

1 Q. Reference: Public Utilities Board Muskrat Falls Review, *Manitoba Hydro*
2 *International: Report on Two Generation Expansion Alternatives for the Island*
3 *Interconnected Electrical System*, January 2012, page 11.

4 “Design Loading Criteria – Nalcor has selected a 1:50-year
5 reliability return period (basis for design loading criteria)
6 for the HVdc transmission line, which is inconsistent with
7 the recommended 1:500-year reliability return period
8 outlined in the International Standard CEI/IEC 60826:2003
9 with Canadian deviations in CSA Standard CAN/CSA-C22.3
10 No. 60826:06, for this class of transmission line without an
11 alternate supply.”

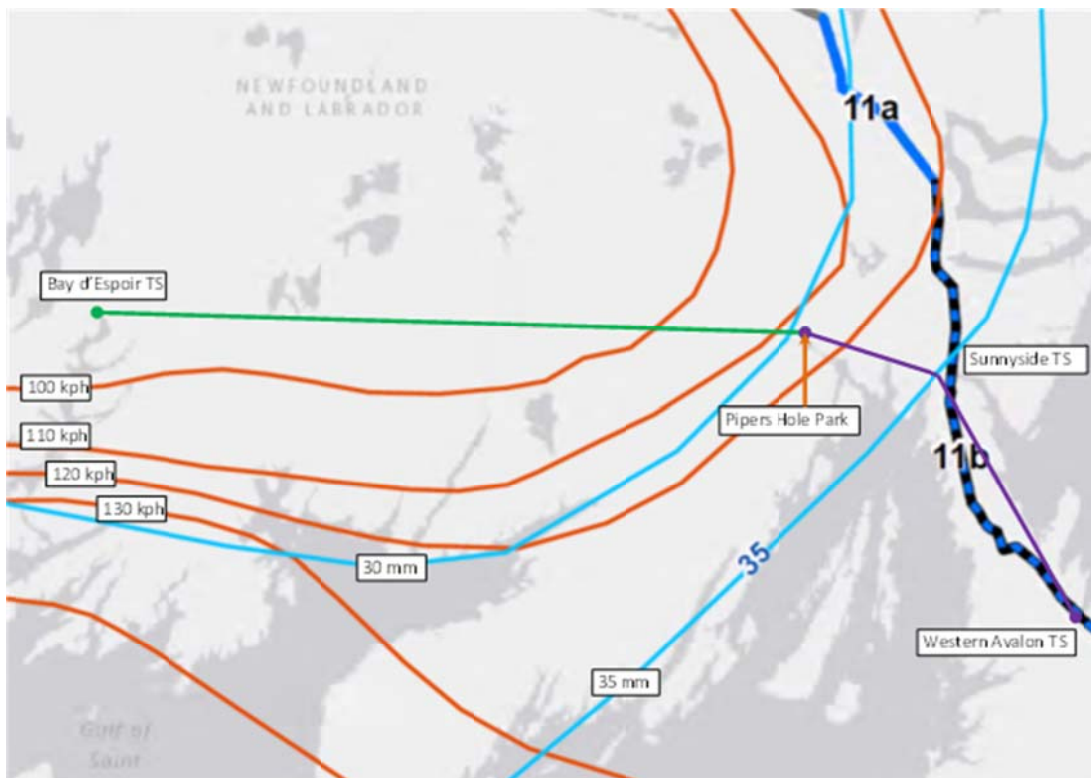
12 Please confirm the return period of climatic loads used in the design of the
13 proposed 230kV transmission line from Bay d’Espoir to Western Avalon and provide
14 all the detailed ice and wind weather cases as well as suspension tower load cases,
15 including the mathematical calculations supporting them.

16
17
18 A. The new transmission line (TL267) between Bay d’Espoir and Western Avalon
19 terminal stations will generally follow the same route as the existing TL202 and
20 TL206 from Bay d’Espoir to Sunnyside and the existing TL 203 from Sunnyside to
21 Western Avalon. This line will be one of three 230 kV lines along this corridor. The
22 line is currently planned to be constructed to Hydro’s standard design criteria, as
23 shown below:

24

Zone	Ice (Glaze)	Wind	Combined Wind/Ice
Bay d’Espoir to Piper’s Hole	50 mm	100 km/hr	60 km/hr / 25 mm
Piper’s Hole to Western Avalon	75 mm	130 km/hr	60 km/hr / 45 mm

The follow map shows the CSA reference wind and ice loadings for the TL267 route:



The CSA reference wind and ice loads for TL267 are as follows:

Zone	Ice (Glaze)	Wind
Bay d'Espoir to Piper's Hole	30 mm	105 km/hr
Piper's Hole to Western Avalon	37.5 mm	125 km/hr

Given the criteria outlined in CAN/CSA 22.3 No. 60826:2010, this 230 kV line would be expected to be designed to a 150-year climatic return period.

After application of the applicable height and spatial factors for ice, as discussed in Hydro's response to NP-NLH-004, the corresponding structure CSA loadings are:

Zone	NLH Ice Design Criteria	CSA 50-yr Structure	CSA 150-yr Structure
Bay d'Espoir to Piper's Hole	50 mm	45 mm	54 mm
Piper's Hole to Western Avalon	75 mm	56 mm	68 mm

Zone	NLH Wind Design Criteria	CSA 50-yr Wind	CSA 150-yr Wind
Bay d'Espoir to Piper's Hole	100 km/hr	105 km/hr	116 km/hr
Piper's Hole to Western Avalon	130 km/hr	125 km/hr	138 km/hr

During detailed design, the as-designed capability of the line will be compared to the CSA 150-year loadings, along with the proposed methodology outlined in IEC 60826 for combined ice and wind loading. If additional structures and costs are required to accommodate these loadings after structure locations are confirmed, appropriate capital budget submissions will be made for the Board's consideration.

This response is intended to address the request for additional detail in relation to the construction of TL267, the third 230 kV transmission line from Bay d'Espoir to Western Avalon (the "Project"). Construction of this line was approved by the Board in Order No. P.U. 53(2014), issued in December 2014. At the time of filing of Hydro's original response to NP-NLH-005, detailed engineering design had not yet

1 commenced; therefore the focus of the response was on providing the
2 meteorological loads which are used as the basis for detailed engineering design.

3
4 Hydro appreciates that issues relating to reliability associated with the construction
5 of TL267 arise from the following:

- 6 a) Meteorological design criteria used as inputs into the design;
- 7 b) Engineering design;
- 8 c) Material procurement;
- 9 d) Construction;
- 10 e) Quality assurance; and
- 11 f) Maintenance and asset management.

12
13 In the case of the Labrador-Island Transmission Link, engineering design has been
14 completed, including tower design, prototype assembly and full-scale testing, and
15 materials have been ordered for the line. As a result, a high level of detail is
16 available and has been presented in Hydro's response to NP-NLH-004.

17
18 This level of detail was not available at the time of filing because of the early stage
19 of the Project, and in particular, additional detail for the response to NP-NLH-005
20 was not available one month after approval of the Project. The initial response to
21 NP-NLH-005 included the information available at the time – the meteorological
22 loads to be used as design inputs.

23
24 As of the date of filing of this revised response (NP-NLH-005 (Revision 1, June 3-
25 15)), engineering design is progressing and additional detail is available as follows:

- 26 a) Structure load cases have been calculated for tower design. These cases
27 have been attached as NP-NLH-005 Attachment 1 (Revision 1).
- 28 b) Sag charts have been developed with the following criteria:

- i. 400 m Ruling Span from Bay d’Espoir terminal station 2 to Pipers Hole Park;
- ii. 300 m Ruling Span from Pipers Hole Park to Western Avalon Station;
- iii. 804 kcmil AACSR conductor, ultimate tensile strength (UTS) 284 kN;
- iv. 19 mm Overhead Ground Wire, UTS 259 kN; and
- v. 20.6 mm Optical Ground Wire, UTS 278 kN.

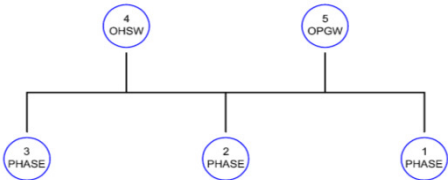
These have been included in NP-NLH-018 Attachment 1 (Revision 1).

Tower designs are currently in progress, and preliminary structure stick models and tower spotting are scheduled to be complete for material take-off by August 2015.

Tower packages, including the provision of detailing which will be undertaken by the successful tower manufacturer, will be tendered in August 2015.

The award of the tower detailing and manufacturing contract is scheduled for October 2015.

Tower detailing, prototype manufacture and full-scale testing will be complete in July 2016, at which time the detailed analysis as performed for Hydro's response to NP-NLH-004 can then be undertaken.

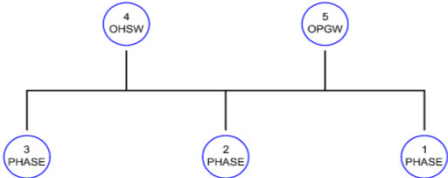


Tower type A Loading

Tower type A Loading				WIND ON CABLES	WIND ON STRUCTURE AND CABLES		ICE ON STRUCTURE AND CABLES		POINTS OF LOADING ATTACHMENT														
									C1			C2			C3			OPGW			OSHW		
CASE #	LOAD CASE	TEMP. (°C)	STRENGTH FACTOR	TRANS. WIND (Pa)	TRANS. WIND (Pa)	LONG. WIND (Pa)	ICE THICKNESS (mm)	ICE DENSITY (N/m³)	V (kN)	T (kN)	L (kN)	V (kN)	T (kN)	L (kN)	V (kN)	T (kN)	L (kN)	V (kN)	T (kN)	L (kN)	V (kN)	T (kN)	L (kN)
1	LC01 Max Wind,L NA+ Z10 Angle 0	-20	0.90	971	3500	0	0	0	12.0	12.5	0.0	12.0	12.5	0.0	12.0	12.5	0.0	8.2	8.8	0.0	8.5	8.2	0.0
2	LC02 Max Wind,L NA- Z10 Angle 0	-20	0.90	-971	-3500	0	0	0	12.0	-12.5	0.0	12.0	-12.5	0.0	12.0	-12.5	0.0	8.2	-8.8	0.0	8.5	-8.2	0.0
3	LC03 Max Wind 45°,L BI+ Z10 Angle 0	-20	0.90	687	2480	2472	0	0	12.0	6.3	0.0	12.0	6.3	0.0	12.0	6.3	0.0	8.2	4.4	0.0	8.5	4.1	0.0
4	LC04 Max Wind 45°,L BI- Z10 Angle 0	-20	0.90	-687	-2480	-2472	0	0	12.0	-6.3	0.0	12.0	-6.3	0.0	12.0	-6.3	0.0	8.2	-4.4	0.0	8.5	-4.1	0.0
5	LC05 Max Wind,L,L BI+ Z10 Angle 0	-20	0.90	0	10	3496	0	0	12.0	0.0	0.0	12.0	0.0	0.0	12.0	0.0	0.0	8.2	0.0	0.0	8.5	0.0	0.0
6	LC06 Max Wind,L,L BI- Z10 Angle 0	-20	0.90	0	-10	-3496	0	0	12.0	0.0	0.0	12.0	0.0	0.0	12.0	0.0	0.0	8.2	0.0	0.0	8.5	0.0	0.0
7	LC07 Max ice,L NA+ Z10 Angle 0	-5	0.90	0	0	0	50	8825	66.2	0.0	0.0	66.2	0.0	0.0	66.2	0.0	0.0	57.1	0.0	0.0	56.4	0.0	0.0
8	LC08 Wind+ice,L NA+ Z10 Angle 0	-5	0.90	300	600	0	25	8825	30.5	10.5	0.0	30.5	10.5	0.0	30.5	10.5	0.0	24.0	9.3	0.0	23.8	9.1	0.0
9	LC09 Wind+ice,L NA- Z10 Angle 0	-5	0.90	-300	-600	0	25	8825	30.5	-10.5	0.0	30.5	-10.5	0.0	30.5	-10.5	0.0	24.0	-9.3	0.0	23.8	-9.1	0.0
10	LC10 Tie Down 1+2+3+4+5,I NA+ Z10 Angle 0	-30	0.50	45	170	0	0	0	24.0	2.8	1.5	24.0	2.8	1.5	24.0	2.8	1.5	16.0	2.1	1.1	16.0	2.1	1.1
11	LC11 Tie Down 1+5,I NA+ Z10 Angle 0	-30	0.50	45	170	0	0	0	12.0	0.6	0.0	12.0	0.6	0.0	24.0	2.8	1.5	16.0	2.1	1.1	8.5	0.4	0.0
12	LC12 Tie Down 3+4,I NA+ Z10 Angle 0	-30	0.50	45	170	0	0	0	24.0	2.8	1.5	12.0	0.6	0.0	12.0	0.6	0.0	8.2	0.4	0.0	16.0	2.1	1.1
13	LC13 Maintenance,I NA+ Z10 Angle 0	-30	0.50	45	170	0	0	0	16.0	0.6	0.0	16.0	0.6	0.0	16.0	0.6	0.0	12.2	0.4	0.0	12.5	0.4	0.0
14	LC14 Maintenance,I NA- Z10 Angle 0	-30	0.50	-45	-170	0	0	0	16.0	-0.6	0.0	16.0	-0.6	0.0	16.0	-0.6	0.0	12.2	-0.4	0.0	12.5	-0.4	0.0
15	LC15 BR 1,C NA+ Z10 Angle 0	0	0.90	0	0	0	0	0	6.6	0.0	39.3	12.0	0.0	0.0	12.0	0.0	0.0	8.2	0.0	0.0	8.5	0.0	0.0
16	LC16 BR 2,C NA+ Z10 Angle 0	0	0.90	0	0	0	0	0	12.0	0.0	0.0	6.6	0.0	39.3	12.0	0.0	0.0	8.2	0.0	0.0	8.5	0.0	0.0
17	LC17 BR 3,C NA+ Z10 Angle 0	0	0.90	0	0	0	0	0	12.0	0.0	0.0	12.0	0.0	0.0	6.6	0.0	39.3	8.2	0.0	0.0	8.5	0.0	0.0
18	LC18 BR 4,C NA+ Z10 Angle 0	0	0.90	0	0	0	0	0	12.0	0.0	0.0	12.0	0.0	0.0	12.0	0.0	0.0	8.2	0.0	0.0	4.3	0.0	32.4
19	LC19 BR 5,C NA+ Z10 Angle 0	0	0.90	0	0	0	0	0	12.0	0.0	0.0	12.0	0.0	0.0	12.0	0.0	0.0	4.2	0.0	29.4	8.5	0.0	0.0
20	LC20 BR 1 D,,C NA+ Z10 Angle 0	0	1.00	0	0	0	0	0	6.6	0.0	59.0	12.0	0.0	0.0	12.0	0.0	0.0	8.2	0.0	0.0	8.5	0.0	0.0
21	LC21 BR 2 D,,C NA+ Z10 Angle 0	0	1.00	0	0	0	0	0	12.0	0.0	0.0	6.6	0.0	59.0	12.0	0.0	0.0	8.2	0.0	0.0	8.5	0.0	0.0
22	LC22 BR 3 D,,C NA+ Z10 Angle 0	0	1.00	0	0	0	0	0	12.0	0.0	0.0	12.0	0.0	0.0	6.6	0.0	59.0	8.2	0.0	0.0	8.5	0.0	0.0
23	LC23 BR 4 D,,C NA+ Z10 Angle 0	0	1.00	0	0	0	0	0	12.0	0.0	0.0	12.0	0.0	0.0	12.0	0.0	0.0	8.2	0.0	0.0	4.3	0.0	48.7
24	LC24 BR 5 D,,C NA+ Z10 Angle 0	0	1.00	0	0	0	0	0	12.0	0.0	0.0	12.0	0.0	0.0	12.0	0.0	0.0	4.2	0.0	44.1	8.5	0.0	0.0
25	LC25 UBL 1,,L NA+ Z10 Angle 0	-5	0.90	0	0	0	50	8825	54.4	0.0	43.9	66.2	0.0	0.0	66.2	0.0	0.0	57.1	0.0	0.0	56.4	0.0	0.0
26	LC26 UBL 2,,L NA+ Z10 Angle 0	-5	0.90	0	0	0	50	8825	66.2	0.0	0.0	54.4	0.0	43.9	66.2	0.0	0.0	57.1	0.0	0.0	56.4	0.0	0.0
27	LC27 UBL 3,,L NA+ Z10 Angle 0	-5	0.90	0	0	0	50	8825	66.2	0.0	0.0	66.2	0.0	0.0	54.4	0.0	43.9	57.1	0.0	0.0	56.4	0.0	0.0
28	LC28 UBL 4,,L NA+ Z10 Angle 0	-5	0.90	0	0	0	50	8825	66.2	0.0	0.0	66.2	0.0	0.0	66.2	0.0	0.0	57.1	0.0	0.0	45.6	0.0	39.9
29	LC29 UBL 5,,L NA+ Z10 Angle 0	-5	0.90	0	0	0	50	8825	66.2	0.0	0.0	66.2	0.0	0.0	66.2	0.0	0.0	46.2	0.0	40.6	56.4	0.0	0.0
30	LC30 EDT,C NA+ Z10 Angle 0	0	1.00	0	0	0	0	0	12.0	0.0	0.0	12.0	0.0	0.0	12.0	0.0	0.0	8.2	0.0	0.0	8.5	0.0	0.0
31	LC31 Cold,I NA+ Z10 Angle 0	-15	1.00	0	0	0	0	0	12.0	0.0	0.0	12.0	0.0	0.0	12.0	0.0	0.0	8.2	0.0	0.0	8.5	0.0	0.0
32	LC32 Max Wind,L NA+ Z10 Angle 1	-20	0.90	971	3500	0	0	0	12.0	13.5	0.0	12.0	13.5	0.0	12.0	13.5	0.0	8.2	9.6	0.0	8.5	8.9	0.0
33	LC33 Max Wind,L NA- Z10 Angle 1	-20	0.90	-971	-3500	0	0	0	12.0	-11.5	0.0	12.0	-11.5	0.0	12.0	-11.5	0.0	8.2	-8.1	0.0	8.5	-7.4	0.0
34	LC34 Max Wind 45°,L BI+ Z10 Angle 1	-20	0.90	687	2480	2472	0	0	12.0	7.1	-0.4	12.0	7.1	-0.4	12.0	7.1	-0.4	8.2	5.0	-0.3	8.5	4.7	-0.2
35	LC35 Max Wind 45°,L BI- Z10 Angle 1	-20	0.90	-687	-2480	-2472	0	0	12.0	-5.5	-0.4	12.0	-5.5	-0.4	12.0	-5.5	-0.4	8.2	-3.8	-0.3	8.5	-3.5	-0.2
36	LC36 Max Wind,L,L BI+ Z10 Angle 1	-20	0.90	0	10	3496	0	0	12.0	0.7	0.0	12.0	0.7	0.0	12.0	0.7	0.0	8.2	0.5	0.0	8.5	0.6	0.0
37	LC37 Max Wind,L,L BI- Z10 Angle 1	-20	0.90	0	-10	-3496	0	0	12.0	0.7	0.0	12.0	0.7	0.0	12.0	0.7	0.0	8.2	0.5	0.0	8.5	0.6	0.0
38	LC38 Max ice,L NA+ Z10 Angle 1	-5	0.90	0	0	0	50	8825	66.2	2.7	0.0	66.2	2.7	0.0	66.2	2.7	0.0	57.1	2.3	0.0	56.4	2.3	0.0
39	LC39 Wind+ice,L NA+ Z10 Angle 1	-5	0.90	300	600	0	25	8825	30.5	12.0	0.0	30.5	12.0	0.0	30.5	12.0	0.0	24.0	10.6	0.0	23.8	10.4	0.0
40	LC40 Wind+ice,L NA- Z10 Angle 1	-5	0.90	-300	-600	0	25	8825	30.5	-8.9	0.0	30.5	-8.9	0.0	30.5	-8.9	0.0	24.0	-8.0	0.0	23.8	-7.8	0.0
41	LC41 Tie Down 1+2+3+4+5,I NA+ Z10 Angle 1	-30	0.50	45	170	0	0	0	24.0	2.8	1.5	24.0	2.8	1.5	24.0	2.8	1.5	16.0	2.1	1.1	16.0	2.1	1.1
42	LC42 Tie Down 1+5,I NA+ Z10 Angle 1	-30	0.50	45	170	0	0	0	12.0	0.6	0.0	12.0	0.6	0.0	24.0	2.8	1.5	16.0	2.1	1.1	8.5	0.4	0.0
43	LC43 Tie Down 3+4,I NA+ Z10 Angle 1	-30	0.50	45	170	0	0	0	24.0	2.8	1.5	12.0	0.6	0.0	12.0	0.6	0.0	8.2	0.4	0.0	16.0	2.1	1.1
44	LC44 Maintenance,I NA+ Z10 Angle 1	-30	0.50	45	170	0	0	0	16.0	1.4	0.0	16.0	1.4	0.0	16.0	1.4	0.0	12.2	1.0	0.0	12.5	1.0	0.0
45	LC45 Maintenance,I NA- Z10 Angle 1	-30	0.50	-45	-170	0	0	0	16.0	0.2	0.0	16.0	0.2	0.0	16.0	0.2	0.0	12.2	0.2	0.0	12.5	0.2	0.0

