 0.5),$ $(0.1, 0.12, 0.14, 0.16, 0.18; 0.4), (0.22, 0.24, 0.26, 0.28, 0.3; -0.8),$ $(0.35, 0.37, 0.39, 0.41, 0.43; -0.6), (0.28, 0.29, 0.3, 0.31, 0.32; -0.2) >$	1
	$< (0.2, 0.22, 0.24, 0.26, 0.28; 0.8), (0.15, 0.16, 0.17, 0.18, 0.19; 0.5),$ $(0.12, 0.13, 0.14, 0.15, 0.16; 0.3), (0.08, 0.1, 0.12, 0.14, 0.16; -0.7),$ $(0.23, 0.25, 0.27, 0.29, 0.31; -0.4), (0.21, 0.22, 0.23, 0.24, 0.25; -0.2) >$	$< (0.04, 0.045, 0.05, 0.055, 0.06; 0.5), (0.01, 0.02, 0.03, 0.04, 0.05; 0.4),$ $(0.1, 0.11, 0.12, 0.13, 0.14; 0.1), (0.06, 0.061, 0.062, 0.063, 0.064; -0.4),$ $(0.03, 0.035, 0.04, 0.045, 0.05; -0.8), (0.11, 0.12, 0.13, 0.14, 0.15; -0.7) >$	$< (0.04, 0.045, 0.05, 0.055, 0.06; 0.5), (0.01, 0.02, 0.03, 0.04, 0.05; 0.4),$ $(0.1, 0.11, 0.12, 0.13, 0.14; 0.3), (0.04, 0.05, 0.06, 0.07, 0.08; -0.5),$ $(0.077, 0.078, 0.079, 0.08, 0.081; -0.7), (0.06, 0.07, 0.08, 0.09, 0.1; -0.7) >$	1
3	$< (0.2, 0.22, 0.24, 0.26, 0.28; 0.7), (0.14, 0.15, 0.16, 0.17, 0.18; 0.5),$ $(0.23, 0.25, 0.27, 0.29, 0.31; 0.2), (0.15, 0.16, 0.17, 0.18, 0.19; -0.6),$ $(0.12, 0.13, 0.14, 0.15, 0.16; -0.2), (0.2, 0.21, 0.22, 0.23, 0.24; -0.5) >$	$< (0.3, 0.32, 0.34, 0.36, 0.38; 0.3), (0.2, 0.25, 0.3, 0.35, 0.4; 0.7),$ $(0.21, 0.24, 0.27, 0.3, 0.33; 0.5), (0.2, 0.23, 0.26, 0.29, 0.32; -0.2),$ $(0.32, 0.35, 0.38, 0.41, 0.44; -0.3), (0.18, 0.19, 0.2, 0.21, 0.22; -0.7) >$	$< (0.05, 0.052, 0.054, 0.056, 0.058; 0.5), (0.01, 0.02, 0.03, 0.04, 0.05; 0.4),$ $(0.1, 0.11, 0.12, 0.13, 0.14; 0.3), (0.04, 0.05, 0.06, 0.07, 0.08; -0.5),$ $(0.077, 0.078, 0.079, 0.08, 0.081; -0.7), (0.06, 0.07, 0.08, 0.09, 0.1; -0.7) >$	1
	$< (0.4, 0.42, 0.44, 0.46, 0.48; 0.3), (0.14, 0.15, 0.16, 0.17, 0.18; 0.5),$ $(0.31, 0.32, 0.33, 0.34, 0.35; 0.7), (0.15, 0.16, 0.17, 0.18, 0.19; -0.7),$ $(0.28, 0.29, 0.3, 0.31, 0.32; -0.3), (0.31, 0.32, 0.33, 0.34, 0.35; -0.5) >$	$< (0.03, 0.04, 0.05, 0.06, 0.07; 0.5), (0.1, 0.11, 0.12, 0.13, 0.14; 0.7),$ $(0.02, 0.04, 0.06, 0.08, 0.1; 0.9), (0.05, 0.058, 0.08, 0.11, 0.14; -0.3),$ $(0.11, 0.12, 0.13, 0.14, 0.15; -0.8), (0.045, 0.05, 0.055, 0.06, 0.065; -0.5) >$	$< (0.14, 0.17, 0.2, 0.23, 0.26; 0.3), (0.2, 0.22, 0.24, 0.26, 0.28; 0.7),$ $(0.17, 0.2, 0.23, 0.26, 0.29; 0.6), (0.2, 0.21, 0.22, 0.23, 0.24; -0.5),$ $(0.16, 0.18, 0.2, 0.22, 0.24; -0.7), (0.24, 0.26, 0.28, 0.3, 0.32; -0.8) >$	2
	$< (0.1, 0.12, 0.14, 0.16, 0.18; 0.3), (0.15, 0.17, 0.19, 0.21, 0.23; 0.5),$ $(0.09, 0.11, 0.13, 0.15, 0.17; 0.7), (0.13, 0.14, 0.15, 0.16, 0.17; -0.3),$ $(0.13, 0.15, 0.17, 0.19, 0.21; -0.6), (0.1, 0.11, 0.12, 0.13, 0.14; -0.8) >$	$< (0.024, 0.026, 0.028, 0.03, 0.032; 0.4), (0.02, 0.03, 0.04, 0.05, 0.06; 0.7),$ $(0.077, 0.079, 0.081, 0.083, 0.085; 0.5), (0.1, 0.11, 0.12, 0.13, 0.14; -0.2),$ $(0.09, 0.091, 0.092, 0.093, 0.094; -0.8), (0.06, 0.07, 0.08, 0.09, 0.1; -0.5) >$	$< (0.2, 0.22, 0.24, 0.26, 0.28; 0.1), (0.15, 0.17, 0.19, 0.21, 0.23; 0.4),$ $(0.2, 0.21, 0.22, 0.23, 0.24; 0.5), (0.16, 0.17, 0.18, 0.19, 0.2; -0.6),$ $(0.24, 0.26, 0.28, 0.3, 0.32; -0.2), (0.12, 0.13, 0.14, 0.15, 0.16; -0.5) >$	1
4	$< (0.1, 0.12, 0.14, 0.16, 0.18; 0.3), (0.06, 0.07, 0.08, 0.09, 0.1; 0.6),$ $(0.075, 0.08, 0.085, 0.09, 0.095; 0.5), (0.04, 0.05, 0.06, 0.07, 0.08; -0.3),$ $(0.02, 0.04, 0.06, 0.08, 0.1; -0.7), (0.03, 0.05, 0.07, 0.09, 0.11; -0.6) >$	$< (0.4, 0.41, 0.42, 0.43, 0.44; 0.9), (0.25, 0.3, 0.35, 0.4, 0.45; 0.6),$ $(0.26, 0.28, 0.3, 0.32, 0.34; 0.5), (0.4, 0.45, 0.46, 0.47, 0.48; -0.4),$ $(0.36, 0.37, 0.38, 0.39, 0.4; -0.8), (0.2, 0.21, 0.22, 0.23, 0.24; -0.5) >$	$< (0.1, 0.11, 0.12, 0.13, 0.14; 0.9), (0.09, 0.1, 0.11, 0.12, 0.13; 0.6),$ $(0.1, 0.12, 0.14, 0.16, 0.18; 0.4), (0.06, 0.08, 0.1, 0.12, 0.14; -0.2),$ $(0.2, 0.21, 0.22, 0.23, 0.24; -0.6), (0.08, 0.09, 0.1, 0.11, 0.12; -0.5) >$	2
