

SCHEDULE 1**SSE Freshet Schedule for 2023**

Licence	Scheme	Freshet condition number(s)	Fish lift / fish trap condition	Appendix	SEPA Team
CAR/L/1011412/V2	Breadalbane	4.2.5	4.3.1	1	Falkirk, Alloa, Stirling and Perth
CAR/L/1011462/V2	Awe	4.2.2	4.3.1	2	Argyll, Hebrides & South Highland
CAR/L/1011463/V2	Shin	3.3.3, 3.3.5	4.3.3	3	North Highland & Northern Isles
CAR/L/1011464/V2	Conon	4.2.2, 4.2.4, 4.2.6, 4.2.9	4.3.3	4	North Highland & Northern Isles
CAR/L/1011467/V2	Beauly	4.2.6 & 4.2.7	4.3.2	5	Argyll, Hebrides & South Highland
CAR/L/1011471/V2	Ness	4.2.2, 4.2.5, 4.2.8	4.3.3	6	Argyll, Hebrides & South Highland
CAR/L/1011485/V2	Tummel	4.2.5, 4.2.10, 4.2.13	4.3.3	7	Falkirk, Alloa, Stirling & Perth / Grampian & Speyside
CAR/L/1011854/V2	Shira	4.2.2	n/a	8	Argyll, Hebrides & South Highland
CAR/L/1011896/V2	Kingairloch	4.2.2	n/a	9	Argyll, Hebrides & South Highland
CAR/L/1010015/V2	Mucomir	n/a	4.3.3	10	Argyll, Hebrides & South Highland

General Notes:

1. Unless stated otherwise all times referred to in this document shall be local times, i.e. GMT or BST as appropriate to the time of year.
2. All freshet volumes released are in addition to the compensation flows unless otherwise stated.
3. All freshet start and end times are approximate, however SSE will endeavour to deliver the freshets as close to the stated time as practicable.
4. All Borland fish passes to operate between the stated dates except for periods of essential maintenance as authorised in writing by SEPA.
5. Where a day of the week is specified as the start of a freshet, the first freshet of the season shall be delivered starting on the first such day in the freshet season.
6. Where a freshet starts within the freshet season but would end beyond the end date, the full duration of the freshet shall be delivered as if it was within the freshet season.

SCHEDULE 2

APPENDIX 1

CAR/L/1011412 V2 - Breadalbane

FRESHETS**Licence condition – 4.2.5**

NGR: NN 5073 4200

LOCATION: Stronuich – River Lyon

TOTAL AVAILABLE VOLUME: 9,546,600 m³ (in addition to compensation flows)

FREQUENCY: Release dates as specified below for 2023.

No	Day	Date	Month
1	Monday	10	April
2	Wednesday	19	April
3	Monday	01	May
4	Wednesday	10	May
5	Wednesday	17	May
6	Wednesday	24	May
7	Tuesday	30	May
8	Wednesday	07	June
9	Thursday	15	June
10	Monday	19	June
11	Tuesday	27	June
12	Wednesday	05	July
13	Wednesday	12	July
14	Thursday	20	July
15	Monday	24	July
16	Tuesday	01	August
17	Monday	07	August
18	Tuesday	15	August
19	Thursday	24	August
20	Thursday	31	August
21	Wednesday	06	September
22	Thursday	14	September
23	Wednesday	20	September
24	Tuesday	26	September
25	Tuesday	03	October
26	Wednesday	11	October

**Two additional freshets will be available for release at the request of SEPA.
Five working days' notice will be given for their release.**

FRESHETS PROFILE: Freshet release commences at 15:00 on the stated day, continues for 20 hours, finishing at 11:00 the following day and releasing a total volume of 340,957 m³/day. 28 freshets lasting 20 hours are available per annum.

TOTAL ALLOCATED VOLUME: 9,546,796 m³ per annum.

SCHEDULE 2

BORLAND FISH PASSES

Licence condition – 4.3.1

NGR: NN 5074 4192 **LOCATION:** Stronuich Dam

OPERATING SEASON: 1 April – 30 November (or following working day if 30 falls on a weekend or public holiday).