46	LC46 BR 1,C NA+ Z10 Angle 1	0	0.90	0	0	0	0	0	6.6	0.3	39.3	12.0	0.7	0.0	12.0	0.7	0.0	8.2	0.5	0.0	8.5	0.6	0.0
47	LC47 BR 2,C NA+ Z10 Angle 1	0	0.90	0	0	0	0	0	12.0	0.7	0.0	6.6	0.3	39.3	12.0	0.7	0.0	8.2	0.5	0.0	8.5	0.6	0.0
48	LC48 BR 3,C NA+ Z10 Angle 1	0	0.90	0	0	0	0	0	12.0	0.7	0.0	12.0	0.7	0.0	6.6	0.3	39.3	8.2	0.5	0.0	8.5	0.6	0.0
49	LC49 BR 4,C NA+ Z10 Angle 1	0	0.90	0	0	0	0	0	12.0	0.7	0.0	12.0	0.7	0.0	12.0	0.7	0.0	8.2	0.5	0.0	4.3	0.3	32.4
50	LC50 BR 5,C NA+ Z10 Angle 1	0	0.90	0	0	0	0	0	12.0	0.7	0.0	12.0	0.7	0.0	12.0	0.7	0.0	4.2	0.3	29.4	8.5	0.6	0.0
51	LC51 BR 1 D,,C NA+ Z10 Angle 1	0	1.00	0	0	0	0	0	6.6	0.5	59.0	12.0	0.7	0.0	12.0	0.7	0.0	8.2	0.5	0.0	8.5	0.6	0.0
52	LC52 BR 2 D,,C NA+ Z10 Angle 1	0	1.00	0	0	0	0	0	12.0	0.7	0.0	6.6	0.5	59.0	12.0	0.7	0.0	8.2	0.5	0.0	8.5	0.6	0.0
53	LC53 BR 3 D,,C NA+ Z10 Angle 1	0	1.00	0	0	0	0	0	12.0	0.7	0.0	12.0	0.9	0.0	6.6	0.3	59.0	8.2	0.5	0.0	8.5	0.6	0.0
54	LC54 BR 4 D,,C NA+ Z10 Angle 1	0	1.00	0	0	0	0	0	12.0	0.7	0.0	12.0	0.7	0.0	12.0	0.7	0.0	8.2	0.5	0.0	4.3	0.4	48.7
55	LC55 BR 5 D,,C NA+ Z10 Angle 1	0	1.00	0	0	0	0	0	12.0	0.7	0.0	12.0	0.7	0.0	12.0	0.7	0.0	4.2	0.4	44.1	8.5	0.6	0.0
56	LC56 UBL 1,,L NA+ Z10 Angle 1	-5	0.90	0	0	0	50	8825	54.4	2.3	43.9	66.2	2.7	0.0	66.2	2.7	0.0	57.1	2.3	0.0	56.4	2.3	0.0
57	LC57 UBL 2,,L NA+ Z10 Angle 1	-5	0.90	0	0	0	50	8825	66.2	2.7	0.0	54.4	2.3	43.9	66.2	2.7	0.0	57.1	2.3	0.0	56.4	2.3	0.0
58	LC58 UBL 3,,L NA+ Z10 Angle 1	-5	0.90	0	0	0	50	8825	66.2	2.7	0.0	66.2	2.7	0.0	54.4	2.3	43.9	57.1	2.3	0.0	56.4	2.3	0.0
59	LC59 UBL 4,,L NA+ Z10 Angle 1	-5	0.90	0	0	0	50	8825	66.2	2.7	0.0	66.2	2.7	0.0	66.2	2.7	0.0	57.1	2.3	0.0	45.6	2.0	39.9
60	LC60 UBL 5,,L NA+ Z10 Angle 1	-5	0.90	0	0	0	50	8825	66.2	2.7	0.0	66.2	2.7	0.0	66.2	2.7	0.0	46.2	2.0	40.6	56.4	2.3	0.0
61	LC61 EDT,C NA+ Z10 Angle 1	0	1.00	0	0	0	0	0	12.0	0.7	0.0	12.0	0.7	0.0	12.0	0.7	0.0	8.2	0.5	0.0	8.5	0.6	0.0
62	LC62 Cold,I NA+ Z10 Angle 1	-15	1.00	0	0	0	0	0	12.0	0.8	0.0	12.0	0.8	0.0	12.0	0.8	0.0	8.2	0.6	0.0	8.5	0.6	0.0
63	LC63 Max Wind,C NA+ Z11a Angle 0	-20	0.90	1536	5530	0	0	0	9.4	15.3	0.0	9.4	15.3	0.0	9.4	15.3	0.0	6.3	10.7	0.0	6.5	9.9	0.0
64	LC64 Max Wind,C NA- Z11a Angle 0	-20	0.90	-1536	-5530	0	0	0	9.4	-15.3	0.0	9.4	-15.3	0.0	9.4	-15.3	0.0	6.3	-10.7	0.0	6.5	-9.9	0.0
65	LC65 Max Wind 45°,C BI+ Z11a Angle 0	-20	0.90	1086	3910	3910	0	0	9.4	7.8	0.0	9.4	7.8	0.0	9.4	7.8	0.0	6.3	5.3	0.0	6.5	4.9	0.0
66	LC66 Max Wind 45°,C BI- Z11a Angle 0	-20	0.90	-1086	-3910	-3910	0	0	9.4	-7.8	0.0	9.4	-7.8	0.0	9.4	-7.8	0.0	6.3	-5.3	0.0	6.5	-4.9	0.0
67	LC67 Max Wind,L,C BI+ Z11a Angle 0	-20	0.90	0	0	5530	0	0	9.4	0.0	0.0	9.4	0.0	0.0	9.4	0.0	0.0	6.3	0.0	0.0	6.5	0.0	0.0
68	LC68 Max Wind,L,C BI- Z11a Angle 0	-20	0.90	0	0	-5530	0	0	9.4	0.0	0.0	9.4	0.0	0.0	9.4	0.0	0.0	6.3	0.0	0.0	6.5	0.0	0.0
69	LC69 Max ice,C NA+ Z11a Angle 0	-5	0.90	0	0	0	75	8825	90.9	0.0	0.0	90.9	0.0	0.0	90.9	0.0	0.0	81.8	0.0	0.0	80.8	0.0	0.0
70	LC70 Wind+ice,C NA+ Z11a Angle 0	-5	0.90	309	620	0	45	8825	44.1	12.4	0.0	44.1	12.4	0.0	44.1	12.4	0.0	37.4	11.5	0.0	36.9	11.3	0.0
71	LC71 Wind+ice,C NA- Z11a Angle 0	-5	0.90	-309	-620	0	45	8825	44.1	-12.4	0.0	44.1	-12.4	0.0	44.1	-12.4	0.0	37.4	-11.5	0.0	36.9	-11.3	0.0
72	LC72 Tie Down 1+2+3+4+5,I NA+ Z11a Angle 0	-30	0.50	45	170	0	0	0	21.6	2.5	1.4	21.6	2.5	1.4	21.6	2.5	1.4	14.9	2.0	1.0	15.1	1.9	1.0
73	LC73 Tie Down 1+5,I NA+ Z11a Angle 0	-30	0.50	45	170	0	0	0	9.4	0.4	0.0	9.4	0.4	0.0	21.6	2.5	1.1	6.3	0.3	0.0	15.1	1.9	1.0
74	LC74 Tie Down 3+4,I NA+ Z11a Angle 0	-30	0.50	45	170	0	0	0	21.6	2.5	1.4	9.4	0.4	0.0	9.4	0.4	0.0	14.9	2.0	1.0	6.5	0.3	0.0
75	LC75 Maintenance,I NA+ Z11a Angle 0	-30	0.50	45	170	0	0	0	13.4	0.4	0.0	13.4	0.4	0.0	13.4	0.4	0.0	10.3	0.3	0.0	10.5	0.3	0.0
76	LC76 Maintenance,I NA- Z11a Angle 0	-30	0.50	-45	-170	0	0	0	13.4	-0.4	0.0	13.4	-0.4	0.0	13.4	-0.4	0.0	10.3	-0.3	0.0	10.5	-0.3	0.0
77	LC77 BR 1,C NA+ Z11a Angle 0	0	0.90	0	0	0	0	0	5.3	0.0	34.6	9.4	0.0	0.0	9.4	0.0	0.0	6.3	0.0	0.0	6.5	0.0	0.0
78	LC78 BR 2,C NA+ Z11a Angle 0	0	0.90	0	0	0	0	0	9.4	0.0	0.0	5.3	0.0	34.6	9.4	0.0	0.0	6.3	0.0	0.0	6.5	0.0	0.0
79	LC79 BR 3,C NA+ Z11a Angle 0	0	0.90	0	0	0	0	0	9.4	0.0	0.0	9.4	0.0	0.0	5.3	0.0	34.6	6.3	0.0	0.0	6.5	0.0	0.0
80	LC80 BR 4,C NA+ Z11a Angle 0	0	0.90	0	0	0	0	0	9.4	0.0	0.0	9.4	0.0	0.0	9.4	0.0	0.0	3.2	0.0	25.8	6.5	0.0	0.0
81	LC81 BR 5,C NA+ Z11a Angle 0	0	0.90	0	0	0	0	0	9.4	0.0	0.0	9.4	0.0	0.0	9.4	0.0	0.0	6.3	0.0	0.0	3.3	0.0	28.8
82	LC82 BR 1 D,,C NA+ Z11a Angle 0	0	1.00	0	0	0	0	0	5.3	0.0	51.9	9.4	0.0	0.0	9.4	0.0	0.0	6.3	0.0	0.0	6.5	0.0	0.0
83	LC83 BR 2 D,,C NA+ Z11a Angle 0	0	1.00	0	0	0	0	0	9.4	0.0	0.0	5.3	0.0	51.9	9.4	0.0	0.0	6.3	0.0	0.0	6.5	0.0	0.0
84	LC84 BR 3 D,,C NA+ Z11a Angle 0	0	1.00	0	0	0	0	0	9.4	0.0	0.0	9.4	0.0	0.0	5.3	0.0	51.9	6.3	0.0	0.0	6.5	0.0	0.0
85	LC85 BR 4 D,,C NA+ Z11a Angle 0	0	1.00	0	0	0	0	0	9.4	0.0	0.0	9.4	0.0	0.0	9.4	0.0	0.0	3.2	0.0	38.8	6.5	0.0	0.0
86	LC86 BR 5 D,,C NA+ Z11a Angle 0	0	1.00	0	0	0	0	0	9.4	0.0	0.0	9.4	0.0	0.0	9.4	0.0	0.0	6.3	0.0	0.0	3.3	0.0	43.3
87	LC87 UBL 1,,L NA+ Z11a Angle 0	-5	0.90	0	0	0	75	8825	78.0	0.0	42.8	90.9	0.0	0.0	90.9	0.0	0.0	81.8	0.0	0.0	80.8	0.0	0.0
88	LC88 UBL 2,,L NA+ Z11a Angle 0	-5	0.90	0	0	0	75	8825	90.9	0.0	0.0	78.0	0.0	42.8	90.9	0.0	0.0	81.8	0.0	0.0	80.8	0.0	0.0
89	LC89 UBL 3,,L NA+ Z11a Angle 0	-5	0.90	0	0	0	75	8825	90.9	0.0	0.0	90.9	0.0	0.0	78.0	0.0	42.8	81.8	0.0	0.0	80.8	0.0	0.0
90	LC90 UBL 4,,L NA+ Z11a Angle 0	-5	0.90	0	0	0	75	8825	90.9	0.0	0.0	90.9	0.0	0.0	90.9	0.0	0.0	69.5	0.0	39.9	80.8	0.0	0.0
91	LC91 UBL 5,,L NA+ Z11a Angle 0	-5	0.90	0	0	0	75	8825	90.9	0.0	0.0	90.9	0.0	0.0	90.9	0.0	0.0	81.8	0.0	0.0	68.6	0.0	39.2
92	LC92 EDT,C NA+ Z11a Angle 0	0	1.00	0	0	0	0	0	9.4	0.0	0.0	9.4	0.0	0.0	9.4	0.0	0.0	6.3	0.0	0.0	6.5	0.0	0.0
93	LC93 Cold,I NA+ Z11a Angle 0	-15	1.00	0	0	0	0	0	9.4	0.0	0.0	9.4	0.0	0.0	9.4	0.0	0.0	6.3	0.0	0.0	6.5	0.0	0.0

94	LC94 Max Wind,C NA+ Z11a Angle 1	-20	0.90	1536	5530	0	0	0	9.4	16.5	0.0	9.4	16.5	0.0	9.4	16.5	0.0	6.3	11.6	0.0	6.5	10.8	0.0
95	LC95 Max Wind,C NA- Z11a Angle 1	-20	0.90	-1536	-5530	0	0	0	9.4	-14.1	0.0	9.4	-14.1	0.0	9.4	-14.1	0.0	6.3	-9.8	0.0	6.5	-9.0	0.0
96	LC96 Max Wind 45°,C BI+ Z11a Angle 1	-20	0.90	1086	3910	3910	0	0	9.4	8.6	-0.6	9.4	8.6	-0.6	9.4	8.6	-0.6	6.3	6.0	-0.5	6.5	5.6	-0.4
97	LC97 Max Wind 45°,C BI- Z11a Angle 1	-20	0.90	-1086	-3910	-3910	0	0	9.4	-6.9	-0.6	9.4	-6.9	-0.6	9.4	-6.9	-0.6	6.3	-4.7	-0.5	6.5	-4.3	-0.4
98	LC98 Max Wind,L,C BI+ Z11a Angle 1	-20	0.90	0	0	5530	0	0	9.4	0.7	0.0	9.4	0.7	0.0	9.4	0.7	0.0	6.3	0.5	0.0	6.5	0.5	0.0
99	LC99 Max Wind,L,C BI- Z11a Angle 1	-20	0.90	0	0	-5530	0	0	9.4	0.7	0.0	9.4	0.7	0.0	9.4	0.7	0.0	6.3	0.5	0.0	6.5	0.5	0.0
100	LC100 Max ice,C NA+ Z11a Angle 1	-5	0.90	0	0	0	75	8825	90.9	3.4	0.0	90.9	3.4	0.0	90.9	3.4	0.0	81.8	3.0	0.0	80.8	3.0	0.0
101	LC101 Wind+ice,C NA+ Z11a Angle 1	-5	0.90	309	620	0	45	8825	44.1	14.6	0.0	44.1	14.6	0.0	44.1	14.6	0.0	37.4	13.4	0.0	36.9	13.2	0.0
102	LC102 Wind+ice,C NA- Z11a Angle 1	-5	0.90	-309	-620	0	45	8825	44.1	-10.3	0.0	44.1	-10.3	0.0	44.1	-10.3	0.0	37.4	-9.6	0.0	36.9	-9.5	0.0
103	LC103 Tie Down 1+2+3+4+5,I NA+ Z11a Angle 1	-30	0.50	45	170	0	0	0	21.6	2.5	1.4	21.6	2.5	1.4	21.6	2.5	1.4	14.9	2.0	1.0	15.1	1.9	1.0
104	LC104 Tie Down 1+5,I NA+ Z11a Angle 1	-30	0.50	45	170	0	0	0	9.4	0.4	0.0	9.4	0.4	0.0	21.6	2.5	1.1	6.3	0.3	0.0	15.1	1.9	1.0
105	LC105 Tie Down 3+4,I NA+ Z11a Angle 1	-30	0.50	45	170	0	0	0	21.6	2.5	1.4	9.4	0.4	0.0	9.4	0.4	0.0	14.9	2.0	1.0	6.5	0.3	0.0
106	LC106 Maintenance,I NA+ Z11a Angle 1	-30	0.50	45	170	0	0	0	13.4	1.2	0.0	13.4	1.2	0.0	13.4	1.2	0.0	10.3	0.9	0.0	10.5	0.8	0.0
107	LC107 Maintenance,I NA- Z11a Angle 1	-30	0.50	-45	-170	0	0	0	13.4	0.3	0.0	13.4	0.3	0.0	13.4	0.3	0.0	10.3	0.2	0.0	10.5	0.3	0.0
108	LC108 BR 1,C NA+ Z11a Angle 1	0	0.90	0	0	0	0	0	5.3	0.3	34.6	9.4	0.6	0.0	9.4	0.6	0.0	6.3	0.5	0.0	6.5	0.5	0.0
109	LC109 BR 2,C NA+ Z11a Angle 1	0	0.90	0	0	0	0	0	9.4	0.6	0.0	5.3	0.3	34.6	9.4	0.6	0.0	6.3	0.5	0.0	6.5	0.5	0.0
110	LC110 BR 3,C NA+ Z11a Angle 1	0	0.90	0	0	0	0	0	9.4	0.6	0.0	9.4	0.6	0.0	5.3	0.3	34.6	6.3	0.5	0.0	6.5	0.5	0.0
111	LC111 BR 4,C NA+ Z11a Angle 1	0	0.90	0	0	0	0	0	9.4	0.6	0.0	9.4	0.6	0.0	9.4	0.6	0.0	3.2	0.2	25.8	6.5	0.5	0.0
112	LC112 BR 5,C NA+ Z11a Angle 1	0	0.90	0	0	0	0	0	9.4	0.6	0.0	9.4	0.6	0.0	9.4	0.6	0.0	6.3	0.5	0.0	3.3	0.3	28.8
113	LC113 BR 1 D,,C NA+ Z11a Angle 1	0	1.00	0	0	0	0	0	5.3	0.5	51.9	9.4	0.6	0.0	9.4	0.6	0.0	6.3	0.5	0.0	6.5	0.5	0.0
114	LC114 BR 2 D,,C NA+ Z11a Angle 1	0	1.00	0	0	0	0	0	9.4	0.6	0.0	5.3	0.5	51.9	9.4	0.6	0.0	6.3	0.5	0.0	6.5	0.5	0.0
115	LC115 BR 3 D,,C NA+ Z11a Angle 1	0	1.00	0	0	0	0	0	9.4	0.6	0.0	9.4	0.8	0.0	5.3	0.3	51.9	6.3	0.5	0.0	6.5	0.5	0.0
116	LC116 BR 4 D,,C NA+ Z11a Angle 1	0	1.00	0	0	0	0	0	9.4	0.6	0.0	9.4	0.6	0.0	9.4	0.6	0.0	3.2	0.3	38.8	6.5	0.5	0.0
117	LC117 BR 5 D,,C NA+ Z11a Angle 1	0	1.00	0	0	0	0	0	9.4	0.6	0.0	9.4	0.6	0.0	9.4	0.6	0.0	6.3	0.5	0.0	3.3	0.4	43.3
118	LC118 UBL 1,,L NA+ Z11a Angle 1	-5	0.90	0	0	0	75	8825	78.0	3.0	42.8	90.9	3.4	0.0	90.9	3.4	0.0	81.8	3.0	0.0	80.8	3.0	0.0
119	LC119 UBL 2,,L NA+ Z11a Angle 1	-5	0.90	0	0	0	75	8825	90.9	3.4	0.0	78.0	3.0	42.8	90.9	3.4	0.0	81.8	3.0	0.0	80.8	3.0	0.0
120	LC120 UBL 3,,L NA+ Z11a Angle 1	-5	0.90	0	0	0	75	8825	90.9	3.4	0.0	90.9	3.4	0.0	78.0	3.0	42.8	81.8	3.0	0.0	80.8	3.0	0.0
121	LC121 UBL 4,,L NA+ Z11a Angle 1	-5	0.90	0	0	0	75	8825	90.9	3.4	0.0	90.9	3.4	0.0	90.9	3.4	0.0	69.5	2.7	39.9	80.8	3.0	0.0
122	LC122 UBL 5,,L NA+ Z11a Angle 1	-5	0.90	0	0	0	75	8825	90.9	3.4	0.0	90.9	3.4	0.0	90.9	3.4	0.0	81.8	3.0	0.0	68.6	2.6	39.2
123	LC123 EDT,C NA+ Z11a Angle 1	0	1.00	0	0	0	0	0	9.4	0.6	0.0	9.4	0.6	0.0	9.4	0.6	0.0	6.3	0.5	0.0	6.5	0.5	0.0
124	LC124 Cold,I NA+ Z11a Angle 1	-15	1.00	0	0	0	0	0	9.4	0.7	0.0	9.4	0.7	0.0	9.4	0.7	0.0	6.3	0.5	0.0	6.5	0.5	0.0