	$< (0.4, 0.42, 0.44, 0.46, 0.48; 0.5), (0.24, 0.26, 0.28, 0.3, 0.32; 0.3),$ $(0.31, 0.32, 0.33, 0.34, 0.35; 0.1), (0.25, 0.26, 0.27, 0.28, 0.29; -0.7),$ $(0.45, 0.48, 0.51, 0.54, 0.57; -0.5), (0.3, 0.31, 0.32, 0.33, 0.34; -0.3) >$	$< (0.2, 0.22, 0.24, 0.26, 0.28; 0.4), (0.24, 0.25, 0.26, 0.27, 0.28; 0.6),$ $(0.33, 0.36, 0.39, 0.42, 0.45; 0.9), (0.23, 0.24, 0.25, 0.26, 0.27; -0.8),$ $(0.16, 0.17, 0.18, 0.19, 0.2; -0.4), (0.35, 0.37, 0.39, 0.41, 0.43; -0.2) >$	$< (0.09, 0.1, 0.11, 0.12, 0.13; 0.6), (0.1, 0.12, 0.14, 0.16, 0.18; 0.3),$ $(0.17, 0.18, 0.19, 0.2, 0.21; 0.5), (0.06, 0.08, 0.1, 0.12, 0.14; -0.6),$ $(0.1, 0.11, 0.12, 0.13, 0.14; -0.2), (0.13, 0.14, 0.15, 0.16, 0.17; -0.4) >$	1
5	$< (0.2, 0.23, 0.26, 0.29, 0.32; 0.8), (0.12, 0.13, 0.14, 0.15, 0.16; 0.2),$ $(0.1, 0.11, 0.12, 0.13, 0.14; 0.3), (0.25, 0.27, 0.29, 0.31, 0.33; -0.7),$ $(0.15, 0.17, 0.19, 0.21, 0.23; -0.4), (0.14, 0.16, 0.18, 0.2, 0.22; -0.2) >$	$< (0.05, 0.07, 0.09, 0.11, 0.13; -0.6), (0.02, 0.03, 0.04, 0.05, 0.06; -0.5) >$	$< (0.25, 0.3, 0.35, 0.4, 0.45; 0.2), (0.33, 0.34, 0.35, 0.36, 0.37; 0.5),$ $(0.4, 0.41, 0.42, 0.43, 0.44; 0.7), (0.14, 0.16, 0.18, 0.2, 0.22; -0.1),$ $(0.24, 0.25, 0.26, 0.27, 0.28; -0.4), (0.26, 0.27, 0.28, 0.29, 0.3; -0.8) >$	2

Table 18: BPNFS input for \widetilde{TerE}_{ijk} from the i^{th} collection center to the j^{th} extraction and recycling center via k^{th} conveyance.

i	$k = 1$	$k = 2$	$k = 3$	j
1	$< (0.31, 0.32, 0.33, 0.34, 0.35; 0.7), (0.24, 0.25, 0.26, 0.27, 0.28; 0.2), (0.46, 0.47, 0.48, 0.49, 0.5; 0.4), (0.22, 0.23, 0.24, 0.25, 0.26; -0.6), (0.44, 0.45, 0.46, 0.47, 0.48; -0.2), (0.2, 0.21, 0.22, 0.23, 0.24; -0.3) >$	$< (0.13, 0.14, 0.15, 0.16, 0.17; 0.2), (0.15, 0.17, 0.19, 0.21, 0.23; 0.5), (0.12, 0.13, 0.14, 0.15, 0.16; 0.7), (0.16, 0.18, 0.2, 0.22, 0.24; -0.6), (0.1, 0.12, 0.14, 0.16, 0.18; -0.5), (0.11, 0.13, 0.15, 0.17, 0.19; -0.1) >$	$< (0.15, 0.17, 0.19, 0.21, 0.23; 0.7), (0.2, 0.21, 0.22, 0.23, 0.24; 0.3), (0.13, 0.14, 0.15, 0.16, 0.17; 0.3), (0.22, 0.23, 0.24, 0.25, 0.26; -0.6), (0.24, 0.25, 0.26, 0.27, 0.28; -0.3), (0.1, 0.11, 0.12, 0.13, 0.14; -0.2) >$	1
	$< (0.35, 0.36, 0.37, 0.38, 0.39; 0.6), (0.25, 0.26, 0.27, 0.28, 0.29; 0.3), (0.21, 0.22, 0.23, 0.24, 0.25; 0.5), (0.25, 0.27, 0.29, 0.31, 0.33; -0.7), (0.31, 0.32, 0.33, 0.34, 0.35; -0.3), (0.24, 0.25, 0.26, 0.27, 0.28; -0.6) >$	$< (0.12, 0.14, 0.16, 0.18, 0.2; 0.5), (0.24, 0.25, 0.26, 0.27, 0.28; 0.7), (0.08, 0.09, 0.1, 0.11, 0.12; 0.6), (0.24, 0.25, 0.26, 0.27, 0.28; -0.2), (0.05, 0.06, 0.07, 0.08, 0.09; -0.7), (0.15, 0.16, 0.17, 0.18, 0.19; -0.5) >$	$< (0.5, 0.6, 0.7, 0.8, 0.9; 0.5), (0.4, 0.6, 0.8, 1, 1.2; 0.7), (0.13, 0.15, 0.17, 0.19, 0.21; 0.5), (0.22, 0.23, 0.24, 0.25, 0.26; -0.7), (0.21, 0.23, 0.25, 0.27, 0.29, -0.2), (0.15, 0.16, 0.17, 0.18, 0.19; -0.6) >$	2
	$< (0.33, 0.35, 0.37, 0.39, 0.41; 0.6), (0.42, 0.44, 0.46, 0.48, 0.5; 0.7), (0.26, 0.27, 0.28, 0.29, 0.3; 0.5), (0.35, 0.36, 0.37, 0.38, 0.39; -0.4), (0.4, 0.41, 0.42, 0.43, 0.44; -0.5), (0.1, 0.15, 0.2, 0.25, 0.3; -0.3) >$	$< (0.06, 0.07, 0.08, 0.09, 0.1; 0.5), (0.03, 0.05, 0.07, 0.09, 0.11; 0.7), (0.013, 0.014, 0.015, 0.016, 0.017; 0.4), (0.01, 0.011, 0.012, 0.013, 0.014; -0.6), (0.1, 0.12, 0.14, 0.16, 0.18; -0.4), (0.05, 0.06, 0.07, 0.08, 0.09; -0.7) >$	$< (0.25, 0.26, 0.27, 0.28, 0.29; 0.7), (0.34, 0.35, 0.36, 0.37, 0.38; 0.4), (0.11, 0.12, 0.13, 0.14, 0.15; 0.5), (0.17, 0.18, 0.19, 0.2, 0.21; -0.4), (0.23, 0.25, 0.27, 0.29, 0.31; -0.6), (0.12, 0.13, 0.14, 0.15, 0.16; -0.2) >$	3