NUMBER OF LIFTS PER DAY: At least 3 lifts per day

TIMING OF LIFTING PHASE: During daylight where possible

DURATION OF LIFTING PHASE: 1 hour

NGR: NN 5437 3503 **LOCATION:** Lochay Fish Pass Weir

OPERATING SEASON: 1 March – 30 November (or following working day)

NUMBER OF LIFTS PER DAY: At least 3 lifts per day

TIMING OF LIFTING PHASE: During daylight where possible

DURATION OF LIFTING PHASE: 1 hour

SCHEDULE 2

APPENDIX 2

CAR/L/1011462 V2/VN02 - Awe

FRESHETS**Licence condition – 4.2.2****NGR:** NN 0453 2868**LOCATION:** Loch Awe Barrage**TOTAL AVAILABLE VOLUME:** 15,200,000m³ (in addition to compensation flows)**FRESHET SEASON:** 22 April – 22 December

FREQUENCY: The following freshet regime shall be delivered subject to the baseline compensation flow being amended in the Awe CAR licence and the annual compensation and freshet totals not being exceeded:

One freshet to be delivered on Saturday 22 April 2023. The freshet on this day shall deliver a volume of 300,000 m³ over a period of 12 hours, i.e. the total flow including the compensation flow shall be increased to the equivalent of 1,200,000 m³/day, starting at 08:00 and finishing at 20:00.

Two freshets to be delivered on Saturday 6 and Sunday 7 May 2023. The freshet on these days shall deliver a volume of 300,000 m³ over a period of 12 hours, i.e. the total flow including the compensation flow shall be increased to the equivalent of 1,200,000 m³/day, starting at 06:00 and finishing at 18:00 on each day.

One freshet starting at 08:00 on the last Sunday in July and August, each of these freshets shall deliver a volume of 500,000 m³ over one day (24 hours) i.e. the total flow including the compensation shall be increased to 1,500,000 m³/day.

One freshet starting at 08:00 on the last Sunday in September. This freshet shall deliver a volume of 600,000 m³ over one day (24 hours) i.e. the total flow including the compensation shall be increased to 1,500,000 m³/day.

A total of six freshets, the first freshet commencing at 12:00 on the second Friday in October and commencing at 12:00 every second Friday thereafter. Where the sixth freshet would fall outside the freshet season above, it may be delivered earlier. Each freshet shall deliver a volume of 2,100,000 m³ over three days (72 hours) i.e. the total flow including the compensation shall be increased to 1,500,000 m³/day.

TOTAL ALLOCATED VOLUME: 15,100,000

SCHEDULE 2**SMOLT FRESHETS**

A 'smolt freshet' shall be released when any one of the following conditions occur between 15 April and 30 June:

- There are reliable reports of a build-up of smolts upstream of the Awe Barrage (under discussion with SSE to agree a protocol with the fisheries board bailiff and/or fisheries trust biologist for opening the freshet gate),
- No main machine running at Inverawe because of insufficient water,
- No planned machine running at Inverawe due to insufficient water / forecast rainfall, and,
- SSE receive a written request from SEPA that a release be made.

Each smolt freshet shall consist of the following actions:

- The flow will be maintained at the current level, i.e. either the normal compensation flow or a lower flow, based on the inflow to Loch Awe (condition 4.2.3 of the licence allows that when the inflow to Loch Awe falls below 15.785 m³/s the outflow shall be equal to the inflow).
- All the flow, apart from the fish pass flow, shall be passed via the freshet gate.
- The freshet will start on or about 19:00 and finish on or about 07:00 the following morning.

Notwithstanding condition 4.2.3 of the licence which limits the required flow if the flows entering Loch Awe are less than 15.785 m³/s.

BORLAND FISH PASSES**Licence condition – 4.3.1**

NGR: NN 0455 2870

LOCATION: Loch Awe Barrage

OPERATING SEASON: All year

NUMBER OF LIFTS PER DAY: 26 March – 30 September 4 per Day and 1 October – 25 March 2 per Day

TIMING OF LIFTING PHASE: From 26 March – 30 September, where possible, 3 during daylight and 1 at night. From 1 October to 25 March, 2 during daylight where possible.

DURATION OF LIFTING PHASE: 1 hour

SCHEDULE 2

APPENDIX 3

CAR/L/1011463 V2 – Shin

FRESHETS

Licence condition – 3.3.3

NGR: NC 3679 2029 **LOCATION:** Duchally – River Cassley

TOTAL AVAILABLE VOLUME: 2,864,038m³

FRESHET SEASON: 1 May – 30 September

FREQUENCY: 7 freshets per month

FRESHETS PROFILE: 35 releases of 81,830 m³

No more than 3 consecutive daily (24hr) freshets.