Tower type B Loading

Tower type B Loading				WIND ON CABLES	WIND ON STRUCTURE AND CABLES		ICE ON STRUCTURE AND CABLES		POINTS OF LOADING ATTACHMENT														
									C1			C2			C3			OPGW			OSHW		
CASE #	LOAD CASE	TEMP. (°C)	STRENGTH FACTOR	TRANS. WIND (Pa)	TRANS. WIND (Pa)	LONG. WIND (Pa)	ICE THICKNESS (mm)	ICE DENSITY (N/m³)	V (kN)	T (kN)	L (kN)	V (kN)	T (kN)	L (kN)	V (kN)	T (kN)	L (kN)	V (kN)	T (kN)	L (kN)	V (kN)	T (kN)	L (kN)
1	LC01 Max Wind,C NA+, Z11a Angle 6 RS290	-20	0.90	1536	5530	0	0	0	9.0	21.6	0.0	9.0	21.6	0.0	9.0	21.6	0.0	6.0	15.4	0.0	6.2	14.6	0.0
2	LC02 Max Wind,C NA-, Z11a Angle 6 RS290	-20	0.90	-1536	-5530	0	0	0	9.0	-7.5	0.0	9.0	-7.5	0.0	9.0	-7.5	0.0	6.0	-4.9	0.0	6.2	-4.2	0.0
3	LC03 Max Wind 45°, C BI+, Z11a Angle 6 RS290	-20	0.90	1086	3910	3910	0	0	9.0	12.5	-3.6	9.0	12.5	-3.6	9.0	12.5	-3.6	6.0	8.8	-2.7	6.2	8.6	-2.3
4	LC04 Max Wind 45°, C BI-, Z11a Angle 6 RS290	-20	0.90	-1086	-3910	-3910	0	0	9.0	-2.3	-3.7	9.0	-2.3	-3.7	9.0	-2.3	-3.7	6.0	-1.3	-2.7	6.2	-0.8	-2.3
5	LC05 Max Wind, L, C BI+, Z11a Angle 6 RS290	-20	0.90	0	10	5530	0	0	9.0	4.0	0.0	9.0	4.0	0.0	9.0	4.0	0.0	6.0	2.9	0.0	6.2	3.2	0.0
6	LC06 Max Wind, L, C BI-, Z11a Angle 6 RS290	-20	0.90	0	-10	-5530	0	0	9.0	4.0	0.0	9.0	4.0	0.0	9.0	4.0	0.0	6.0	2.9	0.0	6.2	3.2	0.0
7	LC07 Max ice, C NA+, Z11a Angle 6 RS290	-5	0.90	0	0	0	75	8825	86.7	19.9	0.0	86.7	19.9	0.0	86.7	19.9	0.0	77.9	17.8	0.0	77.0	17.5	0.0
8	LC08 Wind+ice, C NA+, Z11a Angle 6 RS290	-5	0.90	309	620	0	45	8825	42.1	24.5	0.0	42.1	24.5	0.0	42.1	24.5	0.0	35.6	21.9	0.0	35.1	21.7	0.0
9	LC09 Wind+ice, C NA-, Z11a Angle 6 RS290	-5	0.90	-309	-620	0	45	8825	42.1	0.9	0.0	42.1	0.9	0.0	42.1	0.9	0.0	35.6	0.0	0.0	35.1	0.2	0.0
10	LC10 Full TD, I NA+, Z11a Angle 6 RS290	-30	0.50	45	170	0	0	0	21.6	2.5	1.4	21.6	2.5	1.4	21.6	2.5	1.4	15.1	1.9	1.0	14.9	2.0	1.0
11	LC11 Right TD, I NA+, Z11a Angle 6 RS290	-30	0.50	45	170	0	0	0	9.0	4.9	0.0	9.0	4.9	0.0	21.6	2.5	1.4	6.0	3.6	0.0	14.9	2.0	1.0
12	LC12 Left TD, I NA+, Z11a Angle 6 RS290	-30	0.50	45	170	0	0	0	4.5	2.4	42.3	9.0	4.9	0.0	9.0	4.9	0.0	15.1	1.9	1.0	6.2	3.6	0.0
13	LC13 Maintenance, I NA+, Z11a Angle 6 RS290	-30	0.50	45	170	0	0	0	13.0	4.9	0.0	13.0	4.9	0.0	13.0	4.9	0.0	10.0	3.6	0.0	10.2	3.6	0.0
14	LC14 Maintenance, I NA-, Z11a Angle 6 RS290	-30	0.50	-45	-170	0	0	0	13.0	4.0	0.0	13.0	4.0	0.0	13.0	4.0	0.0	10.0	3.0	0.0	10.2	3.1	0.0
15	LC15 BR 1, C NA+, Z11a Angle 6 RS290	0	0.90	0	0	0	0	0	5.1	1.8	34.3	9.0	3.6	0.0	9.0	3.6	0.0	6.0	2.7	0.0	6.2	3.0	0.0
16	LC16 BR 2, C NA+, Z11a Angle 6 RS290	0	0.90	0	0	0	0	0	9.0	3.6	0.0	5.1	1.8	34.3	9.0	3.6	0.0	6.0	2.7	0.0	6.2	3.0	0.0
17	LC17 BR 3, C NA+, Z11a Angle 6 RS290	0	0.90	0	0	0	0	0	9.0	3.6	0.0	9.0	3.6	0.0	5.1	1.8	34.3	6.0	2.7	0.0	6.2	3.0	0.0
18	LC18 BR 4, C NA+, Z11a Angle 6 RS290	0	0.90	0	0	0	0	0	9.0	3.6	0.0	9.0	3.6	0.0	9.0	3.6	0.0	3.0	1.3	25.6	6.2	3.0	0.0
19	LC19 BR 5, C NA+, Z11a Angle 6 RS290	0	0.90	0	0	0	0	0	9.0	3.6	0.0	9.0	3.6	0.0	9.0	3.6	0.0	6.0	2.7	0.0	3.2	1.5	28.7
20	LC20 BR 1 D, C NA+, Z11a Angle 6 RS290	0	1.00	0	0	0	0	0	5.1	2.7	51.4	9.0	3.6	0.0	9.0	3.6	0.0	6.0	2.7	0.0	6.2	3.0	0.0
21	LC21 BR 2 D, C NA+, Z11a Angle 6 RS290	0	1.00	0	0	0	0	0	9.0	3.6	0.0	5.1	2.7	51.4	9.0	3.6	0.0	6.0	2.7	0.0	6.2	3.0	0.0
22	LC22 BR 3 D, C NA+, Z11a Angle 6 RS290	0	1.00	0	0	0	0	0	9.0	3.6	0.0	9.0	3.6	0.0	5.1	2.7	51.4	6.0	2.7	0.0	6.2	3.0	0.0
23	LC23 BR 4 D, C NA+, Z11a Angle 6 RS290	0	1.00	0	0	0	0	0	9.0	3.6	0.0	9.0	3.6	0.0	9.0	3.6	0.0	3.0	2.0	38.4	6.2	3.0	0.0
24	LC24 BR 5 D, C NA+, Z11a Angle 6 RS290	0	1.00	0	0	0	0	0	9.0	3.6	0.0	9.0	3.6	0.0	9.0	3.6	0.0	6.0	2.7	0.0	3.2	2.3	43.0
25	LC25 UBL 1, L NA+, Z11a Angle 6 RS290	-5	0.90	0	0	0	75	8825	74.4	17.7	41.4	86.7	19.9	0.0	86.7	19.9	0.0	77.9	17.8	0.0	77.0	17.5	0.0
26	LC26 UBL 2, L NA+, Z11a Angle 6 RS290	-5	0.90	0	0	0	75	8825	86.7	19.9	0.0	74.4	17.7	41.4	86.7	19.9	0.0	77.9	17.8	0.0	77.0	17.5	0.0
27	LC27 UBL 3, L NA+, Z11a Angle 6 RS290	-5	0.90	0	0	0	75	8825	86.7	19.9	0.0	86.7	19.9	0.0	74.4	17.7	41.4	77.9	17.8	0.0	77.0	17.5	0.0
28	LC28 UBL 4, L NA+, Z11a Angle 6 RS290	-5	0.90	0	0	0	75	8825	86.7	19.9	0.0	86.7	19.9	0.0	86.7	19.9	0.0	66.2	15.8	38.5	77.0	17.5	0.0
29	LC29 UBL 5, L NA+, Z11a Angle 6 RS290	-5	0.90	0	0	0	75	8825	86.7	19.9	0.0	86.7	19.9	0.0	86.7	19.9	0.0	77.9	17.8	0.0	65.4	15.5	37.9
30	LC30 EDT, C NA+, Z11a Angle 6 RS290	0	1.00	0	0	0	0	0	9.0	3.6	0.0	9.0	3.6	0.0	9.0	3.6	0.0	6.0	2.7	0.0	6.2	3.0	0.0
31	LC30 UPLIFT EDT, C NA+, Z11a Angle 6 RS290	0	1.00	0	0	0	0	0	9.0	3.6	0.0	9.0	3.6	0.0	9.0	3.6	0.0	6.0	2.7	0.0	6.2	3.0	0.0
32	LC31 Cold, I NA+, Z11a Angle 6 RS290	-15	1.00	0	0	0	0	0	9.0	4.1	0.0	9.0	4.1	0.0	9.0	4.1	0.0	6.0	3.1	0.0	6.2	3.2	0.0
33	LC32 Max Wind, C NA+, Z11a Angle 0	-20	0.90	1536	5530	0	0	0	10.3	17.2	0.0	10.3	17.2	0.0	10.3	17.2	0.0	6.9	12.1	0.0	7.2	11.2	0.0
34	LC33 Max Wind, C NA-, Z11a Angle 0	-20	0.90	-1536	-5530	0	0	0	10.3	-17.2	0.0	10.3	-17.2	0.0	10.3	-17.2	0.0	6.9	-12.1	0.0	7.2	-11.2	0.0
35	LC34 Max Wind 45°, C BI+, Z11a Angle 0	-20	0.90	1086	3910	3910	0	0	10.3	8.7	0.0	10.3	8.7	0.0	10.3	8.7	0.0	6.9	6.0	0.0	7.2	5.6	0.0
36	LC35 Max Wind 45°, C BI-, Z11a Angle 0	-20	0.90	-1086	-3910	-3910	0	0	10.3	-8.7	0.0	10.3	-8.7	0.0	10.3	-8.7	0.0	6.9	-6.0	0.0	7.2	-5.6	0.0
37	LC36 Max Wind, L, C BI+, Z11a Angle 0	-20	0.90	0	0	5530	0	0	10.3	0.0	0.0	10.3	0.0	0.0	10.3	0.0	0.0	6.9	0.0	0.0	7.2	0.0	0.0
38	LC37 Max Wind, L, C BI-, Z11a Angle 0	-20	0.90	0	0	-5530	0	0	10.3	0.0	0.0	10.3	0.0	0.0	10.3	0.0	0.0	6.9	0.0	0.0	7.2	0.0	0.0
39	LC38 Max ice, C NA+, Z11a Angle 0	-5	0.90	0	0	0	75	8825	100.4	0.0	0.0	100.4	0.0	0.0	100.4	0.0	0.0	90.4	0.0	0.0	89.3	0.0	0.0
40	LC39 Wind+ice, C NA+, Z11a Angle 0	-5	0.90	309	620	0	45	8825	48.6	14.0	0.0	48.6	14.0	0.0	48.6	14.0	0.0	41.3	13.0	0.0	40.7	12.8	0.0
41	LC40 Wind+ice, C NA-, Z11a Angle 0	-5	0.90	-309	-620	0	45	8825	48.6	-14.0	0.0	48.6	-14.0	0.0	48.6	-14.0	0.0	41.3	-13.0	0.0	40.7	-12.8	0.0
42	LC41 Maintenance, I NA+, Z11a Angle 0	-30	0.50	45	170	0	0	0	14.3	0.5	0.0	14.3	0.5	0.0	14.3	0.5	0.0	10.9	0.4	0.0	11.2	0.3	0.0
43	LC42 Maintenance, I NA-, Z11a Angle 0	-30	0.50	-45	-170	0	0	0	14.3	-0.5	0.0	14.3	-0.5	0.0	14.3	-0.5	0.0	10.9	-0.4	0.0	11.2	-0.3	0.0
44	LC43 BR 1, C NA+, Z11a Angle 0	0	0.90	0	0	0	0	0	5.8	0.0	34.6	10.3	0.0	0.0	10.3	0.0	0.0	6.9	0.0	0.0	7.2	0.0	0.0
45	LC44 BR 2, C NA+, Z11a Angle 0	0	0.90	0	0	0	0	0	10.3	0.0	0.0	5.8	0.0	34.6	10.3	0.0	0.0	6.9	0.0	0.0	7.2	0.0	0.0