	$< (0.3, 0.31, 0.32, 0.33, 0.34; 0.6), (0.24, 0.26, 0.28, 0.3, 0.32; 0.4), (0.14, 0.17, 0.2, 0.23, 0.26; 0.6), (0.13, 0.16, 0.19, 0.22, 0.25; -0.7), (0.21, 0.22, 0.23, 0.24, 0.25; -0.3), (0.31, 0.33, 0.35, 0.37, 0.39; -0.4) >$	$< (0.05, 0.06, 0.07, 0.08, 0.09; 0.9), (0.04, 0.07, 0.1, 0.13, 0.16; 0.4), (0.1, 0.11, 0.12, 0.13, 0.14; 0.5), (0.026, 0.036, 0.046, 0.056, 0.066; -0.6), (0.04, 0.05, 0.06, 0.07, 0.08; -0.5), (0.05, 0.07, 0.09, 0.11, 0.13; -0.3) >$	$< (0.15, 0.17, 0.19, 0.21, 0.23; 0.6), (0.04, 0.08, 0.12, 0.16, 0.2; 0.7), (0.09, 0.12, 0.15, 0.18, 0.21; 0.4), (0.1, 0.11, 0.12, 0.13, 0.14; -0.6), (0.08, 0.09, 0.1, 0.11, 0.12; -0.4), (0.07, 0.08, 0.09, 0.1, 0.11; -0.2) >$	4
	$< (0.23, 0.24, 0.25, 0.26, 0.27; 0.4), (0.25, 0.27, 0.29, 0.31, 0.33; 0.5), (0.31, 0.33, 0.35, 0.37, 0.39; 0.6), (0.34, 0.35, 0.36, 0.37, 0.38; -0.3), (0.21, 0.23, 0.25, 0.27, 0.29; -0.3), (0.25, 0.27, 0.29, 0.31, 0.33; -0.5) >$	$< (0.13, 0.15, 0.17, 0.19, 0.21; 0.7), (0.23, 0.26, 0.29, 0.32, 0.35; 0.5), (0.23, 0.24, 0.25, 0.26, 0.27; 0.4), (0.15, 0.16, 0.17, 0.18, 0.19; -0.6), (0.16, 0.18, 0.2, 0.22, 0.24; -0.2), (0.19, 0.2, 0.21, 0.22, 0.23; -0.4) >$	$< (0.06, 0.07, 0.08, 0.09, 0.1; 0.7), (0.03, 0.06, 0.09, 0.12, 0.15; 0.4), (0.07, 0.08, 0.09, 0.1, 0.11; 0.3), (0.04, 0.06, 0.08, 0.1, 0.12; -0.5), (0.07, 0.08, 0.09, 0.1, 0.11; -0.9), (0.02, 0.04, 0.06, 0.08, 0.1; -0.6) >$	5
2	$< (0.14, 0.16, 0.18, 0.2, 0.22; 0.3), (0.24, 0.25, 0.26, 0.27, 0.28; 0.5), (0.13, 0.15, 0.17, 0.19, 0.21; 0.6), (0.12, 0.14, 0.16, 0.18, 0.2; -0.4), (0.2, 0.22, 0.24, 0.26, 0.28; -0.3), (0.21, 0.23, 0.25, 0.27, 0.29; -0.6) >$	$< (0.09, 0.1, 0.11, 0.12, 0.13; 0.7), (0.05, 0.06, 0.07, 0.08, 0.09; 0.4), (0.03, 0.05, 0.07, 0.09, 0.11; 0.3), (0.04, 0.06, 0.08, 0.1, 0.12; -0.7), (0.07, 0.08, 0.09, 0.1, 0.11; -0.4), (0.04, 0.05, 0.06, 0.07, 0.08; -0.1) >$	$< (0.4, 0.41, 0.42, 0.43, 0.44; 0.3), (0.25, 0.26, 0.27, 0.28, 0.29; -0.7), (0.3, 0.31, 0.32, 0.33, 0.34; -0.4), (0.45, 0.46, 0.47, 0.48, 0.49, -0.2) >$	1
	$< (0.21, 0.23, 0.25, 0.27, 0.29; 0.7), (0.31, 0.32, 0.33, 0.34, 0.35; 0.3), (0.26, 0.27, 0.28, 0.29, 0.3; 0.4), (0.23, 0.24, 0.25, 0.26, 0.27; -0.6), (0.3, 0.31, 0.32, 0.33, 0.34; -0.5), (0.21, 0.22, 0.23, 0.24, 0.25; -0.3) >$	$< (0.4, 0.42, 0.43, 0.44, 0.45; 0.5), (0.2, 0.22, 0.24, 0.26, 0.28; 0.6), (0.4, 0.42, 0.44, 0.46, 0.48; 0.7), (0.34, 0.36, 0.38, 0.4, 0.42; -0.3), (0.3, 0.4, 0.42, 0.44, 0.46; -0.6), (0.23, 0.25, 0.27, 0.29, 0.31; -0.3) >$	$< (0.3, 0.32, 0.34, 0.36, 0.38; 0.2), (0.25, 0.27, 0.29, 0.31, 0.33; 0.5), (0.27, 0.28, 0.29, 0.3, 0.31; 0.4), (0.27, 0.28, 0.29, 0.3, 0.31; -0.3), (0.32, 0.33, 0.34, 0.35, 0.36; -0.5), (0.21, 0.22, 0.23, 0.24, 0.25; -0.6) >$	2
	$< (0.45, 0.46, 0.47, 0.48, 0.49; 0.7), (0.37, 0.39, 0.41, 0.43, 0.45; 0.4), (0.25, 0.26, 0.27, 0.28, 0.29; 0.6), (0.44, 0.46, 0.48, 0.5, 0.52; -0.7), (0.41, 0.42, 0.43, 0.44, 0.45; -0.3), (0.5, 0.51, 0.52, 0.53, 0.54; -0.6) >$	$< (0.1, 0.11, 0.12, 0.13, 0.14; 0.6), (0.13, 0.15, 0.17, 0.19, 0.21; 0.3), (0.2, 0.21, 0.22, 0.23, 0.24; 0.6), (0.09, 0.1, 0.11, 0.12, 0.13; -0.7), (0.1, 0.13, 0.16, 0.19, 0.22; -0.3), (0.06, 0.08, 0.1, 0.12, 0.14; -0.7) >$	$< (0.21, 0.23, 0.25, 0.27, 0.29; 0.6), (0.16, 0.17, 0.18, 0.19, 0.2; 0.7), (0.25, 0.26, 0.27, 0.28, 0.29; 0.3), (0.12, 0.13, 0.14, 0.15, 0.16; -0.5), (0.2, 0.22, 0.24, 0.26, 0.28; -0.6), (0.12, 0.14, 0.16, 0.18, 0.2; -0.2) >$	3