If there is insufficient water for a freshet the allocation will be carried over to next month. Released when the flows start rising.

Licence condition – 3.3.5

NGR: NC 6321 1521 **LOCATION:** Dalnessie – River Brora

TOTAL AVAILABLE VOLUME: 1,432,000m³

FRESHET SEASON: 1 April – 30 September

FREQUENCY: Released during periods of increased inflow.

FRESHETS PROFILE: 21 releases of 68,191m³ where the natural flow upstream allows.

SCHEDULE 2

BORLAND FISH PASSES

Licence condition – 4.3.3

NGR: NC 5749 0695 **LOCATION:** Lairg Dam

OPERATING SEASON: 1 April – 31 December (or following working day if 31 December falls on a weekend or public holiday)

NUMBER OF LIFTS PER DAY: At least 3 lifts per day

TIMING OF LIFTING PHASE: During daylight where possible

DURATION OF LIFTING PHASE: 1 hour

NGR: NC 5817 0511 **LOCATION:** Loch Shin diversion dam

OPERATING SEASON: 1 April – 31 December (or following working day if 31 December falls on a weekend or public holiday)

NUMBER OF LIFTS PER DAY: At least 3 lifts per day

TIMING OF LIFTING PHASE: During daylight where possible

DURATION OF LIFTING PHASE: 1 hour

NGR: NC 3680 2027 **LOCATION:** Duchally intake

OPERATING SEASON: 1 April – 30 November (or following working day if 30 November falls on a weekend or public holiday)

NUMBER OF LIFTS PER DAY: At least 3 lifts per day

TIMING OF LIFTING PHASE: During daylight where possible

DURATION OF LIFTING PHASE: 1 hour

SCHEDULE 2

APPENDIX 4

CAR/L/1011464 V2 – Conon

FRESHETS**Licence condition – 4.2.2**

NGR: NH 3876 5797

LOCATION: Luichart – River Conon

TOTAL AVAILABLE VOLUME: 11,592,530m³

FRESHET SEASON: 1 June – 15 November

FREQUENCY: Twice per week

FRESHETS PROFILE: Freshet releases commence at 09:00 on Monday and continuing for 26 hours finishing at 11:00 on Tuesday, and also on Friday at 09:00 continuing for 26 hours until 11:00 on Saturday. Each freshet shall release 159,110m³. One natural spate may be counted as one freshet.

TOTAL ALLOCATED VOLUME: 7,637,280m³**Licence condition – 4.2.4**

NGR: NH 3754 5600

LOCATION: Meig – River Meig

TOTAL AVAILABLE VOLUME: 9,887,750m³

FRESHET SEASON: 1 June – 31 October

FREQUENCY: Once per week

FRESHETS PROFILE: Freshet releases commence at 09:00 on Thursday continuing for 24 hours until 09:00 on Friday. Each freshet shall release a minimum of 36,000m³. One natural spate may be counted as one freshet.

TOTAL ALLOCATED VOLUME: 3,341,310m³**ADDITIONAL NOTES**

The unallocated volumes may be considered for release here or elsewhere as part of measures to deliver the third cycle of the river basin management plan.

SCHEDULE 2**Licence condition – 4.2.6**

The freshet volumes for the Orrin are now available on request.

NGR: NH 4026 5035

LOCATION: Orrin – River Orrin

TOTAL AVAILABLE VOLUME: 4,625,666 m³

FREQUENCY: on request

FRESHETS PROFILE: As required

Licence condition – 4.2.9

NGR: either Vaich dam NH 3461 7496 or Glascarnoch dam NH 3455 7073

LOCATION: Black Water

TOTAL AVAILABLE VOLUME: 2,618,549m³

FREQUENCY: on request

FRESHETS PROFILE: As required

BORLAND FISH PASSES**Licence condition – 4.3.3**

NGR: NH 3002 6148 **LOCATION:** Loch a' Chuilinn Dam

OPERATING SEASON: 1 July – 16 November (or following working day)