46	LC45 BR 3, C NA+, Z11a Angle 0	0	0.90	0	0	0	0	0	10.3	0.0	0.0	10.3	0.0	0.0	5.8	0.0	34.6	6.9	0.0	0.0	7.2	0.0	0.0
47	LC46 BR 4, C NA+, Z11a Angle 0	0	0.90	0	0	0	0	0	10.3	0.0	0.0	10.3	0.0	0.0	10.3	0.0	0.0	3.5	0.0	25.8	7.2	0.0	0.0
48	LC47 BR 5, C NA+, Z11a Angle 0	0	0.90	0	0	0	0	0	10.3	0.0	0.0	10.3	0.0	0.0	10.3	0.0	0.0	6.9	0.0	0.0	3.6	0.0	28.8
49	LC48 BR 1 D, C NA+, Z11a Angle 0	0	1.00	0	0	0	0	0	5.8	0.0	51.9	10.3	0.0	0.0	10.3	0.0	0.0	6.9	0.0	0.0	7.2	0.0	0.0
50	LC49 BR 2 D, C NA+, Z11a Angle 0	0	1.00	0	0	0	0	0	10.3	0.0	0.0	5.8	0.0	51.9	10.3	0.0	0.0	6.9	0.0	0.0	7.2	0.0	0.0
51	LC50 BR 3 D, C NA+, Z11a Angle 0	0	1.00	0	0	0	0	0	10.3	0.0	0.0	10.3	0.0	0.0	5.8	0.0	51.9	6.9	0.0	0.0	7.2	0.0	0.0
52	LC51 BR 4 D, C NA+, Z11a Angle 0	0	1.00	0	0	0	0	0	10.3	0.0	0.0	10.3	0.0	0.0	10.3	0.0	0.0	3.5	0.0	38.8	7.2	0.0	0.0
53	LC52 BR 5 D,, C NA+, Z11a Angle 0	0	1.00	0	0	0	0	0	10.3	0.0	0.0	10.3	0.0	0.0	10.3	0.0	0.0	6.9	0.0	0.0	3.6	0.0	43.3
54	LC53 UBL 1,, L NA+, Z11a Angle 0	-5	0.90	0	0	0	75	8825	86.1	0.0	42.8	100.4	0.0	0.0	100.4	0.0	0.0	90.4	0.0	0.0	89.3	0.0	0.0
55	LC54 UBL 2, L NA+, Z11a Angle 0	-5	0.90	0	0	0	75	8825	100.4	0.0	0.0	86.1	0.0	42.8	100.4	0.0	0.0	90.4	0.0	0.0	89.3	0.0	0.0
56	LC55 UBL 3, L NA+, Z11a Angle 0	-5	0.90	0	0	0	75	8825	100.4	0.0	0.0	100.4	0.0	0.0	86.1	0.0	42.8	90.4	0.0	0.0	89.3	0.0	0.0
57	LC56 UBL 4, L NA+, Z11a Angle 0	-5	0.90	0	0	0	75	8825	100.4	0.0	0.0	100.4	0.0	0.0	100.4	0.0	0.0	76.8	0.0	39.9	89.3	0.0	0.0
58	LC57 UBL 5, L NA+, Z11a Angle 0	-5	0.90	0	0	0	75	8825	100.4	0.0	0.0	100.4	0.0	0.0	100.4	0.0	0.0	90.4	0.0	0.0	75.9	0.0	39.2
59	LC58 EDT, C NA+, Z11a Angle 0	0	1.00	0	0	0	0	0	10.3	0.0	0.0	10.3	0.0	0.0	10.3	0.0	0.0	6.9	0.0	0.0	7.2	0.0	0.0
60	LC58 UPLIFT EDT, C NA+, Z11a Angle 0	0	1.00	0	0	0	0	0	10.3	0.0	0.0	10.3	0.0	0.0	10.3	0.0	0.0	6.9	0.0	0.0	7.2	0.0	0.0
61	LC59 Cold, I NA+, Z11a Angle 0	-15	1.00	0	0	0	0	0	10.3	0.0	0.0	10.3	0.0	0.0	10.3	0.0	0.0	6.9	0.0	0.0	7.2	0.0	0.0
62	LC60 Max Wind, L NA+, Z10 Angle 6	-20	0.90	971	3500	0	0	0	12.0	18.6	0.0	12.0	18.6	0.0	12.0	18.6	0.0	8.2	13.4	0.0	8.5	12.7	0.0
63	LC61 Max Wind, L NA-, Z10 Angle 6	-20	0.90	-971	-3500	0	0	0	12.0	-6.4	0.0	12.0	-6.4	0.0	12.0	-6.4	0.0	8.2	-4.2	0.0	8.5	-3.6	0.0
64	LC62 Max Wind 45°, L BI+, Z10 Angle 6	-20	0.90	687	2480	2472	0	0	12.0	11.1	-2.2	12.0	11.1	-2.2	12.0	11.1	-2.2	8.2	8.0	-1.6	8.5	7.8	-1.4
65	LC63 Max Wind 45°, L BI-, Z10 Angle 6	-20	0.90	-687	-2480	-2472	0	0	12.0	-1.5	-2.2	12.0	-1.5	-2.2	12.0	-1.5	-2.2	8.2	-0.8	-1.6	8.5	-0.4	-1.4
66	LC64 Max Wind, L, L BI+, Z10 Angle 6	-20	0.90	0	0	3496	0	0	12.0	4.2	0.0	12.0	4.2	0.0	12.0	4.2	0.0	8.2	3.1	0.0	8.5	3.3	0.0
67	LC65 Max Wind, L, L BI-, Z10 Angle 6	-20	0.90	0	0	-3496	0	0	12.0	4.2	0.0	12.0	4.2	0.0	12.0	4.2	0.0	8.2	3.1	0.0	8.5	3.3	0.0
68	LC66 Max ice, L NA+, Z10 Angle 6	-5	0.90	0	0	0	50	8825	66.2	16.2	0.0	66.2	16.2	0.0	66.2	16.2	0.0	57.1	14.0	0.0	56.4	13.9	0.0
69	LC67 Wind+ice, L NA+, Z10 Angle 6	-5	0.90	300	600	0	25	8825	30.5	19.8	0.0	30.5	19.8	0.0	30.5	19.8	0.0	24.0	17.1	0.0	23.8	16.9	0.0
70	LC68 Wind+ice, L NA-, Z10 Angle 6	-5	0.90	-300	-600	0	25	8825	30.5	-1.1	0.0	30.5	-1.1	0.0	30.5	-1.1	0.0	24.0	-1.5	0.0	23.8	-1.3	0.0
71	LC69 Full TD, I NA+, Z10 Angle 6	-30	0.50	45	170	0	0	0	23.4	6.7	1.5	23.4	6.7	1.5	23.4	6.7	1.5	16.0	2.1	1.1	16.0	2.1	1.1
72	LC70 Right TD, I NA+, Z10 Angle 6	-30	0.50	45	170	0	0	0	10.3	0.5	0.0	12.0	5.4	0.0	23.4	6.7	1.5	16.0	2.1	1.1	8.5	4.1	0.0
73	LC71 Left TD, I NA+, Z10 Angle 6	-30	0.50	45	170	0	0	0	23.4	6.7	1.5	10.3	0.5	0.0	12.0	5.4	0.0	8.2	4.0	0.0	16.0	2.1	1.1
74	LC72 Maintenance, I NA+, Z10 Angle 6	-30	0.50	45	170	0	0	0	16.0	5.4	0.0	16.0	5.4	0.0	16.0	5.4	0.0	12.2	4.0	0.0	12.5	4.1	0.0
75	LC73 Maintenance, I NA-, Z10 Angle 6	-30	0.50	-45	-170	0	0	0	16.0	4.2	0.0	16.0	4.2	0.0	16.0	4.2	0.0	12.2	3.2	0.0	12.5	3.3	0.0
76	LC74 BR 1, C NA+, Z10 Angle 6	0	0.90	0	0	0	0	0	6.6	2.1	39.3	12.0	4.1	0.0	12.0	4.1	0.0	8.2	3.1	0.0	8.5	3.4	0.0
77	LC75 BR 2, C NA+, Z10 Angle 6	0	0.90	0	0	0	0	0	12.0	4.1	0.0	6.6	2.1	39.3	12.0	4.1	0.0	8.2	3.1	0.0	8.5	3.4	0.0
78	LC76 BR 3, C NA+, Z10 Angle 6	0	0.90	0	0	0	0	0	12.0	4.1	0.0	12.0	4.1	0.0	6.6	2.1	39.3	8.2	3.1	0.0	8.5	3.4	0.0
79	LC77 BR 4, C NA+, Z10 Angle 6	0	0.90	0	0	0	0	0	12.0	4.1	0.0	12.0	4.1	0.0	12.0	4.1	0.0	8.2	3.1	0.0	4.3	1.7	32.4
80	LC78 BR 5, C NA+, Z10 Angle 6	0	0.90	0	0	0	0	0	12.0	4.1	0.0	12.0	4.1	0.0	12.0	4.1	0.0	4.2	1.5	29.4	8.5	3.4	0.0
81	LC79 BR 1 D, C NA+, Z10 Angle 6	0	1.00	0	0	0	0	0	6.6	3.1	58.9	12.0	4.1	0.0	12.0	4.1	0.0	8.2	3.1	0.0	8.5	3.4	0.0
82	LC80 BR 2 D, C NA+, Z10 Angle 6	0	1.00	0	0	0	0	0	12.0	4.1	0.0	6.6	3.1	58.9	12.0	4.1	0.0	8.2	3.1	0.0	8.5	3.4	0.0
83	LC81 BR 3 D, C NA+, Z10 Angle 6	0	1.00	0	0	0	0	0	12.0	4.1	0.0	12.0	4.1	0.0	6.6	3.1	58.9	8.2	3.1	0.0	8.5	3.4	0.0
84	LC82 BR 4 D, C NA+, Z10 Angle 6	0	1.00	0	0	0	0	0	12.0	4.1	0.0	12.0	4.1	0.0	12.0	4.1	0.0	8.2	3.1	0.0	4.3	2.5	48.6
85	LC83 BR 5 D, C NA+, Z10 Angle 6	0	1.00	0	0	0	0	0	12.0	4.1	0.0	12.0	4.1	0.0	12.0	4.1	0.0	4.2	2.3	44.0	8.5	3.4	0.0
86	LC84 UBL 1, L NA+, Z10 Angle 6	-5	0.90	0	0	0	50	8825	54.4	13.9	43.9	66.2	16.2	0.0	66.2	16.2	0.0	57.1	14.0	0.0	56.4	13.9	0.0
87	LC85 UBL 2, L NA+, Z10 Angle 6	-5	0.90	0	0	0	50	8825	66.2	16.2	0.0	54.4	13.9	43.9	66.2	16.2	0.0	57.1	14.0	0.0	56.4	13.9	0.0
88	LC86 UBL 3,,L NA+, Z10 Angle 6	-5	0.90	0	0	0	50	8825	66.2	16.2	0.0	66.2	16.2	0.0	54.4	13.9	43.9	57.1	14.0	0.0	56.4	13.9	0.0
89	LC87 UBL 4, L NA+, Z10 Angle 6	-5	0.90	0	0	0	50	8825	66.2	16.2	0.0	66.2	16.2	0.0	66.2	16.2	0.0	57.1	14.0	0.0	45.6	11.8	39.8
90	LC88 UBL 5, L NA+, Z10 Angle 6	-5	0.90	0	0	0	50	8825	66.2	16.2	0.0	66.2	16.2	0.0	66.2	16.2	0.0	46.2	11.9	40.5	56.4	13.9	0.0
91	LC89 EDT, C NA+, Z10 Angle 6	0	0.50	0	0	0	0	0	12.0	4.1	0.0	12.0	4.1	0.0	12.0	4.1	0.0	8.2	3.1	0.0	8.5	3.4	0.0
92	LC89 UPLIFT EDT, C NA+, Z10 Angle 6	0	0.50	0	0	0	0	0	12.0	4.1	0.0	12.0	4.1	0.0	12.0	4.1	0.0	8.2	3.1	0.0	8.5	3.4	0.0
93	LC90 Cold, I NA+, Z10 Angle 6	-15	0.50	0	0	0	0	0	12.0	4.5	0.0	12.0	4.5	0.0	12.0	4.5	0.0	8.2	3.4	0.0	8.5	3.5	0.0

94	LC91 Max Wind, L NA+, Z10 Angle 0	-20	0.90	971	3500	0	0	0	13.3	14.1	0.0	13.3	14.1	0.0	13.3	14.1	0.0	9.2	10.0	0.0	9.5	9.3	0.0
95	LC92 Max Wind, L NA-, Z10 Angle 0	-20	0.90	-971	-3500	0	0	0	13.3	-14.1	0.0	13.3	-14.1	0.0	13.3	-14.1	0.0	9.2	-10.0	0.0	9.5	-9.3	0.0
96	LC93 Max Wind 45°, L BI+, Z10 Angle 0	-20	0.90	687	2480	2472	0	0	13.3	7.2	0.0	13.3	7.2	0.0	13.3	7.2	0.0	9.2	5.0	0.0	9.5	4.6	0.0
97	LC94 Max Wind 45°, L BI-, Z10 Angle 0	-20	0.90	-687	-2480	-2472	0	0	13.3	-7.2	0.0	13.3	-7.2	0.0	13.3	-7.2	0.0	9.2	-5.0	0.0	9.5	-4.6	0.0
98	LC95 Max Wind, L, L BI+, Z10 Angle 0	-20	0.90	0	0	3496	0	0	13.3	0.0	0.0	13.3	0.0	0.0	13.3	0.0	0.0	9.2	0.0	0.0	9.5	0.0	0.0
99	LC96 Max Wind, L, L BI-, Z10 Angle 0	-20	0.90	0	0	-3496	0	0	13.3	0.0	0.0	13.3	0.0	0.0	13.3	0.0	0.0	9.2	0.0	0.0	9.5	0.0	0.0
100	LC97 Max ice, L NA+, Z10 Angle 0	-5	0.90	0	0	0	50	8825	74.0	0.0	0.0	74.0	0.0	0.0	74.0	0.0	0.0	64.0	0.0	0.0	63.1	0.0	0.0
101	LC98 Wind+ice, L NA+, Z10 Angle 0	-5	0.90	300	600	0	25	8825	34.0	11.9	0.0	34.0	11.9	0.0	34.0	11.9	0.0	26.9	10.6	0.0	26.6	10.4	0.0
102	LC99 Wind+ice, L NA-, Z10 Angle 0	-5	0.90	-300	-600	0	25	8825	34.0	-11.9	0.0	34.0	-11.9	0.0	34.0	-11.9	0.0	26.9	-10.6	0.0	26.6	-10.4	0.0
103	LC100 Maintenance, I NA+, Z10 Angle 0	-30	0.50	45	170	0	0	0	17.3	0.7	0.0	17.3	0.7	0.0	17.3	0.7	0.0	13.2	0.5	0.0	13.5	0.4	0.0
104	LC101 Maintenance, I NA-, Z10 Angle 0	-30	0.50	-45	-170	0	0	0	17.3	-0.7	0.0	17.3	-0.7	0.0	17.3	-0.7	0.0	13.2	-0.5	0.0	13.5	-0.4	0.0
105	LC102 BR 1, C NA+, Z10 Angle 0	0	0.90	0	0	0	0	0	7.3	0.0	39.3	13.3	0.0	0.0	13.3	0.0	0.0	9.2	0.0	0.0	9.5	0.0	0.0
106	LC103 BR 2, C NA+, Z10 Angle 0	0	0.90	0	0	0	0	0	13.3	0.0	0.0	7.3	0.0	39.3	13.3	0.0	0.0	9.2	0.0	0.0	9.5	0.0	0.0
107	LC104 BR 3, C NA+, Z10 Angle 0	0	0.90	0	0	0	0	0	13.3	0.0	0.0	13.3	0.0	0.0	7.3	0.0	39.3	9.2	0.0	0.0	9.5	0.0	0.0
108	LC105 BR 4, C NA+, Z10 Angle 0	0	0.90	0	0	0	0	0	13.3	0.0	0.0	13.3	0.0	0.0	13.3	0.0	0.0	9.2	0.0	0.0	4.8	0.0	32.4
109	LC106 BR 5, C NA+, Z10 Angle 0	0	0.90	0	0	0	0	0	13.3	0.0	0.0	13.3	0.0	0.0	13.3	0.0	0.0	4.6	0.0	29.4	9.5	0.0	0.0
110	LC107 BR 1 D, C NA+, Z10 Angle 0	0	1.00	0	0	0	0	0	7.3	0.0	59.0	13.3	0.0	0.0	13.3	0.0	0.0	9.2	0.0	0.0	9.5	0.0	0.0
111	LC108 BR 2 D, C NA+, Z10 Angle 0	0	1.00	0	0	0	0	0	13.3	0.0	0.0	7.3	0.0	59.0	13.3	0.0	0.0	9.2	0.0	0.0	9.5	0.0	0.0
112	LC109 BR 3 D, C NA+, Z10 Angle 0	0	1.00	0	0	0	0	0	13.3	0.0	0.0	13.3	0.0	0.0	7.3	0.0	59.0	9.2	0.0	0.0	9.5	0.0	0.0
113	LC110 BR 4 D, C NA+, Z10 Angle 0	0	1.00	0	0	0	0	0	13.3	0.0	0.0	13.3	0.0	0.0	13.3	0.0	0.0	9.2	0.0	0.0	4.8	0.0	48.7
114	LC111 BR 5 D, C NA+, Z10 Angle 0	0	1.00	0	0	0	0	0	13.3	0.0	0.0	13.3	0.0	0.0	13.3	0.0	0.0	4.6	0.0	44.1	9.5	0.0	0.0
115	LC112 UBL 1, L NA+, Z10 Angle 0	-5	0.90	0	0	0	50	8825	60.8	0.0	43.9	74.0	0.0	0.0	74.0	0.0	0.0	64.0	0.0	0.0	63.1	0.0	0.0
116	LC113 UBL 2, L NA+, Z10 Angle 0	-5	0.90	0	0	0	50	8825	74.0	0.0	0.0	60.8	0.0	43.9	74.0	0.0	0.0	64.0	0.0	0.0	63.1	0.0	0.0
117	LC114 UBL 3, L NA+, Z10 Angle 0	-5	0.90	0	0	0	50	8825	74.0	0.0	0.0	74.0	0.0	0.0	60.8	0.0	43.9	64.0	0.0	0.0	63.1	0.0	0.0
118	LC115 UBL 4, L NA+, Z10 Angle 0	-5	0.90	0	0	0	50	8825	74.0	0.0	0.0	74.0	0.0	0.0	74.0	0.0	0.0	64.0	0.0	0.0	51.0	0.0	39.9
119	LC116 UBL 5, L NA+, Z10 Angle 0	-5	0.90	0	0	0	50	8825	74.0	0.0	0.0	74.0	0.0	0.0	74.0	0.0	0.0	51.7	0.0	40.6	63.1	0.0	0.0
120	LC117 EDT, C NA+, Z10 Angle 0	0	0.50	0	0	0	0	0	13.3	0.0	0.0	13.3	0.0	0.0	13.3	0.0	0.0	9.2	0.0	0.0	9.5	0.0	0.0
121	LC117 UPLIFT EDT, C NA+, Z10 Angle 0	0	0.50	0	0	0	0	0	13.3	0.0	0.0	13.3	0.0	0.0	13.3	0.0	0.0	9.2	0.0	0.0	9.5	0.0	0.0
122	LC118 Cold, I NA+, Z10 Angle 0	-15	0.50	0	0	0	0	0	13.3	0.0	0.0	13.3	0.0	0.0	13.3	0.0	0.0	9.2	0.0	0.0	9.5	0.0	0.0