	$< (0.5, 0.51, 0.52, 0.53, 0.54; 0.7), (0.2, 0.25, 0.3, 0.35, 0.4; 0.4), (0.25, 0.27, 0.29, 0.31, 0.33; 0.5), (0.34, 0.35, 0.36, 0.37, 0.38; -0.6), (0.25, 0.26, 0.27, 0.28, 0.29; -0.3), (0.22, 0.26, 0.3, 0.34, 0.38; -0.5) >$	$< (0.14, 0.16, 0.18, 0.2, 0.22; 0.5), (0.15, 0.16, 0.17, 0.18, 0.19; 0.1), (0.06, 0.07, 0.08, 0.09, 0.1; 0.3), (0.15, 0.16, 0.17, 0.18, 0.19; -0.6), (0.08, 0.1, 0.12, 0.14, 0.16; -0.7), (0.12, 0.13, 0.14, 0.15, 0.16; -0.3) >$	$< (0.01, 0.013, 0.016, 0.019, 0.022; 0.6), (0.04, 0.06, 0.08, 0.1, 0.12; 0.7), (0.06, 0.07, 0.08, 0.09, 0.1; 0.5), (0.012, 0.014, 0.016, 0.018, 0.02; -0.8), (0.1, 0.11, 0.12, 0.13, 0.14; -0.5), (0.067, 0.068, 0.069, 0.07, 0.071; -0.3) >$	4
	$< (0.4, 0.42, 0.44, 0.46, 0.48; 0.6), (0.36, 0.37, 0.38, 0.39, 0.4; 0.4), (0.2, 0.22, 0.24, 0.26, 0.28; 0.3), (0.14, 0.17, 0.2, 0.23, 0.26; -0.7), (0.23, 0.24, 0.25, 0.26, 0.27; -0.4), (0.5, 0.51, 0.52, 0.53, 0.54; -0.6) >$	$< (0.1, 0.12, 0.14, 0.16, 0.18; 0.5), (0.15, 0.17, 0.19, 0.21, 0.23; 0.6), (0.21, 0.22, 0.23, 0.24, 0.25; 0.7), (0.04, 0.08, 0.12, 0.16, 0.2; -0.4), (0.03, 0.06, 0.09, 0.12, 0.15; -0.6), (0.15, 0.17, 0.19, 0.21, 0.23; -0.8) >$	$< (0.2, 0.21, 0.22, 0.23, 0.24, 0.25; 0.5), (0.16, 0.17, 0.18, 0.19, 0.2; -0.9), (0.12, 0.14, 0.16, 0.18, 0.2; -0.6), (0.23, 0.25, 0.27, 0.29, 0.31; -0.5) >$	5
3	$< (0.09, 0.1, 0.11, 0.12, 0.13; 0.3), (0.05, 0.06, 0.07, 0.08, 0.09; 0.6), (0.03, 0.05, 0.07, 0.09, 0.11; 0.4), (0.06, 0.07, 0.08, 0.09, 0.1; -0.4), (0.02, 0.04, 0.06, 0.08, 0.1; -0.3), (0.01, 0.03, 0.05, 0.07, 0.09; -0.6) >$	$< (0.08, 0.09, 0.1, 0.11, 0.12; -0.3), (0.1, 0.12, 0.14, 0.16, 0.18; -0.4) >$	$< (0.4, 0.42, 0.44, 0.46, 0.48, 0.5; 0.7), (0.34, 0.35, 0.36, 0.37, 0.38; 0.3), (0.4, 0.41, 0.42, 0.43, 0.44; 0.6), (0.25, 0.26, 0.27, 0.28, 0.29; -0.6), (0.41, 0.43, 0.45, 0.47, 0.49; -0.3), (0.2, 0.21, 0.22, 0.23, 0.24; -0.7) >$	1
	$< (0.21, 0.22, 0.23, 0.24, 0.25; 0.6), (0.12, 0.14, 0.16, 0.18, 0.2; 0.5), (0.22, 0.23, 0.24, 0.25, 0.26; 0.7), (0.25, 0.26, 0.27, 0.28, 0.29; -0.3), (0.11, 0.12, 0.13, 0.14; 0.5), (0.1, 0.11, 0.12, 0.13, 0.14; 0.6) >$	$< (0.07, 0.08, 0.09, 0.1, 0.11; 0.7), (0.1, 0.11, 0.12, 0.13, 0.14; 0.5), (0.04, 0.05, 0.06, 0.07, 0.08, 0.09; -0.7), (0.06, 0.07, 0.08, 0.09, 0.1; -0.4), (0.02, 0.04, 0.06, 0.08, 0.1; -0.6) >$	$< (0.35, 0.36, 0.37, 0.38, 0.39; 0.7), (0.45, 0.46, 0.47, 0.48, 0.49; 0.5), (0.25, 0.26, 0.27, 0.28, 0.29; 0.6), (0.31, 0.33, 0.35, 0.37, 0.39; -0.4), (0.32, 0.33, 0.34, 0.35, 0.36; -0.6), (0.4, 0.41, 0.42, 0.43, 0.44; -0.2) >$	2
	$< (0.02, 0.04, 0.06, 0.08, 0.1; 0.5), (0.1, 0.11, 0.12, 0.13, 0.14; 0.6), (0.04, 0.05, 0.06, 0.07, 0.08; 0.3), (0.01, 0.02, 0.03, 0.04, 0.05; -0.6), (0.013, 0.014, 0.015, 0.016, 0.017; -0.4), (0.07, 0.09, 0.11, 0.13, 0.15; -0.2) >$	$< (0.2, 0.22, 0.24, 0.26, 0.28; 0.6), (0.15, 0.17, 0.19, 0.21, 0.23; 0.4), (0.23, 0.24, 0.25, 0.26, 0.27; 0.3), (0.17, 0.19, 0.21, 0.23, 0.25; -0.6), (0.26, 0.27, 0.28, 0.29, 0.3; -0.7), (0.13, 0.14, 0.15, 0.16, 0.17; -0.3) >$	$< (0.1, 0.11, 0.12, 0.13, 0.14; 0.3), (0.08, 0.09, 0.1, 0.11, 0.12; -0.8), (0.05, 0.07, 0.09, 0.11, 0.13; -0.4), (0.1, 0.12, 0.14, 0.16, 0.18; -0.2) >$	3
	$< (0.2, 0.22, 0.24, 0.26, 0.28; 0.7), (0.23, 0.25, 0.27, 0.29, 0.31; 0.4), (0.2, 0.21, 0.22, 0.23, 0.24; 0.5), (0.15, 0.16, 0.17, 0.18, 0.19; -0.6), (0.14, 0.16, 0.18, 0.2, 0.22; -0.3), (0.21, 0.22, 0.23, 0.24, 0.25; -0.5) >$	$< (0.3, 0.31, 0.32, 0.33, 0.34; 0.9), (0.25, 0.26, 0.27, 0.28, 0.29; 0.6), (0.15, 0.17, 0.19, 0.21, 0.23; 0.4), (0.14, 0.15, 0.16, 0.17, 0.18; -0.8), (0.16, 0.17, 0.18, 0.19, 0.2; -0.5), (0.26, 0.28, 0.3, 0.32, 0.34; -0.3) >$	$< (0.5, 0.51, 0.52, 0.53, 0.54; 0.2), (0.2, 0.25, 0.3, 0.35, 0.4; 0.4), (0.25, 0.27, 0.29, 0.31, 0.33; 0.6), (0.34, 0.35, 0.36, 0.37, 0.38; -0.7), (0.25, 0.26, 0.27, 0.28, 0.29; -0.3), (0.22, 0.26, 0.3, 0.34, 0.38; -0.5) >$	4
				5

Table 19: BPNFS input for $\widetilde{TrmE_{jm k''}}$ from the j^{th} extraction and recycling center to the m^{th} manufacturing company via k''^{th} conveyance.