NUMBER OF LIFTS PER DAY: At least 2 lifts per day

TIMING OF LIFTING PHASE: During daylight where possible

DURATION OF LIFTING PHASE: 1 hour

NGR: NH 3881 5798 **LOCATION:** Luichart Dam

OPERATING SEASON: 1 May – 16 November (or following working day)

NUMBER OF LIFTS PER DAY: At least 2 lifts per day

TIMING OF LIFTING PHASE: During daylight where possible

DURATION OF LIFTING PHASE: 1 hour

SCHEDULE 2

NGR: NH 3751 5602 **LOCATION:** Meig Dam

OPERATING SEASON: 1 May – 16 November (or following working day)

NUMBER OF LIFTS PER DAY: At least 2 lifts per day

TIMING OF LIFTING PHASE: During daylight where possible

DURATION OF LIFTING PHASE: 1 hour

NGR: NH 4026 5035 **LOCATION:** Orrin Dam

OPERATING SEASON: See freshet for operation details.

Additional Notes:

The Orrin Borland lift only acts as a mechanism for downstream passage. The fish trap below covers the upstream passage.

NGR: NH 4462 5454 **LOCATION:** Loch Achonachie Dam

OPERATING SEASON: 1 April – 30 November (or following working day)

NUMBER OF LIFTS PER DAY: At least 2 per day

TIMING OF LIFTING PHASE: During daylight where possible

DURATION OF LIFTING PHASE: 1 hour

SCHEDULE 2**FISH TRAPS****Licence condition – 4.3.3**

NGR: NH 4041 5028

LOCATION: Orrin Dam

TYPE: Adult Fish Trap

OPERATING SEASON: 1 August – 30 November or other dates as agreed in writing, by exchange of emails between SEPA and SSE no less than 2 working days before the change is put into effect.

NGR: NH 3081 6181

LOCATION: Achanalt Dam

TYPE: Smolt Trap

OPERATING SEASON: 1 April – 15 June or other dates as agreed in writing, by exchange of emails between SEPA and SSE no less than 2 working days before the change is put into effect.

CAR LICENCE: CAR/L/1011873

NGR: NH 4285 5923

LOCATION: Loch na Croic

TYPE: Adult trap

OPERATING SEASON: Unless otherwise agreed with SEPA in writing, the fish trap shall be maintained and operated to facilitate the free passage of fish at all times except during the period 1 June to 31 December inclusive, during which time screens effective for preventing the passage of adult migratory fish may be provided.

SCHEDULE 2

APPENDIX 5

CAR/L/1011467 V2 - Beaully

FRESHETS

Licence conditions – 4.2.6 & 4.2.7

NGR: NH 3255 3933

LOCATION: Beannachran – River Farrar

TOTAL AVAILABLE VOLUME: 13,638,000 m³ (in addition to compensation flows.)

FREQUENCY: To be released once per week, commencing on the first Thursday in July, on 15 occasions.

FRESHETS PROFILE: Freshet releases commence at 08:00 on Thursday continuing for 56 hours until 16:00 on Saturday. Each freshet shall release 910,136 m³.

TOTAL ALLOCATED VOLUME: 13,652,040 m³.

BORLAND FISH PASSES

Licence condition – 4.3.2

NGR: NH 3257 3936 **LOCATION:** Beannachran Dam

OPERATING SEASON: 1 May – 30 November (or following working day)

NUMBER OF LIFTS PER DAY: At least 3 lifts per day

TIMING OF LIFTING PHASE: During daylight where possible

DURATION OF LIFTING PHASE: 1 hour

NGR: NH 4743 4365 **LOCATION:** Aigas Dam

OPERATING SEASON: 1 April – 30 November (or following working day)

NUMBER OF LIFTS PER DAY: At least 2 lifts per day

TIMING OF LIFTING PHASE: During daylight where possible

DURATION OF LIFTING PHASE: 1 hour

SCHEDULE 2

NGR: NH 4940 4421

LOCATION: Kilmorack Dam

OPERATING SEASON: 1 April – 30 November (or following working day)

NUMBER OF LIFTS PER DAY: At least 2 lifts per day

TIMING OF LIFTING PHASE: During daylight where possible

DURATION OF LIFTING PHASE: 1 hour

SCHEDULE 2

APPENDIX 6

CAR/L/1011471 V2 - Ness

FRESHETSLicence condition – 4.2.2

The freshets from Loch Cluanie to the River Moriston have not historically been delivered. Following a request for the freshets to be provided from 2023 onward, trial freshets are being discussed with a view to including formally programmed freshets in subsequent years.