TOWER C LOADING				WIND ON STRUCTURE AND CABLES		ICE ON STRUCTURE AND CABLES		Phase-1-Ahead (1a)			Phase-1-back (1b)			Phase-2-Ahead (2a)			Phase-2-back (2b)			Phase-3-Ahead (3a)			Phase-3-back (3b)			OPGW-Ahead (5a)			OPGW-Back (5b)			OHSW-Ahead (4a)			OHSW-Back (4b)			
CASE #	LOAD CASE	TEMP. (°C)	STRENGTH FACTOR	WIND ON CABLES (Pa)	TRANS. WIND (Pa)	LONG. WIND (Pa)	ICE THICKNESS (mm)	ICE DENSITY (N/m³)	V1 (kN)	T1 (kN)	L1 (kN)	V2 (kN)	T2 (kN)	L2 (kN)	V3 (kN)	T3 (kN)	L3 (kN)	V4 (kN)	T4 (kN)	L4 (kN)	V5 (kN)	T5 (kN)	L5 (kN)	V1 (kN)	T1 (kN)	L1 (kN)	V2 (kN)	T2 (kN)	L2 (kN)	V3 (kN)	T3 (kN)	L3 (kN)	V4 (kN)	T4 (kN)	L4 (kN)	V5 (kN)	T5 (kN)	L5 (kN)
1	LC1 Max Wind Z11 Angle 30,L NA+	-20	0.80	1536	5530	0	0	0	8.0	23.7	56.6	8.0	23.7	-56.6	8.0	23.7	56.6	8.0	23.7	-56.6	8.0	23.7	56.6	8.0	23.7	-56.6	4.2	16.4	41.0	4.2	16.4	-41.0	4.1	17.4	43.3	4.1	17.4	-43.3
2	LC2 Max Wind Z11 Angle 30,L NA-	-20	0.80	-1536	-5530	0	0	0	8.0	7.6	60.3	8.0	7.6	-60.3	8.0	7.6	60.3	8.0	7.6	-60.3	8.0	7.6	60.3	8.0	7.6	-60.3	4.2	6.3	43.5	4.2	6.3	-43.5	4.1	6.5	46.0	4.1	6.5	-46.0
3	LC3 Max Wind 45° Z11 Angle 30,L BI+	-20	0.80	1086	3910	3910	0	0	8.0	11.5	33.2	8.0	19.2	-47.8	8.0	11.5	33.2	8.0	19.2	-47.8	8.0	11.5	33.2	8.0	19.2	-47.8	4.2	8.3	25.4	4.2	13.4	-35.1	4.1	8.4	25.4	4.1	14.2	-36.6
4	LC4 Max Wind 45° Z11 Angle 30,L BI-	-20	0.80	-1086	-3910	-3910	0	0	8.0	6.5	34.2	8.0	7.2	-50.6	8.0	6.5	34.2	8.0	7.2	-50.6	8.0	6.5	34.2	8.0	7.2	-50.6	4.2	5.5	26.0	4.2	5.9	-37.0	4.1	5.4	26.1	4.1	6.0	-38.7
5	LC5 Max Wind,L Z11 Angle 30,L BI+	-20	0.80	0	0	5530	0	0	8.0	7.9	31.4	8.0	8.8	-31.1	8.0	7.9	31.4	8.0	8.8	-31.1	8.0	7.9	31.4	8.0	8.8	-31.1	4.2	6.1	24.1	4.2	6.8	-23.9	4.1	6.0	23.8	4.1	6.7	-23.6
6	LC6 Max Wind,L Z11 Angle 30,L BI-	-20	0.80	0	0	-5530	0	0	8.0	8.8	31.1	8.0	7.9	-31.4	8.0	8.8	31.1	8.0	7.9	-31.4	8.0	8.8	31.1	8.0	7.9	-31.4	4.2	6.8	23.9	4.2	6.1	-24.1	4.1	6.7	23.6	4.1	6.0	-23.8
7	LC7 Max ice Z11 Angle 30,L NA+	-5	0.80	0	0	0	75	8825	60.4	50.5	188.3	60.4	50.5	-188.3	60.4	50.5	188.3	60.4	50.5	-188.3	60.4	50.5	188.3	60.4	50.5	-188.3	51.9	44.4	165.5	51.9	44.4	-165.5	52.6	45.2	168.7	52.6	45.2	-168.7
8	LC8 Wind+ice Z11 Angle 30,L NA+	-5	0.80	309	618	0	45	8825	30.3	36.5	111.7	30.3	36.5	-111.7	30.3	36.5	111.7	30.3	36.5	-111.7	30.3	36.5	111.7	30.3	36.5	-111.7	23.7	31.6	95.7	23.7	31.6	-95.7	24.0	32.2	97.6	24.0	32.2	-97.6
9	LC9 Wind+ice Z11 Angle 30,L NA-	-5	0.80	-309	-618	0	45	8825	30.3	24.2	114.8	30.3	24.2	-114.8	30.3	24.2	114.8	30.3	24.2	-114.8	30.3	24.2	114.8	30.3	24.2	-114.8	23.7	20.5	98.6	23.7	20.5	-98.6	24.0	21.0	100.6	24.0	21.0	-100.6
10	LC10 Full Tie Down Z11 Angle 30,I NA+	-30	0.50	45	162	0	0	0	22.2	23.3	1.7	0.0	0.0	0.0	22.2	23.3	1.7	0.0	0.0	0.0	22.2	23.3	1.7	0.0	0.0	0.0	16.0	17.8	1.3	0.0	0.0	0.0	15.6	17.2	1.2	0.0	0.0	0.0
11	LC11 Left Side Tie Down Z11 Angle 30,I NA+	-30	0.50	45	162	0	0	0	22.2	23.3	1.7	0.0	0.0	0.0	8.0	11.1	-40.6	8.0	11.1	40.6	8.0	11.1	-40.6	8.0	11.1	40.6	16.0	17.8	1.3	0.0	0.0	0.0	4.1	8.2	-30.0	4.1	8.2	30.0
12	LC12 Right Side Tie Down Z11 Angle 30,I NA+	-30	0.50	45	162	0	0	0	8.0	11.1	-40.6	8.0	11.1	40.6	8.0	11.1	-40.6	8.0	11.1	40.6	22.2	23.3	1.7	0.0	0.0	0.0	4.2	8.4	-30.9	4.2	8.4	30.9	15.6	17.2	1.2	0.0	0.0	0.0
13	LC13 Maintenance Z11 Angle 30,I NA+	-30	0.50	45	162	0	0	0	10.0	11.1	40.6	10.0	11.1	-40.6	10.0	11.1	40.6	10.0	11.1	-40.6	10.0	11.1	40.6	10.0	11.1	-40.6	6.2	8.4	30.9	6.2	8.4	-30.9	6.1	8.2	30.0	6.1	8.2	-30.0
14	LC14 Maintenance Z11 Angle 30,I NA-	-30	0.50	-45	-162	0	0	0	10.0	10.7	40.7	10.0	10.7	-40.7	10.0	10.7	40.7	10.0	10.7	-40.7	10.0	10.7	40.7	10.0	10.7	-40.7	6.2	8.1	31.0	6.2	8.1	-31.0	6.1	7.9	30.1	6.1	7.9	-30.1
15	LC15 BR 1 Z11 Angle 30,C NA+	0	0.80	0	0	0	0	0	2.7	0.0	0.0	8.0	8.9	-33.4	8.0	8.9	33.4	8.0	8.9	-33.4	8.0	8.9	33.4	8.0	8.9	-33.4	4.2	7.5	27.9	4.2	7.5	-27.9	4.1	6.7	25.0	4.1	6.7	-25.0
16	LC16 BR 2 Z11 Angle 30,C NA+	0	0.80	0	0	0	0	0	8.0	8.9	33.4	8.0	8.9	-33.4	2.7	0.0	0.0	8.0	8.9	-33.4	8.0	8.9	33.4	8.0	8.9	-33.4	4.2	7.5	27.9	4.2	7.5	-27.9	4.1	6.7	25.0	4.1	6.7	-25.0
17	LC17 BR 3 Z11 Angle 30,C NA+	0	0.80	0	0	0	0	0	8.0	8.9	33.4	8.0	8.9	-33.4	8.0	8.9	33.4	8.0	8.9	-33.4	2.7	0.0	0.0	8.0	8.9	-33.4	4.2	7.5	27.9	4.2	7.5	-27.9	4.1	6.7	25.0	4.1	6.7	-25.0
18	LC18 BR 4 Z11 Angle 30,C NA+	0	0.80	0	0	0	0	0	8.0	8.9	33.4	8.0	8.9	-33.4	8.0	8.9	33.4	8.0	8.9	-33.4	8.0	8.9	33.4	8.0	8.9	-33.4	4.2	7.5	27.9	4.2	7.5	-27.9	0.1	0.0	0.0	4.1	6.7	-25.0
19	LC19 BR 5 Z11 Angle 30,C NA+	0	0.80	0	0	0	0	0	8.0	8.9	33.4	8.0	8.9	-33.4	8.0	8.9	33.4	8.0	8.9	-33.4	8.0	8.9	33.4	8.0	8.9	-33.4	0.1	0.0	0.0	4.2	7.5	-27.9	4.1	6.7	25.0	4.1	6.7	-25.0
20	LC20 BR 1,5 Z11 Angle 30,C NA+	0	0.80	0	0	0	0	0	2.7	0.0	0.0	8.0	8.9	-33.4	8.0	8.9	33.4	8.0	8.9	-33.4	8.0	8.9	33.4	8.0	8.9	-33.4	0.1	0.0	0.0	4.2	7.5	-27.9	4.1	6.7	25.0	4.1	6.7	-25.0
21	LC21 BR 1,2,3 Z11 Angle 30,C NA+	0	0.80	0	0	0	0	0	2.7	0.0	0.0	8.0	8.9	-33.4																								

101	LC101 BR 1 Z11 Angle 0,C,NA+	0	0.80	0	0	0	0	0	2.7	0.0	0.0	8.0	0.0	-34.6	8.0	0.0	34.6	8.0	0.0	-34.6	8.0	0.0	34.6	8.0	0.0	-34.6	4.2	0.0	28.8	4.2	0.0	-28.8	4.1	0.0	25.8	4.1	0.0	-25.8
102	LC102 BR 2 Z11 Angle 0,C,NA+	0	0.80	0	0	0	0	0	8.0	0.0	34.6	8.0	0.0	-34.6	2.7	0.0	0.0	8.0	0.0	-34.6	8.0	0.0	34.6	8.0	0.0	-34.6	4.2	0.0	28.8	4.2	0.0	-28.8	4.1	0.0	25.8	4.1	0.0	-25.8
103	LC103 BR 3 Z11 Angle 0,C,NA+	0	0.80	0	0	0	0	0	8.0	0.0	34.6	8.0	0.0	-34.6	8.0	0.0	34.6	8.0	0.0	-34.6	2.7	0.0	0.0	8.0	0.0	-34.6	4.2	0.0	28.8	4.2	0.0	-28.8	4.1	0.0	25.8	4.1	0.0	-25.8
104	LC104 BR 4 Z11 Angle 0,C,NA+	0	0.80	0	0	0	0	0	8.0	0.0	34.6	8.0	0.0	-34.6	8.0	0.0	34.6	8.0	0.0	-34.6	8.0	0.0	34.6	8.0	0.0	-34.6	4.2	0.0	28.8	4.2	0.0	-28.8	0.1	0.0	0.0	4.1	0.0	-25.8
105	LC105 BR 5 Z11 Angle 0,C,NA+	0	0.80	0	0	0	0	0	8.0	0.0	34.6	8.0	0.0	-34.6	8.0	0.0	34.6	8.0	0.0	-34.6	8.0	0.0	34.6	8.0	0.0	-34.6	0.1	0.0	0.0	4.2	0.0	-28.8	4.1	0.0	25.8	4.1	0.0	-25.8
106	LC106 BR 1,5 Z11 Angle 0,C,NA+	0	0.80	0	0	0	0	0	2.7	0.0	0.0	8.0	0.0	-34.6	8.0	0.0	34.6	8.0	0.0	-34.6	8.0	0.0	34.6	8.0	0.0	-34.6	0.1	0.0	0.0	4.2	0.0	-28.8	4.1	0.0	25.8	4.1	0.0	-25.8
107	LC107 BR 1,2,3 Z11 Angle 0,C,NA+	0	0.80	0	0	0	0	0	2.7	0.0	0.0	8.0	0.0	-34.6	2.7	0.0	0.0	8.0	0.0	-34.6	2.7	0.0	0.0	8.0	0.0	-34.6	4.2	0.0	28.8	4.2	0.0	-28.8	4.1	0.0	25.8	4.1	0.0	-25.8
108	LC108 BR 3,4 Z11 Angle 0,C,NA+	0	0.80	0	0	0	0	0	8.0	0.0	34.6	8.0	0.0	-34.6	8.0	0.0	34.6	8.0	0.0	-34.6	2.7	0.0	0.0	8.0	0.0	-34.6	4.2	0.0	28.8	4.2	0.0	-28.8	0.1	0.0	0.0	4.1	0.0	-25.8
109	LC109 BR 4,5 Z11 Angle 0,C,NA+	0	0.80	0	0	0	0	0	8.0	0.0	34.6	8.0	0.0	-34.6	8.0	0.0	34.6	8.0	0.0	-34.6	8.0	0.0	34.6	8.0	0.0	-34.6	0.1	0.0	0.0	4.2	0.0	-28.8	0.1	0.0	0.0	4.1	0.0	-25.8
110	LC110 BR ALL Z11 Angle 0,C,NA+	0	0.80	0	0	0	0	0	2.7	0.0	0.0	8.0	0.0	-34.6	2.7	0.0	0.0	8.0	0.0	-34.6	2.7	0.0	0.0	8.0	0.0	-34.6	0.1	0.0	0.0	4.2	0.0	-28.8	0.1	0.0	0.0	4.1	0.0	-25.8
111	LC111 BR 1 D,2,3,4,5 Z11 Angle 0,C,NA+	0	1.00	0	0	0	0	0	2.7	0.0	0.0	8.0	0.0	-69.1	2.7	0.0	0.0	8.0	0.0	-34.6	2.7	0.0	0.0	8.0	0.0	-34.6	0.1	0.0	0.0	4.2	0.0	-28.8	0.1	0.0	0.0	4.1	0.0	-25.8
112	LC112 BR 2 D,1,3,4,5 Z11 Angle 0,C,NA+	0	1.00	0	0	0	0	0	2.7	0.0	0.0	8.0	0.0	-34.6	2.7	0.0	0.0	8.0	0.0	-69.1	2.7	0.0	0.0	8.0	0.0	-34.6	0.1	0.0	0.0	4.2	0.0	-28.8	0.1	0.0	0.0	4.1	0.0	-25.8
113	LC113 BR 3 D,1,2,4,5 Z11 Angle 0,C,NA+	0	1.00	0	0	0	0	0	2.7	0.0	0.0	8.0	0.0	-34.6	2.7	0.0	0.0	8.0	0.0	-34.6	2.7	0.0	0.0	8.0	0.0	-69.1	0.1	0.0	0.0	4.2	0.0	-28.8	0.1	0.0	0.0	4.1	0.0	-25.8
114	LC114 BR 4 D,1,2,3,5 Z11 Angle 0,C,NA+	0	1.00	0	0	0	0	0	2.7	0.0	0.0	8.0	0.0	-34.6	2.7	0.0	0.0	8.0	0.0	-34.6	2.7	0.0	0.0	8.0	0.0	-34.6	0.1	0.0	0.0	4.2	0.0	-57.7	0.1	0.0	0.0	4.1	0.0	-25.8
115	LC115 BR 5 D,1,2,3,4 Z11 Angle 0,C,NA+	0	1.00	0	0	0	0	0	2.7	0.0	0.0	8.0	0.0	-34.6	2.7	0.0	0.0	8.0	0.0	-34.6	2.7	0.0	0.0	8.0	0.0	-34.6	0.1	0.0	0.0	4.2	0.0	-28.8	0.1	0.0	0.0	4.1	0.0	-51.7
116	LC116 UBL 1, Z11 Angle 0,L,NA+	-5	0.80	0	0	0	75	8825	60.4	0.0	194.9	8.0	0.0	-31.0	60.4	0.0	194.9	60.4	0.0	-194.9	60.4	0.0	194.9	60.4	0.0	-194.9	51.9	0.0	171.4	51.9	0.0	-171.4	52.6	0.0	174.7	52.6	0.0	-174.7
117	LC117 UBL 2, Z11 Angle 0,L,NA+	-5	0.80	0	0	0	75	8825	60.4	0.0	194.9	60.4	0.0	-194.9	60.4	0.0	194.9	8.0	0.0	-31.0	60.4	0.0	194.9	60.4	0.0	-194.9	51.9	0.0	171.4	51.9	0.0	-171.4	52.6	0.0	174.7	52.6	0.0	-174.7
118	LC118 UBL 3, Z11 Angle 0,L,NA+	-5	0.80	0	0	0	75	8825	60.4	0.0	194.9	60.4	0.0	-194.9	60.4	0.0	194.9	60.4	0.0	-194.9	60.4	0.0	194.9	8.0	0.0	-31.0	51.9	0.0	171.4	51.9	0.0	-171.4	52.6	0.0	174.7	52.6	0.0	-174.7
119	LC119 UBL 4, Z11 Angle 0,L,NA+	-5	0.80	0	0	0	75	8825	60.4	0.0	194.9	60.4	0.0	-194.9	60.4	0.0	194.9	60.4	0.0	-194.9	60.4	0.0	194.9	60.4	0.0	-194.9	51.9	0.0	171.4	51.9	0.0	-171.4	52.6	0.0	174.7	4.1	0.0	-23.2
120	LC120 UBL 5, Z11 Angle 0,L,NA+	-5	0.80	0	0	0	75	8825	60.4	0.0	194.9	60.4	0.0	-194.9	60.4	0.0	194.9	60.4	0.0	-194.9	60.4	0.0	194.9	60.4	0.0	-194.9	51.9	0.0	171.4	4.2	0.0	-23.8	52.6	0.0	174.7	52.6	0.0	-174.7
121	LC121 UBL 1,5 Z11 Angle 0,L,NA+	-5	0.80	0	0	0	75	8825	60.4	0.0	194.9	8.0	0.0	-31.0	60.4	0.0	194.9	60.4	0.0	-194.9	60.4	0.0	194.9	60.4	0.0	-194.9	51.9	0.0	171.4	4.2	0.0	-23.8	52.6	0.0	174.7	52.6	0.0	-174.7
122	LC122 UBL 1,2,3 Z11 Angle 0,L,NA+	-5	0.80	0	0	0	75	8825	60.4	0.0	194.9	8.0	0.0	-31.0	60.4	0.0	194.9	8.0	0.0	-31.0	60.4	0.0	194.9	8.0	0.0	-31.0	51.9	0.0	171.4	51.9	0.0	-171.4	52.6	0.0	174.7	52.6	0.0	-174.7
123	LC123 UBL 3,4 Z11 Angle 0,L,NA+	-5	0.80	0	0	0	75	8825	60.4	0.0	194.9	60.4	0.0	-194.9	60.4	0.0	194.9	60.4	0.0	-194.9	60.4	0.0	194.9	8.0	0.0	-31.0	51.9	0.0	171.4	51.9	0.0	-171.4	52.6	0.0	174.7	4.1	0.0	-23.2
124	LC124 UBL 4,5 Z11 Angle 0,L,NA+	-5	0.80	0	0	0	75	8825	60.4	0.0	194.9	60.4	0.0	-194.9	60.4	0.0	194.9	60.4	0.0	-194.9	60.4	0.0	194.9	60.4	0.0	-194.9	51.9	0.0	171.4	4.2	0.0	-23.8	52.6	0.0	174.7	4.1	0.0	-23.2
125	LC125 UBL 1,2,3,4,5 Z11 Angle 0,L,NA+	-5	0.80	0	0	0	75	8825	60.4	0.0	194.9	8.0	0.0	-31.0	60.4	0.0	194.9	8.0	0.0	-31.0	60.4	0.0	194.9	8.0	0.0	-31.0	51.9	0.0	171.4	4.2	0.0	-23.8	52.6	0.0	174.7	4.1	0.0	-23.2
126	LC126 Extreme UBL 1, Z11 Angle 0,L,NA+	-5	1.00	0	0	0	75	8825	60.4	0.0	194.9	2.7	0.0	0.0	60.4	0.0	194.9	60.4	0.0	-194.9	60.4	0.0	194.9	60.4	0.0	-194.9	51.9	0.0	171.4	51.9	0.0	-171.4	52.6	0.0	174.7	52.6	0.0	-174.7
127	LC127 Extreme UBL 2, Z11 Angle 0,L,NA+	-5	1.00	0	0	0	75	8825	60.4	0.0	194.9	60.4	0.0	-194.9	60.4	0.0	194.9	2.7	0.0	0.0	60.4	0.0	194.9	60.4	0.0	-194.9	51.9	0.0	171.4	51.9	0.0	-171.4	52.6	0.0	174.7	52.6	0.0	-174.7
128	LC128 Extreme UBL 3, Z11 Angle 0,L,NA+	-5	1.00	0	0	0	75	8825	60.4	0.0	194.9	60.4	0.0	-194.9	60.4	0.0	194.9	60.4	0.0	-194.9	60.4	0.0	194.9	60.4	0.0	-194.9	51.9	0.0	171.4	51.9	0.0	-171.4	52.6	0.0	174.7	52.6	0.0	-174.7
129	LC129 Extreme UBL 4, Z11 Angle 0,L,NA+	-5	1.00	0	0	0	75	8825	60.4	0.0	194.9	60.4	0.0	-194.9	60.4	0.0	194.9	60.4	0.0	-194.9	60.4	0.0	194.9	60.4	0.0	-194.9	51.9	0.0	171.4	51.9	0.0	-171.4	52.6	0.0	174.7	0.1	0.0	0.0
130	LC130 Extreme UBL 5, Z11 Angle 0,L,NA+	-5	1.00	0	0	0	75	8825	60.4	0.0	194.9	60.4	0.0	-194.9	60.4	0.0	194.9	60.4	0.0	-194.9	60.4	0.0	194.9	60.4	0.0	-194.9	51.9	0.0	171.4	0.1	0.0	0.0	52.6	0.0	174.7	52.6	0.0	-174.7
131	LC131 EDT Z11 Angle 0,C,NA+	0	0.50	0	0	0	0	0	8.0	0.0	34.6	8.0	0.0	-34.6	8.0	0.0	34.6	8.0	0.0	-34.6	8.0	0.0	34.6	8.0	0.0	-34.6	4.2	0.0	28.8	4.2	0.0	-28.8	4.1	0.0	25.8	4.1	0.0	-25.8
132	LC132 Cold Z11 Angle 0,I,NA+	-15	0.50	0	0	0	0	0	8.0	0.0	39.0	8.0	0.0	-39.0	8.0	0.0	39.0	8.0	0.0	-39.0	8.0	0.0	39.0	8.0	0.0	-39.0	4.2	0.0	30.3	4.2	0.0	-30.3	4.1	0.0	29.2	4.1	0.0	-29.2
133	LC133 Max Wind Z11 Angle 0, MIN,L,NA+	-20	0.80	1536	5530	0	0	0	0.6	10.1	60.5	0.6	10.1	-60.5	0.6	10.1	60.5	0.6	10.1	-60.5	0.6	10.1	-60.5	0.6	10.1	-60.5	-1.6	6.5	43.7	-1.6	6.5	-43.7	-1.5	7.0	46.2	-1.5	7.0	-46.2
134	LC134 Max Wind Z11 Angle 0, MIN,L,NA+	-20	0.80	-1536	-5530	0	0	0	0.6	-10.1	60.5	0.6	-10.1	-60.5	0.6	-10.1	60.5	0.6	-10.1	-60.5	0.6	-10.1	60.5	0.6	-10.1	-60.5	-1.6	-6.5	43.7	-1.6	-6.5	-43.7	-1.5	-7.0	46.2	-1.5	-7.0	-46.2
135	LC135 Max Wind 45° Z11 Angle 0, MIN,L,Bl+	-20	0.80	1086	3910	3910	0	0	0.6	5.3	41.9	0.6	5.3	-41.9	0.6	5.3	41.9	0.6	5.3	-41.9	0.6	5.3	-41.9	0.6	5.3	-41.9	-1.6	3.3	31.3	-1.6	3.3	-31.3	-1.5	3.5	32.2	-1.5	3.5	-32.2
136	LC136 Max Wind 45° Z11 Angle 0, MIN,L,Bl-	-20	0.80	-1086	-3910	-3910	0	0	0.6	-5.3	41.9	0.6	-5.3	-41.9	0.6	-5.3	41.9	0.6	-5.3	-41.9	0.6	-5.3	-41.9	0.6	-5.3	-41.9	-1.6	-3.3	31.3	-1.6	-3.3	-31.3	-1.5	-3.5	32.2	-1.5	-3.5	-32.2
137	LC137 Max Wind,L Z11 Angle 0, MIN,L,Bl+	-20	0.80	0																																		