j	$k'' = 1$	$k'' = 2$	$k'' = 3$	m
1	$< (0.15, 0.17, 0.19, 0.21, 0.23, 0.4), (0.22, 0.23, 0.24, 0.25, 0.26; 0.7), (0.24, 0.25, 0.26, 0.27, 0.28; 0.8), (0.16, 0.17, 0.18, 0.19, 0.2; -0.3), (0.22, 0.23, 0.24, 0.25, 0.26; -0.5), (0.2, 0.22, 0.24, 0.26, 0.28; -0.7) >$	$< (0.13, 0.15, 0.17, 0.19, 0.21; 0.7), (0.16, 0.17, 0.18, 0.19, 0.2; 0.3), (0.04, 0.05, 0.06, 0.07, 0.08; 0.2), (0.14, 0.15, 0.16, 0.17, 0.18; -0.5), (0.02, 0.04, 0.06, 0.08, 0.1; -0.2), (0.1, 0.12, 0.14, 0.16, 0.18; -0.1) >$	$< (0.1, 0.11, 0.12, 0.13, 0.14; 0.3), (0.12, 0.14, 0.16, 0.18, 0.2; 0.5), (0.14, 0.15, 0.16, 0.17, 0.18; 0.7), (0.14, 0.15, 0.16, 0.17, 0.18; -0.3), (0.11, 0.13, 0.15, 0.17, 0.19; -0.6), (0.1, 0.11, 0.12, 0.13, 0.14; -0.5) >$	1
	$< (0.1, 0.11, 0.12, 0.13, 0.14; 0.2), (0.12, 0.13, 0.14, 0.15, 0.16; 0.4), (0.13, 0.14, 0.15, 0.16, 0.17; 0.7), (0.12, 0.14, 0.16, 0.18, 0.2; -0.9), (0.1, 0.11, 0.12, 0.13, 0.14; -0.2), (0.14, 0.15, 0.16, 0.17, 0.18; -0.6) >$	$< (0.12, 0.13, 0.14, 0.15, 0.16; 0.1), (0.13, 0.15, 0.17, 0.19, 0.21; 0.3), (0.12, 0.14, 0.16, 0.18, 0.2; -0.6), (0.11, 0.12, 0.13, 0.14, 0.15; -0.2), (0.1, 0.13, 0.16, 0.19, 0.22; -0.6), (0.09, 0.1, 0.11, 0.12, 0.13; -0.5) >$	$< (0.3, 0.32, 0.34, 0.36, 0.38; 0.7), (0.19, 0.21, 0.23, 0.25, 0.27; 0.4), (0.22, 0.23, 0.24, 0.25, 0.26; 0.2), (0.24, 0.25, 0.26, 0.27, 0.28; -0.8), (0.17, 0.19, 0.21, 0.23, 0.25; -0.5), (0.27, 0.29, 0.31, 0.33, 0.35; -0.3) >$	2
	$< (0.12, 0.13, 0.14, 0.15, 0.16; 0.5), (0.08, 0.1, 0.14, 0.17, 0.2; 0.4), (0.12, 0.14, 0.16, 0.18, 0.2; 0.2), (0.14, 0.15, 0.16, 0.17, 0.18; -0.6), (0.11, 0.13, 0.15, 0.17, 0.19; -0.1), (0.08, 0.09, 0.1, 0.11, 0.12; -0.2) >$	$< (0.23, 0.24, 0.25, 0.26; 0.7), (0.18, 0.19, 0.2, 0.21, 0.22; 0.4), (0.22, 0.23, 0.24, 0.25, 0.26; 0.3), (0.14, 0.15, 0.16, 0.17, 0.18; -0.6), (0.13, 0.15, 0.17, 0.19, 0.21; -0.2), (0.14, 0.16, 0.18, 0.2, 0.22; -0.3) >$	$< (0.11, 0.12, 0.13, 0.14, 0.15; 0.8), (0.09, 0.11, 0.13, 0.15, 0.17; 0.3), (0.12, 0.14, 0.16, 0.18, 0.2; 0.6), (0.12, 0.13, 0.14, 0.15, 0.16; -0.3), (0.15, 0.16, 0.17, 0.18, 0.19; -0.5), (0.07, 0.09, 0.11, 0.13, 0.15; -0.4) >$	3
	$< (0.09, 0.11, 0.13, 0.15, 0.17; 0.8), (0.1, 0.12, 0.14, 0.16, 0.18; 0.2), (0.12, 0.14, 0.16, 0.18, 0.2; 0.4), (0.1, 0.11, 0.12, 0.13, 0.14; -0.6), (0.13, 0.14, 0.15, 0.16, 0.17; -0.3), (0.07, 0.08, 0.09, 0.1, 0.11; -0.5) >$	$< (0.21, 0.22, 0.23, 0.24, 0.25; 0.7), (0.14, 0.15, 0.16, 0.17, 0.18; 0.4), (0.19, 0.2, 0.21, 0.22, 0.23; 0.6), (0.22, 0.23, 0.24, 0.25, 0.26; -0.8), (0.2, 0.21, 0.22, 0.23, 0.24; -0.3), (0.15, 0.16, 0.17, 0.18, 0.19; -0.3) >$	$< (0.2, 0.22, 0.24, 0.26, 0.28; 0.2), (0.25, 0.26, 0.27, 0.28, 0.29; 0.4), (0.3, 0.31, 0.32, 0.33, 0.34; 0.6), (0.22, 0.23, 0.24, 0.25, 0.26; -0.4), (0.3, 0.32, 0.34, 0.36, 0.38; -0.7), (0.31, 0.32, 0.33, 0.34, 0.35; -0.5) >$	1
	$< (0.11, 0.13, 0.15, 0.17, 0.19; 0.2), (0.12, 0.14, 0.16, 0.18, 0.2; 0.4), (0.13, 0.14, 0.15, 0.16, 0.17; -0.3), (0.07, 0.08, 0.09, 0.1, 0.11; -0.5) >$	$< (0.1, 0.11, 0.12, 0.13, 0.14; 0.4), (0.12, 0.13, 0.14, 0.15, 0.16; 0.6), (0.09, 0.1, 0.11, 0.12, 0.13; 0.8), (0.07, 0.08, 0.09, 0.1, 0.11; -0.7), (0.13, 0.15, 0.17, 0.19, 0.21; -0.1), (0.12, 0.13, 0.14, 0.15, 0.16; -0.3) >$	$< (0.01, 0.02, 0.03, 0.04, 0.05; 0.6), (0.01, 0.03, 0.05, 0.07, 0.09; 0.4), (0.05, 0.07, 0.09, 0.11, 0.13; 0.2), (0.06, 0.07, 0.08, 0.09, 0.11; -0.4), (0.04, 0.06, 0.08, 0.1, 0.12; -0.5), (0.03, 0.05, 0.07, 0.09, 0.11; -0.7) >$	2
2	$< (0.12, 0.13, 0.14, 0.15, 0.16; 0.3), (0.11, 0.13, 0.15, 0.17, 0.19; 0.7), (0.15, 0.16, 0.17, 0.18, 0.19; 0.6), (0.14, 0.15, 0.16, 0.17, 0.18; -0.1), (0.13, 0.15, 0.17, 0.19, 0.21; -0.6), (0.07, 0.09, 0.11, 0.13, 0.15; -0.3) >$	$< (0.12, 0.13, 0.14, 0.15, 0.16; 0.5), (0.11, 0.13, 0.15, 0.17, 0.19; 0.3), (0.09, 0.11, 0.13, 0.15, 0.17; 0.4), (0.13, 0.14, 0.15, 0.16, 0.17; -0.6), (0.13, 0.15, 0.17, 0.19, 0.21; -0.4), (0.08, 0.09, 0.11, 0.12; -0.5) >$	$< (0.06, 0.07, 0.08, 0.09, 0.1; 0.8), (0.03, 0.04, 0.05, 0.06, 0.07; 0.5), (0.02, 0.04, 0.06, 0.08, 0.1; 0.4), (0.05, 0.07, 0.09, 0.11, 0.13; -0.6), (0.02, 0.04, 0.06, 0.08, 0.1; -0.3), (0.05, 0.07, 0.09, 0.11, 0.13; -0.6) >$	3