NGR: NH 1845 0981

LOCATION: Cluanie – River Moriston

TOTAL AVAILABLE VOLUME: 8,000,960 m³

Licence condition – 4.2.5

NGR: NH 3572 1565

LOCATION: Dundreggan (River Moriston)

TOTAL AVAILABLE VOLUME: 43,778,866 m³

FRESHET SEASON: 1 April - 1 November

FREQUENCY: Once per week

FRESHETS PROFILE: Freshet releases commence at 11:00 on Tuesday continuing for 29 hours until 16:00 on Wednesday.

Except for weeks beginning 15 May, 29 May, 03 July, 24 July, 07 August, 14 August, 21 August, and 11 September when the freshets shall be released as follows:

Saturday 20 May starting at 05:00 continuing for 29 hours until 10:00 on Sunday.

Saturday 03 June starting at 09:00 continuing for 29 hours until 14:00 on Sunday.

Saturday 08 July starting at 09:00 continuing for 29 hours until 14:00 on Sunday.

Saturday 29 July starting at 10:00 continuing for 32 hours until 18:00 on Sunday.

Saturday 12 August starting at 09:00 continuing for 29 hours until 14:00 on Sunday.

Saturday 19 August starting at 09:00 continuing for 29 hours until 14:00 on Sunday.

Saturday 26 August starting at 09:00 continuing for 29 hours until 14:00 on Sunday.

Saturday 16 September starting at 05:00 continuing for 29 hours until 10:00 on Sunday.

Each freshet shall release a minimum of 736,467 m³

NATURAL SPATES: The freshets at Dundreggan take into account natural spates and count one natural spate as one freshet.

TOTAL ALLOCATED VOLUME: 16,938,741m³

SCHEDULE 2**Licence condition – 4.2.8****NGR:** NH 2759 0202**LOCATION:** Garry (Invergarry)**TOTAL AVAILABLE VOLUME:** 27,640,239 m³

FRESHETS PROFILE: Freshet release commences at 08:00 on the stated day and continuing for 20 hours until 04:00 on the following day. Each freshet shall release a volume of 684,225 m³ and 40 such freshets shall be released per annum as per the table below. Except freshets delivered on the Saturday 15 July and Saturday 09 September which will commence at 06:00 and continue for 13 hours until 19:00 releasing 444,746 m³.

TOTAL ALLOCATED VOLUME: 27,369,000 m³

No	DAY	DATE	MONTH
1	Thursday	23	March
2	Thursday	30	March
3	Thursday	06	April
4	Saturday	08	April
5	Thursday	13	April
6	Thursday	20	April
7	Friday	21	April
8	Thursday	27	April
9	Thursday	04	May
10	Thursday	11	May
11	Friday	12	May
12	Saturday	20	May
13	Thursday	25	May
14	Thursday	01	June
15	Thursday	08	June
16	Thursday	15	June
17	Thursday	22	June
18	Thursday	29	June
19	Saturday	01	July
20	Thursday	06	July
21	Saturday	08	July
22	Thursday	13	July
23	Saturday	15	July
24	Thursday	20	July
25	Thursday	27	July
26	Saturday	29	July
27	Thursday	03	August
28	Thursday	10	August
29	Saturday	12	August
30	Thursday	17	August
31	Thursday	24	August
32	Saturday	26	August
33	Thursday	31	August
34	Saturday	09	September
35	Sunday	17	September

SCHEDULE 2

36	Thursday	21	September
37	Thursday	28	September
38	Thursday	05	October
39	Thursday	12	October
40	Thursday	19	October

BORLAND FISH PASSES**Licence condition – 4.3.5**

NGR: NH 2760 0203 **LOCATION:** Invergarry Dam

OPERATING SEASON: 1 March – 30 November (or following working day)

NUMBER OF LIFTS PER DAY: At least 3 per day

TIMING OF LIFTING PHASE: During daylight where possible

DURATION OF LIFTING PHASE: 1 hour

NGR: NH 3574 1562 **LOCATION:** Dundreggan Dam

OPERATING SEASON: 1 March – 30 November (or following working day)

NUMBER OF LIFTS PER DAY: At least 3 per day

TIMING OF LIFTING PHASE: During daylight where possible

DURATION OF LIFTING PHASE: 1 hour

SCHEDULE 2

APPENDIX 7

CAR/L/1011485 V2 - Tummel

FRESHETSLicence condition – 4.2.5

The freshet volumes for Errochty are currently used to supplement the compensation flows.