206	LC206 UBL 2, Z10 Angle 30,L NA+	0	0.80	0	0	0	50	8825	44.3	40.0	149.1	44.3	40.0	-149.1	44.3	40.0	149.1	9.7	9.8	-36.7	44.3	40.0	149.1	44.3	40.0	-149.1	36.1	34.4	128.3	36.1	34.4	-128.3	36.6	34.6	129.0	36.6	34.6	-129.0
207	LC207 UBL 3, Z10 Angle 30,L NA+	0	0.80	0	0	0	50	8825	44.3	40.0	149.1	44.3	40.0	-149.1	44.3	40.0	149.1	44.3	40.0	-149.1	44.3	40.0	149.1	9.7	9.8	-36.7	36.1	34.4	128.3	36.1	34.4	-128.3	36.6	34.6	129.0	36.6	34.6	-129.0
208	LC208 UBL 4, Z10 Angle 30,L NA+	0	0.80	0	0	0	50	8825	44.3	40.0	149.1	44.3	40.0	-149.1	44.3	40.0	149.1	44.3	40.0	-149.1	44.3	40.0	149.1	44.3	40.0	-149.1	36.1	34.4	128.3	36.1	34.4	-128.3	36.6	34.6	129.0	36.6	34.6	-129.0
209	LC209 UBL 5, Z10 Angle 30,L NA+	0	0.80	0	0	0	50	8825	44.3	40.0	149.1	44.3	40.0	-149.1	44.3	40.0	149.1	44.3	40.0	-149.1	44.3	40.0	149.1	44.3	40.0	-149.1	36.1	34.4	128.3	36.1	34.4	-128.3	36.6	34.6	129.0	36.6	34.6	-129.0
210	LC210 UBL 1,5 Z10 Angle 30,L NA+	0	0.80	0	0	0	50	8825	44.3	40.0	149.1	9.7	9.8	-36.7	44.3	40.0	149.1	44.3	40.0	-149.1	44.3	40.0	149.1	44.3	40.0	-149.1	36.1	34.4	128.3	36.1	34.4	-128.3	36.6	34.6	129.0	36.6	34.6	-129.0
211	LC211 UBL 1,2,3 Z10 Angle 30,L NA+	0	0.80	0	0	0	50	8825	44.3	40.0	149.1	9.7	9.8	-36.7	44.3	40.0	149.1	9.7	9.8	-36.7	44.3	40.0	149.1	9.7	9.8	-36.7	36.1	34.4	128.3	36.1	34.4	-128.3	36.6	34.6	129.0	36.6	34.6	-129.0
212	LC212 UBL 3,4 Z10 Angle 30,L NA+	0	0.80	0	0	0	50	8825	44.3	40.0	149.1	44.3	40.0	-149.1	44.3	40.0	149.1	44.3	40.0	-149.1	44.3	40.0	149.1	9.7	9.8	-36.7	36.1	34.4	128.3	36.1	34.4	-128.3	36.6	34.6	129.0	36.6	34.6	-129.0
213	LC213 UBL 4,5 Z10 Angle 30,L NA+	0	0.80	0	0	0	50	8825	44.3	40.0	149.1	44.3	40.0	-149.1	44.3	40.0	149.1	44.3	40.0	-149.1	44.3	40.0	149.1	44.3	40.0	-149.1	36.1	34.4	128.3	36.1	34.4	-128.3	36.6	34.6	129.0	36.6	34.6	-129.0
214	LC214 UBL 1,2,3,4,5 Z10 Angle 30,L NA+	0	0.80	0	0	0	50	8825	44.3	40.0	149.1	9.7	9.8	-36.7	44.3	40.0	149.1	9.7	9.8	-36.7	44.3	40.0	149.1	9.7	9.8	-36.7	36.1	34.4	128.3	36.1	34.4	-128.3	36.6	34.6	129.0	36.6	34.6	-129.0
215	LC215 Extreme UBL 1, Z10 Angle 30,L NA+	0	1.00	0	0	0	50	8825	44.3	40.0	149.1	2.7	0.0	0.0	44.3	40.0	149.1	44.3	40.0	-149.1	44.3	40.0	149.1	44.3	40.0	-149.1	36.1	34.4	128.3	36.1	34.4	-128.3	36.6	34.6	129.0	36.6	34.6	-129.0
216	LC216 Extreme UBL 2, Z10 Angle 30,L NA+	0	1.00	0	0	0	50	8825	44.3	40.0	149.1	44.3	40.0	-149.1	44.3	40.0	149.1	2.7	0.0	0.0	44.3	40.0	149.1	44.3	40.0	-149.1	36.1	34.4	128.3	36.1	34.4	-128.3	36.6	34.6	129.0	36.6	34.6	-129.0
217	LC217 Extreme UBL 3, Z10 Angle 30,L NA+	0	1.00	0	0	0	50	8825	44.3	40.0	149.1	44.3	40.0	-149.1	44.3	40.0	149.1	44.3	40.0	-149.1	44.3	40.0	149.1	44.3	40.0	-149.1	36.1	34.4	128.3	36.1	34.4	-128.3	36.6	34.6	129.0	36.6	34.6	-129.0
218	LC218 Extreme UBL 4, Z10 Angle 30,L NA+	0	1.00	0	0	0	50	8825	44.3	40.0	149.1	44.3	40.0	-149.1	44.3	40.0	149.1	44.3	40.0	-149.1	44.3	40.0	149.1	44.3	40.0	-149.1	36.1	34.4	128.3	36.1	34.4	-128.3	36.6	34.6	129.0	0.1	0.0	0.0
219	LC219 Extreme UBL 5, Z10 Angle 30,L NA+	0	1.00	0	0	0	50	8825	44.3	40.0	149.1	44.3	40.0	-149.1	44.3	40.0	149.1	44.3	40.0	-149.1	44.3	40.0	149.1	44.3	40.0	-149.1	36.1	34.4	128.3	36.1	34.4	-128.3	36.6	34.6	129.0	36.6	34.6	-129.0
220	LC220 EDT Z10 Angle 30,C NA+	0	0.50	0	0	0	0	0	9.7	10.2	38.0	9.7	10.2	-38.0	9.7	10.2	38.0	9.7	10.2	-38.0	9.7	10.2	38.0	9.7	10.2	-38.0	5.5	8.4	31.3	5.5	8.4	-31.3	5.3	7.6	28.4	5.3	7.6	-28.4
221	LC221 Cold Z10 Angle 30,I NA+	-15	0.50	0	0	0	0	0	9.7	11.2	41.9	9.7	11.2	-41.9	9.7	11.2	41.9	9.7	11.2	-41.9	9.7	11.2	41.9	9.7	11.2	-41.9	5.5	8.7	32.6	5.5	8.7	-32.6	5.3	8.4	31.3	5.3	8.4	-31.3
222	LC222 Max Wind Z10 Angle 30 MIN,L NA+	0	0.80	0	0	0	0	0	-0.1	21.6	54.9	-0.1	21.6	-54.9	-0.1	21.6	54.9	-0.1	21.6	-54.9	-0.1	21.6	54.9	-0.1	21.6	-54.9	-2.1	15.4	41.0	-2.1	15.4	-41.0	-2.1	15.8	41.1	-2.1	15.8	-41.1
223	LC223 Max Wind Z10 Angle 30 MIN,L NA-	0	0.80	0	0	0	0	0	-0.1	8.7	58.1	-0.1	8.7	-58.1	-0.1	8.7	58.1	-0.1	8.7	-58.1	-0.1	8.7	58.1	-0.1	8.7	-58.1	-2.1	7.2	43.2	-2.1	7.2	-43.2	-2.1	6.9	43.4	-2.1	6.9	-43.4
224	LC224 Max Wind 45° Z10 Angle 30 MIN,L BI+	0	0.80	0	0	0	0	0	-0.1	12.7	39.7	-0.1	18.2	-48.7	-0.1	12.7	39.7	-0.1	18.2	-48.7	-0.1	12.7	39.7	-0.1	18.2	-48.7	-2.1	9.6	31.3	-2.1	13.2	-37.0	-2.1	9.3	29.8	-2.1	13.3	-36.5
225	LC225 Max Wind 45° Z10 Angle 30 MIN,L BI-	0	0.80	0	0	0	0	0	-0.1	8.8	40.5	-0.1	8.6	-51.1	-0.1	8.8	40.5	-0.1	8.6	-51.1	-0.1	8.8	40.5	-0.1	8.6	-51.1	-2.1	7.3	31.9	-2.1	7.0	-38.6	-2.1	6.9	30.4	-2.1	6.7	-38.2
226	LC226 Max Wind,L Z10 Angle 30 MIN,L BI+	0	0.80	0	0	0	0	0	-0.1	10.0	38.8	-0.1	10.8	-38.6	-0.1	10.0	38.8	-0.1	10.8	-38.6	-0.1	10.0	38.8	-0.1	10.8	-38.6	-2.1	8.0	30.8	-2.1	8.5	-30.7	-2.1	7.5	29.1	-2.1	8.1	-29.0
227	LC227 Max Wind,L Z10 Angle 30 MIN,L BI-	0	0.80	0	0	0	0	0	-0.1	10.8	38.6	-0.1	10.0	-38.8	-0.1	10.8	38.6	-0.1	10.0	-38.8	-0.1	10.8	38.6	-0.1	10.0	-38.8	-2.1	8.5	30.7	-2.1	8.0	-30.8	-2.1	8.1	29.0	-2.1	7.5	-29.1
228	LC228 Max ice Z10 Angle 30 MIN,L NA+	0	0.80	0	0	0	50	8825	-14.5	40.0	149.1	-14.5	40.0	-149.1	-14.5	40.0	149.1	-14.5	40.0	-149.1	-14.5	40.0	149.1	-14.5	40.0	-149.1	-14.9	34.4	128.3	-14.9	34.4	-128.3	-15.1	34.6	129.0	-15.1	34.6	-129.0
229	LC229 Wind+ice Z10 Angle 30 MIN,L NA+	0	0.80	0	0	0	25	8825	-5.0	28.4	85.2	-5.0	28.4	-85.2	-5.0	28.4	85.2	-5.0	28.4	-85.2	-5.0	28.4	85.2	-5.0	28.4	-85.2	-6.2	23.8	70.8	-6.2	23.8	-70.8	-6.3	23.8	70.5	-6.3	23.8	-70.5
230	LC230 Wind+ice Z10 Angle 30 MIN,L NA-	0	0.80	0	0	0	25	8825	-5.0	18.0	87.8	-5.0	18.0	-87.8	-5.0	18.0	87.8	-5.0	18.0	-87.8	-5.0	18.0	87.8	-5.0	18.0	-87.8	-6.2	14.8	73.2	-6.2	14.8	-73.2	-6.3	14.7	73.0	-6.3	14.7	-73.0
231	LC231 Maintenance Z10 Angle 30 MIN,I NA+	-30	0.50	45	162	0	0	0	1.9	12.2	44.3	1.9	12.2	-44.3	1.9	12.2	44.3	1.9	12.2	-44.3	1.9	12.2	44.3	1.9	12.2	-44.3	-0.1	9.3	33.9	-0.1	9.3	-33.9	-0.1	9.0	32.9	-0.1	9.0	-32.9
232	LC232 Maintenance Z10 Angle 30 MIN,I NA-	-30	0.50	-45	-162	0	0	0	1.9	11.6	44.4	1.9	11.6	-44.4	1.9	11.6	44.4	1.9	11.6	-44.4	1.9	11.6	44.4	1.9	11.6	-44.4	-0.1	8.9	34.0	-0.1	8.9	-34.0	-0.1	8.6	33.0	-0.1	8.6	-33.0
233	LC233 BR 1 Z10 Angle 30 MIN,C NA+	0	0.80	0	0	0	0	0	2.7	0.0	0.0	-0.1	10.2	-38.0	-0.1	10.2	38.0	-0.1	10.2	-38.0	-0.1	10.2	38.0	-0.1	10.2	-38.0	-2.1	8.4	31.3	-2.1	8.4	-31.3	-2.1	7.6	28.4	-2.1	7.6	-28.4
234	LC234 BR 2 Z10 Angle 30 MIN,C NA+	0	0.80	0	0	0	0	0	-0.1	10.2	38.0	-0.1	10.2	-38.0	2.7	0.0	0.0	-0.1	10.2	-38.0	-0.1	10.2	38.0	-0.1	10.2	-38.0	-2.1	8.4	31.3	-2.1	8.4	-31.3	-2.1	7.6	28.4	-2.1	7.6	-28.4
235	LC235 BR 3 Z10 Angle 30 MIN,C NA+	0	0.80	0	0	0	0	0	-0.1	10.2	38.0	-0.1	10.2	-38.0	-0.1	10.2	38.0	-0.1	10.2	-38.0	-0.1	10.2	38.0	-0.1	10.2	-38.0	-2.1	8.4	31.3	-2.1	8.4	-31.3	-2.1	7.6	28.4	-2.1	7.6	-28.4
236	LC236 BR 4 Z10 Angle 30 MIN,C NA+	0	0.80	0	0	0	0	0	-0.1	10.2	38.0	-0.1	10.2	-38.0	-0.1	10.2	38.0	-0.1	10.2	-38.0	-0.1	10.2	38.0	-0.1	10.2	-38.0	-2.1	8.4	31.3	-2.1	8.4	-31.3	0.1	0.0	0.0	-2.1	7.6	-28.4
237	LC237 BR 5 Z10 Angle 30 MIN,C NA+	0	0.80	0	0	0	0	0	-0.1	10.2	38.0	-0.1	10.2	-38.0	-0.1	10.2	38.0	-0.1	10.2	-38.0	-0.1	10.2	38.0	-0.1	10.2	-38.0	0.1	0.0	0.0	-2.1	8.4	-31.3	-2.1	7.6	28.4	-2.1	7.6	-28.4
238	LC238 BR 1,5 Z10 Angle 30 MIN,C NA+	0	0.80	0	0	0	0	0	2.7	0.0	0.0	-0.1	10.2	-38.0	-0.1	10.2	38.0	-0.1	10.2	-38.0	-0.1	10.2	38.0	-0.1	10.2	-38.0	0.1	0.0	0.0	-2.1	8.4	-31.3	-2.1	7.6	28.4	-2.1	7.6	-28.4
239	LC239 BR 1,2,3 Z10 Angle 30 MIN,C NA+	0	0.80	0	0	0	0	0	2.7	0.0	0.0	-0.1	10.2	-38.0	2.7	0.0	0.0	-0.1	10.2	-38.0	2.7	0.0	0.0	-0.1	10.2	-38.0	-2.1	8.4	31.3	-2.1	8.4	-31.3	-2.1	7.6	28.4	-2.1	7.6	-28.4
240	LC240 BR 3,4 Z10 Angle 30 MIN,C NA+	0	0.80	0	0	0	0	0	-0.1	10.2	38.0	-0.1	10.2	-38.0	-0.1	10.2	38.0	-0.1	10.2	-38.0	-0.1	10.2	38.0	-0.1	10.2	-38.0	-2.1	8.4	31.3	-2.1	8.4	-31.3	0.1	0.0	0.0	-2.1	7.6	-28.4
241	LC241 BR 4,5 Z10 Angle 30 MIN,C NA+	0	0.80	0	0	0	0	0	-0.1	10.2	38.0	-0.1	10.2	-38.0	-0.1	10.2</																						