	$< (0.2, 0.22, 0.24, 0.26, 0.28; 0.6), (0.15, 0.16, 0.17, 0.18, 0.19; 0.4), (0.12, 0.14, 0.16, 0.18, 0.2; 0.2), (0.13, 0.15, 0.17, 0.19, 0.21; -0.6), (0.23, 0.25, 0.27, 0.29, 0.31; -0.4), (0.2, 0.21, 0.22, 0.23, 0.24; -0.3) >$	$< (0.06, 0.07, 0.08, 0.09, 0.1; 0.7), (0.01, 0.02, 0.03, 0.04, 0.05; 0.3), (0.02, 0.04, 0.06, 0.08, 0.1; 0.4), (0.05, 0.06, 0.07, 0.08, 0.09; -0.6), (0.05, 0.07, 0.09, 0.11, 0.13; -0.2), (0.03, 0.05, 0.07, 0.09, 0.11; -0.4) >$	$< (0.21, 0.22, 0.23, 0.24, 0.25; 0.2), (0.17, 0.19, 0.21, 0.23, 0.25; 0.5), (0.16, 0.17, 0.18, 0.19, 0.2; 0.6), (0.19, 0.21, 0.23, 0.25, 0.27; -0.3), (0.22, 0.23, 0.24, 0.25, 0.26; -0.6), (0.24, 0.25, 0.26, 0.27, 0.28; -0.7) >$	1
	$< (0.12, 0.13, 0.14, 0.15, 0.16; 0.5), (0.1, 0.11, 0.12, 0.13, 0.14; 0.6), (0.09, 0.1, 0.11, 0.12, 0.13; 0.7), (0.07, 0.09, 0.11, 0.13, 0.15; -0.4), (0.15, 0.16, 0.17, 0.18, 0.19; -0.4), (0.14, 0.16, 0.18, 0.2, 0.22; -0.1) >$	$< (0.04, 0.05, 0.06, 0.07, 0.08; 0.6), (0.03, 0.05, 0.07, 0.09, 0.11; 0.4), (0.05, 0.07, 0.09, 0.11, 0.13; 0.2), (0.07, 0.09, 0.11, 0.13, 0.15; -0.3), (0.01, 0.02, 0.03, 0.04, 0.05; -0.7), (0.02, 0.04, 0.06, 0.08, 0.1; -0.5) >$	$< (0.12, 0.13, 0.14, 0.15, 0.16; 0.6), (0.08, 0.1, 0.12, 0.14, 0.16; 0.4), (0.1, 0.11, 0.12, 0.13, 0.14; 0.5), (0.09, 0.11, 0.13, 0.15, 0.17; -0.8), (0.1, 0.11, 0.12, 0.13, 0.14; -0.6), (0.13, 0.15, 0.17, 0.19, 0.21; -0.2) >$	2
	$< (0.24, 0.25, 0.26, 0.27, 0.28; 0.7), (0.21, 0.23, 0.25, 0.27, 0.29; 0.5), (0.31, 0.32, 0.33, 0.34, 0.35; 0.2), (0.14, 0.16, 0.18, 0.2, 0.22; -0.3), (0.23, 0.25, 0.27, 0.29, 0.31; -0.3), (0.24, 0.25, 0.26, 0.27, 0.28; -0.2) >$	$< (0.12, 0.13, 0.14, 0.15, 0.16; 0.5), (0.08, 0.1, 0.12, 0.14, 0.16; 0.4), (0.1, 0.11, 0.12, 0.13, 0.14; 0.7), (0.12, 0.13, 0.14, 0.15, 0.16; 0.4), (0.14, 0.15, 0.16, 0.17, 0.18; 0.7), (0.15, 0.16, 0.17, 0.18, 0.19; -0.3), (0.18, 0.21, 0.24, 0.27, 0.3; -0.6), (0.24, 0.26, 0.28, 0.3, 0.32; -0.7) >$	$< (0.12, 0.13, 0.14, 0.15, 0.16; 0.5), (0.08, 0.1, 0.12, 0.14, 0.16; 0.4), (0.1, 0.11, 0.12, 0.13, 0.14; 0.7), (0.12, 0.13, 0.14, 0.15, 0.16; 0.4), (0.14, 0.15, 0.16, 0.17, 0.18; 0.7), (0.15, 0.16, 0.17, 0.18, 0.19; -0.3), (0.18, 0.21, 0.24, 0.27, 0.3; -0.6), (0.24, 0.26, 0.28, 0.3, 0.32; -0.7) >$	3
	$< (0.04, 0.05, 0.06, 0.07, 0.08; 0.9), (0.01, 0.03, 0.05, 0.07, 0.09; 0.6), (0.05, 0.07, 0.09, 0.11, 0.13; 0.3), (0.04, 0.06, 0.08, 0.1, 0.12; -0.5), (0.01, 0.02, 0.03, 0.04, 0.05; -0.4), (0.03, 0.05, 0.07, 0.09, 0.11; -0.1) >$	$< (0.22, 0.23, 0.24, 0.25, 0.26; 0.6), (0.2, 0.21, 0.22, 0.23, 0.24; 0.3), (0.14, 0.16, 0.18, 0.2, 0.22; 0.2), (0.23, 0.24, 0.25, 0.26, 0.27; -0.8), (0.21, 0.22, 0.23, 0.24; -0.6), (0.21, 0.23, 0.25, 0.27, 0.29; -0.5) >$	$< (0.22, 0.23, 0.24, 0.25, 0.26; 0.6), (0.2, 0.21, 0.22, 0.23, 0.24; 0.3), (0.14, 0.16, 0.18, 0.2, 0.22; 0.2), (0.23, 0.24, 0.25, 0.26, 0.27; -0.8), (0.21, 0.22, 0.23, 0.24; -0.6), (0.21, 0.23, 0.25, 0.27, 0.29; -0.5) >$	1
3	$< (0.21, 0.22, 0.23, 0.24, 0.25; 0.6), (0.24, 0.25, 0.26, 0.27, 0.28; 0.4), (0.11, 0.12, 0.13, 0.14, 0.15; 0.5), (0.13, 0.15, 0.17, 0.19, 0.21; -0.6), (0.21, 0.22, 0.23, 0.24, 0.25; -0.4), (0.16, 0.18, 0.2, 0.22, 0.24; -0.2) >$	$< (0.1, 0.11, 0.12, 0.13, 0.14; 0.3), (0.12, 0.13, 0.14, 0.15, 0.16; 0.5), (0.08, 0.09, 0.1, 0.11, 0.12; 0.3), (0.14, 0.16, 0.18, 0.2, 0.22; -0.4), (0.16, 0.18, 0.2, 0.22, 0.24; -0.2) >$	$< (0.02, 0.03, 0.04, 0.05, 0.06; 0.4), (0.04, 0.05, 0.06, 0.07, 0.08; 0.3), (0.02, 0.04, 0.06, 0.08, 0.1; 0.6), (0.05, 0.06, 0.07, 0.08, 0.09; -0.7), (0.04, 0.06, 0.08, 0.1, 0.12; -0.5), (0.05, 0.07, 0.09, 0.11, 0.13; -0.8) >$	2
	$< (0.1, 0.11, 0.12, 0.13, 0.14; 0.2), (0.12, 0.13, 0.14, 0.15, 0.16; 0.5), (0.09, 0.11, 0.13, 0.15, 0.17; 0.3), (0.12, 0.14, 0.16, 0.18, 0.2; 0.6), (0.12, 0.13, 0.14, 0.15, 0.16; -0.3), (0.15, 0.16, 0.17, 0.18, 0.19; -0.5), (0.07, 0.09, 0.11, 0.13, 0.15; -0.4) >$	$< (0.01, 0.03, 0.05, 0.07, 0.09; 0.1), (0.05, 0.06, 0.07, 0.08, 0.09; 0.1), (0.0$		

Table 20: BPNFS input for time and emission constraints.