Licence condition – 4.2.10

NGR: NN 7215 5912 **LOCATION:** Dunalastair

TOTAL AVAILABLE VOLUME: 20,454,000 m³ (including the compensation flow)

FRESHET SEASON: From May to October

FREQUENCY: 15 releases/season.

No.	Day	Start Date	Month
1	Wednesday	31	May
2	Friday	09	June
3	Wednesday	21	June
4	Monday	03	July
5	Friday	14	July
6	Monday	24	July
7	Wednesday	02	August
8	Friday	11	August
9	Wednesday	23	August
10	Monday	04	September
11	Friday	15	September
12	Monday	25	September
13	Wednesday	04	October
14	Monday	16	October
15	Friday	27	October

FRESHETS PROFILE: Freshet releases commence at 14:00 on the stated day continuing for 47 hours until 13:00 on day three.

Each freshet shall release 811,500 m³.

TOTAL ALLOCATED VOLUME: 12,172,500 m³/day (in addition to the compensation flow)

Licence condition – 4.2.13

NGR: NN 8843 6027 **LOCATION:** Clunie – River Tummel

TOTAL AVAILABLE VOLUME: 14,320,190 m³

SCHEDULE 2

FRESHET SEASON: 1 June – 30 September

FRESHETS PROFILE: Freshets shall be released weekly and shall commence at 16:00 on Friday continuing for 64 hours until 08:00 on Monday. Each freshet shall release 976,896 m³.

TOTAL ALLOCATED VOLUME: 16,607,232 m³

BORLAND FISH PASSES

Licence condition – 4.3.5

NGR: NN 4607 5680

LOCATION: Loch Eigheach dam

OPERATING SEASON: 1 March – 15 May (or following working day) – on flow through settings
16 May – 30 November (or following working day) – on lift cycle settings

NUMBER OF LIFTS PER DAY: At least 3 per day

TIMING OF LIFTING PHASE: During daylight where possible

DURATION OF LIFTING PHASE: 1 hour

SCHEDULE 2

APPENDIX 8

CAR/L/1011854 V2 - Shira

FRESHETS

Licence condition – 4.2.2

NGR: NN 1274 1350

LOCATION: River Shira

TOTAL AVAILABLE VOLUME: 2,909,499 m³

FRESHET SEASON: Freshet releases commence on the first Monday in June and continue every second Monday thereafter until a total of eight releases has been made. Freshets must achieve a minimum flow in the River Shira of 204,574m³ for 48 hours at the above NGR.

FRESHETS PROFILE: Freshet releases commence on Monday at 10:00 continuing for 48 hours until 09:00 on Wednesday. Each freshet shall release 363,688 m³.

TOTAL ALLOCATED VOLUME: 2,909,504 m³

SCHEDULE 2

APPENDIX 9

CAR/L/1011896 V2 - Kingairloch

FRESHETS

Licence condition – 4.2.2

NGR: NM 8102 5469 **LOCATION:** Kingairloch – Loch Uisge Dam

TOTAL AVAILABLE VOLUME: 64,800 m³ (including the compensation flow)

FRESHET SEASON: 1 May to 31 August

FREQUENCY: 3 per month for a total of 12 freshets.

FRESHETS PROFILE: Each freshet shall last for 10 hours and shall release a volume of 4,320 m³.

NATURAL SPATES: Spill from the dam counts towards the freshet volume.

TOTAL ALLOCATED VOLUME: 51,840 m³ (in addition to the compensation flow)

SCHEDULE 2

APPENDIX 10

CAR/L/1010015 V2 - Mucomir

BORLAND FISH PASSES

Licence condition – 4.3.5

NGR: NN 1834 8386

LOCATION: Mucomir Barrage

OPERATING SEASON: 1 April – 30 November (or following working day)

NUMBER OF LIFTS PER DAY: At least 4 lifts per day

TIMING OF LIFTING PHASE: Where possible 3 during daylight and 1 at night

DURATION OF LIFTING PHASE: 1 hour