311	LC311 Max Wind 45° Z10 Angle 0 MIN,L BI-	0	0.80	0	0	0	0	0	0	-0.1	-4.3	45.7	-0.1	-4.3	-45.7	-0.1	-4.3	45.7	-0.1	-4.3	-45.7	-0.1	-4.3	-45.7	-2.1	-2.7	35.3	-2.1	-2.7	-35.3	-2.1	-2.9	34.3	-2.1	-2.9	-34.3						
312	LC312 Max Wind,L Z10 Angle 0 MIN,L BI+	0	0.80	0	0	0	0	0	0	-0.1	0.0	39.9	-0.1	0.0	-39.9	-0.1	0.0	39.9	-0.1	0.0	-39.9	-0.1	0.0	-39.9	-2.1	0.0	31.8	-2.1	0.0	-31.8	-2.1	0.0	30.0	-2.1	0.0	-30.0						
313	LC313 Max Wind,L Z10 Angle 0 MIN,L BI-	0	0.80	0	0	0	0	0	0	-0.1	0.0	39.9	-0.1	0.0	-39.9	-0.1	0.0	39.9	-0.1	0.0	-39.9	-0.1	0.0	-39.9	-2.1	0.0	31.8	-2.1	0.0	-31.8	-2.1	0.0	30.0	-2.1	0.0	-30.0						
314	LC314 Max ice Z10 Angle 0 MIN,L NA+	0	0.80	0	0	0	0	75	8825	-14.5	0.0	154.4	-14.5	0.0	-154.4	-14.5	0.0	154.4	-14.5	0.0	-154.4	-14.5	0.0	-154.4	-14.9	0.0	132.8	-14.9	0.0	-132.8	-15.1	0.0	133.5	-15.1	0.0	-133.5						
315	LC315 Wind+ice Z10 Angle 0 MIN,L NA+	0	0.80	0	0	0	0	45	8825	-5.0	6.8	89.6	-5.0	6.8	-89.6	-5.0	6.8	89.6	-5.0	6.8	-89.6	-5.0	6.8	-89.6	-6.2	5.9	74.6	-6.2	5.9	-74.6	-6.3	6.0	74.3	-6.3	6.0	-74.3						
316	LC316 Wind+ice Z10 Angle 0 MIN,L NA-	0	0.80	0	0	0	0	45	8825	-5.0	-6.8	89.6	-5.0	-6.8	-89.6	-5.0	-6.8	89.6	-5.0	-6.8	-89.6	-5.0	-6.8	-89.6	-6.2	-5.9	74.6	-6.2	-5.9	-74.6	-6.3	-6.0	74.3	-6.3	-6.0	-74.3						
317	LC317 Maintenance Z10 Angle 0 MIN,I NA+	-30	0.50	45	162	0	0	0	0	1.9	0.4	45.9	1.9	0.4	-45.9	1.9	0.4	45.9	1.9	0.4	-45.9	1.9	0.4	-45.9	-0.1	0.2	35.2	-0.1	0.2	-35.2	-0.1	0.3	34.1	-0.1	0.3	-34.1						
318	LC318 Maintenance Z10 Angle 0 MIN,I NA-	-30	0.50	-45	-162	0	0	0	0	1.9	-0.4	45.9	1.9	-0.4	-45.9	1.9	-0.4	45.9	1.9	-0.4	-45.9	1.9	-0.4	-45.9	-0.1	-0.2	35.2	-0.1	-0.2	-35.2	-0.1	-0.3	34.1	-0.1	-0.3	-34.1						
319	LC319 BR 1 Z10 Angle 0 MIN,C NA+	0	0.80	0	0	0	0	0	0	2.7	0.0	0.0	-0.1	0.0	-39.3	-0.1	0.0	39.3	-0.1	0.0	-39.3	-0.1	0.0	-39.3	-2.1	0.0	32.4	-2.1	0.0	-32.4	-2.1	0.0	29.4	-2.1	0.0	-29.4						
320	LC320 BR 2 Z10 Angle 0 MIN,C NA+	0	0.80	0	0	0	0	0	0	-0.1	0.0	39.3	-0.1	0.0	-39.3	2.7	0.0	0.0	-0.1	0.0	-39.3	-0.1	0.0	-39.3	-0.1	0.0	39.3	-0.1	0.0	-39.3	-2.1	0.0	32.4	-2.1	0.0	29.4	-2.1	0.0	-29.4			
321	LC321 BR 3 Z10 Angle 0 MIN,C NA+	0	0.80	0	0	0	0	0	0	-0.1	0.0	39.3	-0.1	0.0	-39.3	-0.1	0.0	39.3	-0.1	0.0	-39.3	-0.1	0.0	-39.3	2.7	0.0	0.0	-0.1	0.0	-39.3	-2.1	0.0	32.4	-2.1	0.0	29.4	-2.1	0.0	-29.4			
322	LC322 BR 4 Z10 Angle 0 MIN,C NA+	0	0.80	0	0	0	0	0	0	-0.1	0.0	39.3	-0.1	0.0	-39.3	-0.1	0.0	39.3	-0.1	0.0	-39.3	-0.1	0.0	-39.3	-0.1	0.0	39.3	-0.1	0.0	-39.3	-2.1	0.0	32.4	-2.1	0.0	29.4	-2.1	0.0	-29.4			
323	LC323 BR 5 Z10 Angle 0 MIN,C NA+	0	0.80	0	0	0	0	0	0	-0.1	0.0	39.3	-0.1	0.0	-39.3	-0.1	0.0	39.3	-0.1	0.0	-39.3	-0.1	0.0	-39.3	-0.1	0.0	39.3	-0.1	0.0	-39.3	0.1	0.0	0.0	-2.1	0.0	29.4	-2.1	0.0	-29.4			
324	LC324 BR 1,5 Z10 Angle 0 MIN,C NA+	0	0.80	0	0	0	0	0	0	2.7	0.0	0.0	-0.1	0.0	-39.3	-0.1	0.0	39.3	-0.1	0.0	-39.3	-0.1	0.0	-39.3	-0.1	0.0	39.3	-0.1	0.0	-39.3	0.1	0.0	0.0	-2.1	0.0	29.4	-2.1	0.0	-29.4			
325	LC325 BR 1,2,3 Z10 Angle 0 MIN,C NA+	0	0.80	0	0	0	0	0	0	2.7	0.0	0.0	-0.1	0.0	-39.3	2.7	0.0	0.0	-0.1	0.0	-39.3	2.7	0.0	0.0	-0.1	0.0	-39.3	-2.1	0.0	32.4	-2.1	0.0	-32.4	-2.1	0.0	29.4	-2.1	0.0	-29.4			
326	LC326 BR 3,4 Z10 Angle 0 MIN,C NA+	0	0.80	0	0	0	0	0	0	-0.1	0.0	39.3	-0.1	0.0	-39.3	-0.1	0.0	39.3	-0.1	0.0	-39.3	-0.1	0.0	-39.3	2.7	0.0	0.0	-0.1	0.0	-39.3	-2.1	0.0	32.4	-2.1	0.0	-32.4	0.1	0.0	0.0	-2.1	0.0	-29.4
327	LC327 BR 4,5 Z10 Angle 0 MIN,C NA+	0	0.80	0	0	0	0	0	0	-0.1	0.0	39.3	-0.1	0.0	-39.3	-0.1	0.0	39.3	-0.1	0.0	-39.3	-0.1	0.0	-39.3	-0.1	0.0	39.3	-0.1	0.0	-39.3	0.1	0.0	0.0	-2.1	0.0	-32.4	0.1	0.0	0.0	-2.1	0.0	-29.4
328	LC328 BR ALL Z10 Angle 0 MIN,C NA+	0	0.80	0	0	0	0	0	0	2.7	0.0	0.0	-0.1	0.0	-39.3	2.7	0.0	0.0	-0.1	0.0	-39.3	2.7	0.0	0.0	-0.1	0.0	-39.3	0.1	0.0	0.0	-2.1	0.0	-32.4	0.1	0.0	0.0	-2.1	0.0	-29.4			
329	LC329 BR 1 D,2,3,4,5 Z10 Angle 0 MIN,C NA+	0	1.00	0	0	0	0	0	0	2.7	0.0	0.0	-0.1	0.0	-78.6	2.7	0.0	0.0	-0.1	0.0	-39.3	2.7	0.0	0.0	-0.1	0.0	-39.3	0.1	0.0	0.0	-2.1	0.0	-32.4	0.1	0.0	0.0	-2.1	0.0	-29.4			
330	LC330 BR 2 D,1,3,4,5 Z10 Angle 0 MIN,C NA+	0	1.00	0	0	0	0	0	0	2.7	0.0	0.0	-0.1	0.0	-39.3	2.7	0.0	0.0	-0.1	0.0	-78.6	2.7	0.0	0.0	-0.1	0.0	-39.3	0.1	0.0	0.0	-2.1	0.0	-32.4	0.1	0.0	0.0	-2.1	0.0	-29.4			
331	LC331 BR 3 D,1,2,4,5 Z10 Angle 0 MIN,C NA+	0	1.00	0	0	0	0	0	0	2.7	0.0	0.0	-0.1	0.0	-39.3	2.7	0.0	0.0	-0.1	0.0	-39.3	2.7	0.0	0.0	-0.1	0.0	-39.3	0.1	0.0	0.0	-2.1	0.0	-32.4	0.1	0.0	0.0	-2.1	0.0	-29.4			
332	LC332 BR 4 D,1,2,3,5 Z10 Angle 0 MIN,C NA+	0	1.00	0	0	0	0	0	0	2.7	0.0	0.0	-0.1	0.0	-39.3	2.7	0.0	0.0	-0.1	0.0	-39.3	2.7	0.0	0.0	-0.1	0.0	-39.3	0.1	0.0	0.0	-2.1	0.0	-64.9	0.1	0.0	0.0	-2.1	0.0	-29.4			
333	LC333 BR 5 D,1,2,3,4 Z10 Angle 0 MIN,C NA+	0	1.00	0	0	0	0	0	0	2.7	0.0	0.0	-0.1	0.0	-39.3	2.7	0.0	0.0	-0.1	0.0	-39.3	2.7	0.0	0.0	-0.1	0.0	-39.3	0.1	0.0	0.0	-2.1	0.0	-32.4	0.1	0.0	0.0	-2.1	0.0	-58.8			
334	LC334 UBL 1, Z10 Angle 0 MIN,L NA+	0	0.80	0	0	0	0	75	8825	-14.5	0.0	154.4	-0.1	0.0	-38.0	-14.5	0.0	154.4	-14.5	0.0	-154.4	-14.5	0.0	-154.4	-14.5	0.0	154.4	-14.5	0.0	-154.4	-14.9	0.0	132.8	-14.9	0.0	-132.8	-15.1	0.0	133.5	-15.1	0.0	-133.5
335	LC335 UBL 2, Z10 Angle 0 MIN,L NA+	0	0.80	0	0	0	0	75	8825	-14.5	0.0	154.4	-14.5	0.0	-154.4	-14.5	0.0	154.4	-0.1	0.0	-38.0	-14.5	0.0	154.4	-14.5	0.0	-154.4	-14.9	0.0	132.8	-14.9	0.0	-132.8	-15.1	0.0	133.5	-15.1	0.0	-133.5			
336	LC336 UBL 3, Z10 Angle 0 MIN,L NA+	0	0.80	0	0	0	0	75	8825	-14.5	0.0	154.4	-14.5	0.0	-154.4	-14.5	0.0	154.4	-14.5	0.0	-154.4	-14.5	0.0	-154.4	-14.5	0.0	154.4	-0.1	0.0	-38.0	-14.9	0.0	132.8	-14.9	0.0	-132.8	-15.1	0.0	133.5	-15.1	0.0	-133.5
337	LC337 UBL 4, Z10 Angle 0 MIN,L NA+	0	0.80	0	0	0	0	75	8825	-14.5	0.0	154.4	-14.5	0.0	-154.4	-14.5	0.0	154.4	-14.5	0.0	-154.4	-14.5	0.0	-154.4	-14.5	0.0	154.4	-14.5	0.0	-154.4	-14.9	0.0	132.8	-14.9	0.0	-132.8	-15.1	0.0	133.5	-2.1	0.0	-28.8
338	LC338 UBL 5, Z10 Angle 0 MIN,L NA+	0	0.80	0	0	0	0	75	8825	-14.5	0.0	154.4	-14.5	0.0	-154.4	-14.5	0.0	154.4	-14.5	0.0	-154.4	-14.5	0.0	-154.4	-14.5	0.0	154.4	-14.5	0.0	-154.4	-14.9	0.0	132.8	-2.1	0.0	-30.6	-15.1	0.0	133.5	-15.1	0.0	-133.5
339	LC339 UBL 1,5 Z10 Angle 0 MIN,L NA+	0	0.80	0	0	0	0	75	8825	-14.5	0.0	154.4	-0.1	0.0	-38.0	-14.5	0.0	154.4	-14.5	0.0	-154.4	-14.5	0.0	-154.4	-14.5	0.0	154.4	-14.5	0.0	-154.4	-14.9	0.0	132.8	-2.1	0.0	-30.6	-15.1	0.0	133.5	-15.1	0.0	-133.5
340	LC340 UBL 1,2,3 Z10 Angle 0 MIN,L NA+	0	0.80	0	0	0	0	75	8825	-14.5	0.0	154.4	-0.1	0.0	-38.0	-14.5	0.0	154.4	-0.1	0.0	-38.0	-14.5	0.0	154.4	-0.1	0.0	-38.0	-14.9	0.0	132.8	-14.9	0.0	-132.8	-15.1	0.0	133.5	-15.1	0.0	-133.5			
341	LC341 UBL 3,4 Z10 Angle 0 MIN,L NA+	0	0.80	0	0	0	0	75	8825	-14.5	0.0	154.4	-14.5	0.0	-154.4	-14.5	0.0	154.4	-14.5	0.0	-154.4	-14.5	0.0	-154.4	-14.5	0.0	154.4	-0.1	0.0	-38.0	-14.9	0.0	132.8	-14.9	0.0	-132.8	-15.1	0.0	133.5	-2.1	0.0	-28.8
342	LC342 UBL 4,5 Z10 Angle 0 MIN,L NA+	0	0.80	0	0	0	0	75	8825	-14.5	0.0	154.4	-14.5	0.0	-154.4	-14.5	0.0	154.4	-14.5	0.0	-154.4	-14.5	0.0	-154.4	-14.5	0.0	154.4	-14.5	0.0	-154.4	-14.9	0.0	132.8	-2.1	0.0	-30.6	-15.1	0.0	133.5	-2.1	0.0	-28.8
343	LC343 UBL 1,2,3,4,5 Z10 Angle 0 MIN,L NA+	0	0.80	0	0	0	0	75	8825	-14.5	0.0	154.4	-0.1	0.0	-38.0	-14.5	0.0	154.4	-0.1	0.0	-38.0	-14.5	0.0	154.4	-0.1	0.0	-38.0	-14.9	0.0	132.8	-2.1	0.0	-30.6	-15.1	0.0	133.5	-2.1	0.0	-28.8			
344	LC344 Extreme UBL 1, Z10 Angle 0 MIN,L NA+	0	1.00	0	0	0	0	75	8825	-14.5	0.0	154.4	2.7	0.0	0.0	-14.5	0.0	154.4	-14.5	0.0	-154.4	-14.5	0.0	-154.4	-14.5	0.0	154.4	-14.5	0.0	-154.4	-14.9	0.0	132.8	-14.9	0.0	-132.8	-15.1	0.0	133.5	-15.1	0.0	-133.5
345	LC345 Extreme UBL 2, Z10 Angle 0 MIN,L NA+	0	1.00	0	0	0	0	75	8825	-14.5	0.0	154.4	-14.5	0.0	-154.4	-14.5	0.0	154.4	2.7	0.0	0.0	-14.5	0.0	154.4	-14.5	0.0	-154.4	-14.9	0.0	132.8	-14.9	0.0	-132.8	-15.1	0.0	133.5	-15.1	0.0	-133.5			
346	LC346 Extreme UBL 3, Z10 Angle 0 MIN,L NA+	0	1.00	0	0	0	0	75	8825	-14.5	0.0	154.4	-14.5	0.0	-154.4	-14.5	0.0	154.4	-14.5	0.0	-154.4	-14.5	0.0	154.																		