\widetilde{mSegT}	\widetilde{MSegT}
$< (0.0001, 0.0002, 0.0003, 0.0004, 0.0005; 0.3),$ $(0.001, 0.002, 0.003, 0.004, 0.005; 0.1),$ $(0.0001, 0.0002, 0.0003, 0.0004, 0.0005; 0.2),$ $(0.001, 0.002, 0.003, 0.004, 0.005; -0.5),$ $(0.0001, 0.0002, 0.0003, 0.0004, 0.0005; -0.3),$ $(0.0001, 0.0002, 0.0003, 0.0004, 0.0005; -0.2) >$	$< (0.004, 0.006, 0.008, 0.01, 0.012; 0.5),$ $(0.005, 0.006, 0.007, 0.008, 0.009; 0.3),$ $(0.002, 0.003, 0.004, 0.005, 0.006; 0.2),$ $(0.008, 0.01, 0.012, 0.014, 0.016; -0.5),$ $(0.001, 0.002, 0.003, 0.004, 0.005; -0.4),$ $(0.004, 0.005, 0.006, 0.007, 0.008; -0.1) >$
\widetilde{mExT}	\widetilde{MExT}
$< (0.2, 0.3, 0.4, 0.5, 0.6; 0.7), (0.1, 0.11, 0.12, 0.13, 0.14; 0.4),$ $(0.3, 0.4, 0.5, 0.6, 0.7; 0.3), (0.08, 0.1, 0.12, 0.14, 0.16; -0.6),$ $(0.11, 0.13, 0.15, 0.17, 0.19; -0.4), (0.2, 0.4, 0.6, 0.8, 1; -0.1) >$	$< (1, 1.1, 1.2, 1.3, 1.4; 0.5), (0.5, 0.7, 0.9, 1.1, 1.3; 0.3),$ $(0.4, 0.6, 0.8, 1, 1.2; 0.2), (0.7, 0.8, 0.9, 1, 1.1; -0.5),$ $(1, 1.2, 1.4, 1.6, 1.8; -0.4), (0.3, 0.5, 0.7, 0.9, 1.1; -0.1) >$
\widetilde{mReT}	\widetilde{MReT}
$< (0.1, 0.2, 0.3, 0.4, 0.5; 0.3), (0.07, 0.09, 0.11, 0.13, 0.15; 0.1),$ $(0.2, 0.3, 0.4, 0.5, 0.6; 0.2), (0.06, 0.08, 0.1, 0.12, 0.14; -0.5),$ $(0.1, 0.3, 0.5, 0.7, 0.9; -0.3), (0.2, 0.3, 0.4, 0.5, 0.6; -0.2) >$	$< (1, 1.1, 1.2, 1.3, 1.4; 0.8), (0.5, 0.7, 0.9, 1.1, 1.3; 0.4),$ $(0.4, 0.6, 0.8, 1, 1.2; 0.2), (0.7, 0.8, 0.9, 1, 1.1; -0.6),$ $(1, 1.2, 1.4, 1.6, 1.8; -0.5), (0.3, 0.5, 0.7, 0.9, 1.1; -0.1) >$
\widetilde{CCE}	
$< (441, 442, 443, 444, 445; 0.6), (345, 346, 347, 348, 349; 0.4),$ $(243, 244, 245, 246, 247; 0.2), (257, 258, 259, 260, 261; -0.8),$ $(321, 322, 323, 324, 325; -0.5), (401, 411, 421, 431, 441; -0.2) >$	

Table 21: BPNFS input for supply, demand, and conveyance constraints.

\widehat{GenC}_i		
$i = 1$	$i = 2$	$i = 3$
$< (100, 101, 102, 103, 104; 0.6), (190, 192, 194, 196, 198; 0.3),$ $(115, 116, 117, 118, 119; 0.2), (100, 102, 104, 106, 108; -0.5),$ $(120, 122, 124, 126, 128; -0.2), (178, 179, 180, 181, 182; -0.5) >$	$< (100, 101, 102, 103, 104; 0.7), (110, 111, 112, 113, 114; 0.4),$ $(109, 110, 111, 112, 113; 0.1), (102, 104, 106, 108, 110; -0.3),$ $(105, 106, 107, 108, 109; -0.7), (101, 102, 103, 104, 105; -0.8) >$	$< (120, 121, 122, 123, 124; 0.9), (102, 103, 104, 105, 106; 0.5),$ $(101, 102, 103, 104, 105; 0.3), (110, 111, 112, 113, 114; -0.2),$ $(98, 100, 102, 104, 106; -0.7), (90, 91, 92, 93, 94; -0.4) >$
\widehat{ReFC}_j		
$j = 1$	$j = 2$	$j = 3$
$< (30, 40, 50, 60, 70; 0.2), (45, 55, 65, 75, 85; 0.5),$ $(100, 102, 104, 106, 108; 0.3), (120, 125, 130, 135, 140; -0.4),$ $(90, 110, 130, 150, 170; -0.7), (65, 75, 85, 95, 105; -0.6) >$	$< (35, 37, 39, 41, 43; 0.4), (44, 46, 48, 50, 52; 0.6),$ $(22, 24, 26, 28, 30; 0.3), (44, 45, 46, 47, 48; -0.1),$ $(41, 42, 43, 44, 45; -0.3), (11, 14, 17, 20, 23; -0.8) >$	$< (65, 66, 67, 68, 69; 0.9), (78, 80, 82, 84, 86; 0.5),$ $(67, 68, 69, 70, 71; 0.3), (78, 80, 82, 84, 86; -0.2),$ $(88, 89, 90, 91, 92; -0.7), (77, 78, 79, 80, 81; -0.4) >$
$j = 4$	$j = 5$	
$< (67, 68, 69, 70, 71; 0.3), (56, 57, 58, 59, 60; 0.4),$ $(34, 36, 38, 40, 42; 0.6), (44, 45, 46, 47, 48; -0.6),$ $(35, 37, 39, 41, 43; -0.7), (57, 58, 59, 60, 61; -0.8) >$	$< (56, 58, 60, 62, 64; 0.5), (62, 63, 64, 65, 66; 0.4),$ $(45, 47, 49, 51, 53; 0.3), (47, 48, 49, 50, 51; -0.7),$ $70, 72, 74, 76, 78; -0.5), (36, 37, 38, 39, 40; -0.5) >$	
\widehat{VcrC}_k		
$k = 1$	$k = 2$	$k = 3$
$< (100, 110, 120, 130, 140; 0.4), (226, 228, 230, 232, 234; 0.2),$ $(170, 171, 172, 173, 174; 0.1), (130, 140, 150, 160, 170; -0.5),$ $(136, 138, 140, 142, 144; -0.3), (202, 204, 206, 208, 210; -0.4) >$	$< (110, 111, 112, 113, 114; 0.5), (150, 152, 154, 156, 158; 0.3),$ $(148, 149, 150, 151, 152; 0.1), (166, 167, 168, 169, 170; -0.5),$ $(146, 147, 148, 149, 150; -0.9), (121, 122, 123, 124, 125; -0.7) >$	$< (179, 180, 181, 182, 183; 0.4), (194, 196, 198, 200, 202; 0.6),$ $(230, 231, 232, 233, 234; 0.7), (220, 222, 224, 226, 228; -0.5),$ $(188, 189, 190, 191, 192; -0.7), (190, 191, 192, 193, 194; -0.6) >$
$\widehat{E\alpha M}_j$		
$j = 1$	$j = 2$	$j = 3$
$< (32, 33, 34, 35, 36; 0.6), (44, 45, 46, 47, 48; 0.4),$ $(25, 26, 27, 28, 29; 0.1), (37, 38, 39, 40, 41; -0.8),$ $(22, 23, 24, 25, 26; -0.5), (31, 32, 33, 34, 35; -0.3) >$	$< (31, 32, 33, 34, 35; 0.6), (29, 31, 33, 35, 37; 0.4),$ $(41, 42, 43, 44, 45; 0.2), (21, 22, 23, 24, 25; -0.6),$ $(33, 35, 37, 39, 41; -0.3), (23, 24, 25, 26, 27; -0.2) >$	$< (32, 33, 34, 35, 36; 0.6), (31, 34, 37, 40, 43; 0.4),$ $(37, 39, 41, 43, 45; 0.5), (41, 42, 43, 44, 45; -0.7),$ $(35, 36, 37, 38, 39; -0.5), (22, 23, 24, 25, 26; -0.4) >$
$j = 4$	$j = 5$	
$< (27, 29, 31, 33, 35; 0.2), (23, 24, 25, 26, 27; 0.5),$ $(34, 36, 38, 40, 42; 0.6), (39, 41, 43, 45, 47; -0.5),$ $(17, 19, 21, 23, 25; -0.7), (26, 27, 28, 29, 30; -0.8) >$	$< (21, 22, 23, 24, 25; 0.6), (14, 16, 18, 20, 22; 0.3),$ $(31, 32, 33, 34, 35; 0.1), (25, 27, 29, 31, 33; -0.6),$ $(34, 35, 36, 37, 38; -0.3), (18, 20, 22, 24, 26; -0.4) >$	
\widehat{DemM}_l		
$l = 1$	$l = 2$	
$< (67, 68, 69, 70, 71; 0.5), (114, 116, 118, 120, 122; 0.3),$ $(96, 97, 98, 99, 100; 0.2), (86, 87, 88, 89, 90; -0.6),$ $(123, 124, 125, 126, 127; -0.4), (111, 112, 113, 114, 115; -0.2) >$	$< (121, 122, 123, 124, 125; 0.2), (140, 142, 144, 146, 148; 0.4),$ $(118, 119, 120, 121, 122; 0.3), (123, 124, 125, 126, 127; -0.7),$ $(92, 94, 96, 98, 100; -0.4), (101, 102, 103, 104, 105; -0.3) >$	
$\widehat{VrmM}_{k'}$		
$k' = 1$	$k' = 2$	$k' = 3$
$< (56, 58, 60, 62, 64; 0.5), (98, 99, 100, 101, 102; 0.3),$ $(78, 79, 80, 81, 82; 0.2), (68, 70, 72, 74, 76; -0.5),$ $(85, 86, 87, 88, 89; -0.4), (92, 93, 94, 95, 96; -0.3) >$	$< (121, 122, 123, 124, 125; 0.5), (92, 93, 94, 95, 96; 0.3),$ $(110, 111, 112, 113, 114; 0.1), (84, 86, 88, 90, 92; -0.5),$ $(125, 126, 127, 128, 129; -0.9), (98, 99, 100, 101, 102; -0.7) >$	$< (124, 125, 126, 127, 128; 0.6), (113, 115, 117, 119, 121; 0.4),$ $(109, 110, 111, 112, 113; 0.2), (134, 135, 136, 137, 138; -0.6),$ $(119, 120, 121, 122, 123; -0.5), (104, 105, 106, 107, 108; -0.1) >$
\widehat{ReP}_j		
$j = 1$	$j = 2$	$j = 3$
$< (43, 44, 45, 46, 47; 0.6), (54, 55, 56, 57, 58; 0.4),$ $(37, 39, 41, 43, 45; 0.1), (34, 36, 38, 40, 42; -0.8),$ $(52, 53, 54, 55, 56; -0.5), (46, 48, 50, 52, 54; -0.3) >$	$< (55, 56, 57, 58, 59; 0.5), (49, 50, 51, 52, 53; 0.7),$ $(62, 63, 64, 65, 66; 0.8), (67, 68, 69, 70, 71; -0.4),$ $(71, 73, 75, 77, 79; -0.7), (59, 61, 63, 65, 67; -0.6) >$	$< (46, 47, 48, 49, 50; 0.7), (32, 33, 34, 35, 36; 0.5),$ $(55, 57, 59, 61, 63; 0.3), (42, 44, 46, 48, 50; -0.6),$ $(52, 53, 54, 55, 56; -0.2), (34, 35, 36, 37, 38; -0.3) >$
$j = 4$	$j = 5$	
$< (51, 52, 53, 54, 55; 0.6), (45, 46, 47, 48, 49; 0.3),$ $(71, 72, 73, 74, 75; 0.4), (62, 63, 64, 65, 66; -0.5),$ $(42, 44, 46, 48, 50; -0.6), (35, 37, 39, 41, 43; -0.6) >$	$< (33, 35, 37, 39, 41; 0.7), (24, 25, 26, 27, 28; 0.6),$ $(46, 47, 48, 49, 50; 0.4), (54, 56, 58, 60, 62; -0.6),$ $(51, 52, 53, 54, 55; -0.5), (23, 25, 27, 29, 31; -0.3) >$	
\widehat{DemP}_m		
$m = 1$	$m = 2$	$m = 3$
$< (64, 65, 66, 67, 68; 0.6), (72, 73, 74, 75, 76; 0.4),$ $(46, 48, 50, 52, 54; 0.3), (53, 55, 57, 59, 61; -0.7),$ $(48, 49, 50, 51, 52; -0.3), (67, 68, 69, 70, 71; -0.2) >$	$< (87, 88, 89, 90, 91; 0.2), (78, 79, 80, 81, 82; 0.4),$ $(56, 58, 60, 62, 64; 0.3), (63, 64, 65, 66, 67; -0.6),$ $(71, 72, 73, 74, 75; -0.3), (47, 49, 51, 53, 55; -0.1) >$	$< (96, 98, 100, 102, 104; 0.4), (125, 127, 129, 131, 133; 0.5),$ $(99, 100, 101, 102, 103; 0.7), (103, 104, 105, 106, 107; -0.5),$ $(87, 88, 89, 90, 91; -0.2), (110, 111, 112, 113, 114; -0.3) >$
$\widehat{VrmP}_{k''}$		
$k'' = 1$	$k'' = 2$	$k'' = 3$
$< (77, 79, 81, 83, 85; 0.5), (115, 116, 117, 118, 119; 0.3),$ $(97, 98, 99, 100, 101; 0.2), (134, 135, 136, 137, 138; -0.5),$ $(102, 104, 106, 108, 110; -0.4), (78, 79, 80, 81, 82; -0.3) >$	$< (136, 137, 138, 139, 140; 0.6), (98, 99, 100, 101, 102; 0.4),$ $(151, 152, 153, 154, 155; 0.2), (99, 100, 101, 102, 103; -0.7),$ $(122, 124, 126, 128, 130; -0.3), (104, 105, 106, 107, 108; -0.1) >$	$< (118, 119, 120, 121, 122; 0.4), (122, 123, 124, 125, 126; 0.6),$ $(101, 102, 103, 104, 105; 0.7), (95, 97, 99, 101, 103; -0.5),$ $(113, 114, 115, 116, 117; -0.7), (102, 103, 104, 105, 106; -0.6) >$