TOWER D LOADING				WIND ON STRUCTURE AND CABLES		ICE ON STRUCTURE AND CABLES		Phase-1-Ahead (1a)			Phase-1-back (1b)			Phase-2-Ahead (2a)			Phase-2-back (2b)			Phase-3-Ahead (3a)			Phase-3-back (3b)			OPGW-Ahead (5a)			OPGW-Back (5b)			OHSW-Ahead (4a)			OHSW-Back (4b)			
CASE #	LOAD CASE	TEMP. (°C)	STRENGTH FACTOR	WIND ON CABLES (Pa)	TRANS. WIND (Pa)	LONG. WIND (Pa)	ICE THICKNESS (mm)	ICE DENSITY (N/m³)	V1 (kN)	T1 (kN)	L1 (kN)	V2 (kN)	T2 (kN)	L2 (kN)	V3 (kN)	T3 (kN)	L3 (kN)	V4 (kN)	T4 (kN)	L4 (kN)	V5 (kN)	T5 (kN)	L5 (kN)	V1 (kN)	T1 (kN)	L1 (kN)	V2 (kN)	T2 (kN)	L2 (kN)	V3 (kN)	T3 (kN)	L3 (kN)	V4 (kN)	T4 (kN)	L4 (kN)	V5 (kN)	T5 (kN)	L5 (kN)
1	LC1 Max Wind, L NA+, Z10 angle 0	-20	0.80	971	3496	0	0	0	10.5	6.7	58.5	10.5	6.7	-58.5	10.5	6.7	58.5	10.5	6.7	-58.5	10.5	6.7	58.5	10.5	6.7	-58.5	6.2	4.3	43.6	6.2	4.3	-43.6	5.9	4.6	43.7	5.9	4.6	-43.7
2	LC2 Max Wind, L NA-, Z10 angle 0	-20	0.80	-971	-3496	0	0	0	10.5	-6.7	58.5	10.5	-6.7	-58.5	10.5	-6.7	58.5	10.5	-6.7	-58.5	10.5	-6.7	58.5	10.5	-6.7	-58.5	6.2	-4.3	-43.6	6.2	-4.3	-43.6	5.9	-4.6	-43.7	5.9	-4.6	-43.7
3	LC3 Max Wind 45°, L Bl+, Z10 angle 0	-20	0.80	687	2472	2472	0	0	10.5	3.5	45.7	10.5	3.5	-45.7	10.5	3.5	45.7	10.5	3.5	-45.7	10.5	3.5	45.7	10.5	3.5	-45.7	6.2	2.2	35.3	6.2	2.2	-35.3	5.9	2.3	34.3	5.9	2.3	-34.3
4	LC4 Max Wind 45°, L Bl-, Z10 angle 0	-20	0.80	-687	-2472	-2472	0	0	10.5	-3.5	45.7	10.5	-3.5	-45.7	10.5	-3.5	45.7	10.5	-3.5	-45.7	10.5	-3.5	45.7	10.5	-3.5	-45.7	6.2	-2.2	-35.3	6.2	-2.2	-35.3	5.9	-2.3	34.3	5.9	-2.3	-34.3
5	LC5 Max Wind, L, L Bl+, Z10 angle 0	-20	0.80	0	0	3496	0	0	10.5	0.0	39.9	10.5	0.0	-39.9	10.5	0.0	39.9	10.5	0.0	-39.9	10.5	0.0	39.9	10.5	0.0	-39.9	6.2	0.0	31.8	6.2	0.0	-31.8	5.9	0.0	30.0	5.9	0.0	-30.0
6	LC6 Max Wind, L, L Bl-, Z10 angle 0	-20	0.80	0	0	-3496	0	0	10.5	0.0	39.9	10.5	0.0	-39.9	10.5	0.0	39.9	10.5	0.0	-39.9	10.5	0.0	39.9	10.5	0.0	-39.9	6.2	0.0	31.8	6.2	0.0	-31.8	5.9	0.0	30.0	5.9	0.0	-30.0
7	LC7 Max ice, L NA+, Z10 angle 0	-5	0.80	0	0	0	50	8825	49.5	0.0	154.4	49.5	0.0	-154.4	49.5	0.0	154.4	49.5	0.0	-154.4	49.5	0.0	154.4	49.5	0.0	-154.4	40.6	0.0	132.8	40.6	0.0	-132.8	41.2	0.0	133.5	41.2	0.0	-133.5
8	LC8 Wind+ice, L NA+, Z10 angle 0	-5	0.80	300	600	0	25	8825	23.8	5.4	89.6	23.8	5.4	-89.6	23.8	5.4	89.6	23.8	5.4	-89.6	23.8	5.4	89.6	23.8	5.4	-89.6	17.2	4.6	74.6	17.2	4.6	-74.6	17.3	4.7	74.3	17.3	4.7	-74.3
9	LC9 Wind+ice, L NA-, Z10 angle 0	-5	0.80	-300	-600	0	25	8825	23.8	-5.4	89.6	23.8	-5.4	-89.6	23.8	-5.4	89.6	23.8	-5.4	-89.6	23.8	-5.4	89.6	23.8	-5.4	-89.6	17.2	-4.6	-74.6	17.2	-4.6	-74.6	17.3	-4.7	-74.3	17.3	-4.7	-74.3
10	LC10 Maintenance, I NA+, Z10 angle 0	-30	0.50	45	162	0	0	0	12.5	0.3	45.9	12.5	0.3	-45.9	12.5	0.3	45.9	12.5	0.3	-45.9	12.5	0.3	45.9	12.5	0.3	-45.9	8.2	0.2	35.2	8.2	0.2	-35.2	7.9	0.2	34.1	7.9	0.2	-34.1
11	LC11 Maintenance, I NA-, Z10 angle 0	-30	0.50	-45	-162	0	0	0	12.5	-0.3	45.9	12.5	-0.3	-45.9	12.5	-0.3	45.9	12.5	-0.3	-45.9	12.5	-0.3	45.9	12.5	-0.3	-45.9	8.2	-0.2	-35.2	8.2	-0.2	-35.2	7.9	-0.2	-34.1	7.9	-0.2	-34.1
12	LC12 BR 1, C NA+, Z10 angle 0	0	0.80	0	0	0	0	0	2.7	0.0	0.0	10.5	0.0	-39.3	10.5	0.0	39.3	10.5	0.0	-39.3	10.5	0.0	39.3	10.5	0.0	-39.3	6.2	0.0	32.4	6.2	0.0	-32.4	5.9	0.0	29.4	5.9	0.0	-29.4
13	LC13 BR 2, C NA+, Z10 angle 0	0	0.80	0	0	0	0	0	10.5	0.0	39.3	10.5	0.0	-39.3	2.7	0.0	0.0	10.5	0.0	-39.3	10.5	0.0	39.3	10.5	0.0	-39.3	6.2	0.0	32.4	6.2	0.0	-32.4	5.9	0.0	29.4	5.9	0.0	-29.4
14	LC14 BR 3, C NA+, Z10 angle 0	0	0.80	0	0	0	0	0	10.5	0.0	39.3	10.5	0.0	-39.3	10.5	0.0	39.3	10.5	0.0	-39.3	2.7	0.0	0.0	10.5	0.0	-39.3	6.2	0.0	32.4	6.2	0.0	-32.4	5.9	0.0	29.4	5.9	0.0	-29.4
15	LC15 BR 4, C NA+, Z10 angle 0	0	0.80	0	0	0	0	0	10.5	0.0	39.3	10.5	0.0	-39.3	10.5	0.0	39.3	10.5	0.0	-39.3	10.5	0.0	39.3	10.5	0.0	-39.3	6.2	0.0	32.4	6.2	0.0	-32.4	0.1	0.0	0.0	5.9	0.0	-29.4
16	LC16 BR 5, C NA+, Z10 angle 0	0	0.80	0	0	0	0	0	10.5	0.0	39.3	10.5	0.0	-39.3	10.5	0.0	39.3	10.5	0.0	-39.3	10.5	0.0	39.3	10.5	0.0	-39.3	0.1	0.0	0.0	6.2	0.0	-32.4	5.9	0.0	29.4	5.9	0.0	-29.4
17	LC17 BR 1, 5, C NA+, Z10 angle 0	0	0.80	0	0	0	0	0	2.7	0.0	0.0	10.5	0.0	-39.3	10.5	0.0	39.3	10.5	0.0	-39.3	10.5	0.0	39.3	10.5	0.0	-39.3	0.1	0.0	0.0	6.2	0.0	-32.4	5.9	0.0	29.4	5.9	0.0	-29.4
18	LC18 BR 1, 2, 3, C NA+, Z10 angle 0	0	0.80	0	0	0	0	0	2.7	0.0	0.0	10.5	0.0	-39.3	2.7	0.0	0.0	10.5	0.0	-39.3	2.7	0.0	0.0	10.5	0.0	-39.3	6.2	0.0	32.4	6.2	0.0	-32.4	5.9	0.0	29.4	5.9	0.0	-29.4
19	LC19 BR 3, 4, C NA+, Z10 angle 0	0	0.80	0	0	0	0	0	10.5	0.0	39.3	10.5	0.0	-39.3	10.5	0.0	39.3	10.5	0.0	-39.3	2.7	0.0	0.0	10.5	0.0	-39.3	6.2	0.0	32.4	6.2	0.0	-32.4	0.1	0.0	0.0	5.9	0.0	-29.4
20	LC20 BR 4, 5, C NA+, Z10 angle 0	0	0.80	0	0	0	0	0	10.5	0.0	39.3	10.5	0.0	-39.3	10.5	0.0	39.3	10.5	0.0	-39.3	10.5	0.0	39.3	10.5	0.0	-39.3	0.1	0.0	0.0	6.2	0.0	-32.4	0.1	0.0	0.0	5.9	0.0	-29.4
21	LC21 BR ALL, C NA+, Z10 angle 0	0	0.80	0	0	0	0	0	2.7	0.0	0.0	10.5	0.0	-39																								

101	LC101 BR 4, C NA+, Z10 DE 0 min	0	0.80	0	0	0	0	0	-0.7	0.0	39.3	0.0	0.0	0.0	-0.7	0.0	39.3	0.0	0.0	0.0	-0.7	0.0	39.3	0.0	0.0	0.0	-2.6	0.0	32.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
102	LC102 BR 5, C NA+, Z10 DE 0 min	0	0.80	0	0	0	0	0	-0.7	0.0	39.3	0.0	0.0	0.0	-0.7	0.0	39.3	0.0	0.0	0.0	-0.7	0.0	39.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	-2.5	0.0	29.4	0.0	0.0	0.0
103	LC103 BR 1, 5, C NA+, Z10 DE 0 min	0	0.80	0	0	0	0	0	2.7	0.0	0.0	0.0	0.0	0.0	-0.7	0.0	39.3	0.0	0.0	0.0	-0.7	0.0	39.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	-2.5	0.0	29.4	0.0	0.0	0.0
104	LC104 BR 1, 2, 3, C NA+, Z10 DE 0 min	0	0.80	0	0	0	0	0	2.7	0.0	0.0	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	-2.6	0.0	32.4	0.0	0.0	0.0	-2.5	0.0	29.4	0.0	0.0	0.0
105	LC105 BR 3, 4, C NA+, Z10 DE 0 min	0	0.80	0	0	0	0	0	-0.7	0.0	39.3	0.0	0.0	0.0	-0.7	0.0	39.3	0.0	0.0	0.0	-0.7	0.0	39.3	0.0	0.0	0.0	-2.6	0.0	32.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
106	LC106 BR 4, 5, C NA+, Z10 DE 0 min	0	0.80	0	0	0	0	0	-0.7	0.0	39.3	0.0	0.0	0.0	-0.7	0.0	39.3	0.0	0.0	0.0	-0.7	0.0	39.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
107	LC107 UBL 1, L NA+, Z10 DE 0 min	-5	0.80	0	0	0	50	8825	-18.1	0.0	154.4	0.0	0.0	0.0	-18.1	0.0	154.4	0.0	0.0	0.0	-18.1	0.0	154.4	0.0	0.0	0.0	-17.9	0.0	132.8	0.0	0.0	0.0	-18.2	0.0	133.5	0.0	0.0	0.0
108	LC108 UBL 2, L NA+, Z10 DE 0 min	-5	0.80	0	0	0	50	8825	-18.1	0.0	154.4	0.0	0.0	0.0	-18.1	0.0	154.4	0.0	0.0	0.0	-18.1	0.0	154.4	0.0	0.0	0.0	-17.9	0.0	132.8	0.0	0.0	0.0	-18.2	0.0	133.5	0.0	0.0	0.0
109	LC109 UBL 3, L NA+, Z10 DE 0 min	-5	0.80	0	0	0	50	8825	-18.1	0.0	154.4	0.0	0.0	0.0	-18.1	0.0	154.4	0.0	0.0	0.0	-18.1	0.0	154.4	0.0	0.0	0.0	-17.9	0.0	132.8	0.0	0.0	0.0	-18.2	0.0	133.5	0.0	0.0	0.0
110	LC110 UBL 4, L NA+, Z10 DE 0 min	-5	0.80	0	0	0	50	8825	-18.1	0.0	154.4	0.0	0.0	0.0	-18.1	0.0	154.4	0.0	0.0	0.0	-18.1	0.0	154.4	0.0	0.0	0.0	-17.9	0.0	132.8	0.0	0.0	0.0	-18.2	0.0	133.5	0.0	0.0	0.0
111	LC111 UBL 5, L NA+, Z10 DE 0 min	-5	0.80	0	0	0	50	8825	-18.1	0.0	154.4	0.0	0.0	0.0	-18.1	0.0	154.4	0.0	0.0	0.0	-18.1	0.0	154.4	0.0	0.0	0.0	-17.9	0.0	132.8	0.0	0.0	0.0	-18.2	0.0	133.5	0.0	0.0	0.0
112	LC112 UBL 1, 5, L NA+, Z10 DE 0 min	-5	0.80	0	0	0	50	8825	-18.1	0.0	154.4	0.0	0.0	0.0	-18.1	0.0	154.4	0.0	0.0	0.0	-18.1	0.0	154.4	0.0	0.0	0.0	-17.9	0.0	132.8	0.0	0.0	0.0	-18.2	0.0	133.5	0.0	0.0	0.0
113	LC113 UBL 1, 2, 3, L NA+, Z10 DE 0 min	-5	0.80	0	0	0	50	8825	-18.1	0.0	154.4	0.0	0.0	0.0	-18.1	0.0	154.4	0.0	0.0	0.0	-18.1	0.0	154.4	0.0	0.0	0.0	-17.9	0.0	132.8	0.0	0.0	0.0	-18.2	0.0	133.5	0.0	0.0	0.0
114	LC114 UBL 3, 4, L NA+, Z10 DE 0 min	-5	0.80	0	0	0	50	8825	-18.1	0.0	154.4	0.0	0.0	0.0	-18.1	0.0	154.4	0.0	0.0	0.0	-18.1	0.0	154.4	0.0	0.0	0.0	-17.9	0.0	132.8	0.0	0.0	0.0	-18.2	0.0	133.5	0.0	0.0	0.0
115	LC115 UBL 4, 5, L NA+, Z10 DE 0 min	-5	0.80	0	0	0	50	8825	-18.1	0.0	154.4	0.0	0.0	0.0	-18.1	0.0	154.4	0.0	0.0	0.0	-18.1	0.0	154.4	0.0	0.0	0.0	-17.9	0.0	132.8	0.0	0.0	0.0	-18.2	0.0	133.5	0.0	0.0	0.0
116	LC116 Extreme UBL 1, L NA+, Z10 DE 0 min	-5	1.00	0	0	0	50	8825	-18.1	0.0	154.4	0.0	0.0	0.0	-18.1	0.0	154.4	0.0	0.0	0.0	-18.1	0.0	154.4	0.0	0.0	0.0	-17.9	0.0	132.8	0.0	0.0	0.0	-18.2	0.0	133.5	0.0	0.0	0.0
117	LC117 Extreme UBL 2, L NA+, Z10 DE 0 min	-5	1.00	0	0	0	50	8825	-18.1	0.0	154.4	0.0	0.0	0.0	-18.1	0.0	154.4	0.0	0.0	0.0	-18.1	0.0	154.4	0.0	0.0	0.0	-17.9	0.0	132.8	0.0	0.0	0.0	-18.2	0.0	133.5	0.0	0.0	0.0
118	LC118 Extreme UBL 3, L NA+, Z10 DE 0 min	-5	1.00	0	0	0	50	8825	-18.1	0.0	154.4	0.0	0.0	0.0	-18.1	0.0	154.4	0.0	0.0	0.0	-18.1	0.0	154.4	0.0	0.0	0.0	-17.9	0.0	132.8	0.0	0.0	0.0	-18.2	0.0	133.5	0.0	0.0	0.0
119	LC119 Extreme UBL 4, L NA+, Z10 DE 0 min	-5	1.00	0	0	0	50	8825	-18.1	0.0	154.4	0.0	0.0	0.0	-18.1	0.0	154.4	0.0	0.0	0.0	-18.1	0.0	154.4	0.0	0.0	0.0	-17.9	0.0	132.8	0.0	0.0	0.0	-18.2	0.0	133.5	0.0	0.0	0.0
120	LC120 Extreme UBL 5, L NA+, Z10 DE 0 min	-5	1.00	0	0	0	50	8825	-18.1	0.0	154.4	0.0	0.0	0.0	-18.1	0.0	154.4	0.0	0.0	0.0	-18.1	0.0	154.4	0.0	0.0	0.0	-17.9	0.0	132.8	0.0	0.0	0.0	-18.2	0.0	133.5	0.0	0.0	0.0
121	LC121 LC81 EDT, C NA+, Z10 DE 0 min	0	0.80	0	0	0	0	0	-0.7	0.0	39.3	0.0	0.0	0.0	-0.7	0.0	39.3	0.0	0.0	0.0	-0.7	0.0	39.3	0.0	0.0	0.0	-2.6	0.0	32.4	0.0	0.0	0.0	-2.5	0.0	29.4	0.0	0.0	0.0
122	LC122 LC82 Cold, I NA+, Z10 DE 0 min	-15	0.80	0	0	0	0	0	-0.7	0.0	43.3	0.0	0.0	0.0	-0.7	0.0	43.3	0.0	0.0	0.0	-0.7	0.0	43.3	0.0	0.0	0.0	-2.6	0.0	33.7	0.0	0.0	0.0	-2.5	0.0	32.5	0.0	0.0	0.0
123	LC123 Max Wind, L NA+, Z10 DE 0	-20	0.80	971	3496	0	0	0	9.0	6.7	58.5	0.0	0.0	0.0	9.0	6.7	58.5	0.0	0.0	0.0	9.0	6.7	58.5	0.0	0.0	0.0	5.0	4.3	43.6	0.0	0.0	0.0	4.8	4.6	43.7	0.0	0.0	0.0
124	LC124 Max Wind, L NA-, Z10 DE 0	-20	0.80	-971	-3496	0	0	0	9.0	-6.7	58.5	0.0	0.0	0.0	9.0	-6.7	58.5	0.0	0.0	0.0	9.0	-6.7	58.5	0.0	0.0	0.0	5.0	-4.3	43.6	0.0	0.0	0.0	4.8	-4.6	43.7	0.0	0.0	0.0
125	LC125 Max Wind 45°, L Bl+, Z10 DE 0	-20	0.80	687	2472	2472	0	0	9.0	3.5	45.7	0.0	0.0	0.0	9.0	3.5	45.7	0.0	0.0	0.0	9.0	3.5	45.7	0.0	0.0	0.0	5.0	2.2	35.3	0.0	0.0	0.0	4.8	2.3	34.3	0.0	0.0	0.0
126	LC126 Max Wind 45°, L Bl-, Z10 DE 0	-20	0.80	-687	-2472	-2472	0	0	9.0	-3.5	45.7	0.0	0.0	0.0	9.0	-3.5	45.7	0.0	0.0	0.0	9.0	-3.5	45.7	0.0	0.0	0.0	5.0	-2.2	35.3	0.0	0.0	0.0	4.8	-2.3	34.3	0.0	0.0	0.0
127	LC127 Max Wind, L, L Bl+, Z10 DE 0	-20	0.80	0	0	3496	0	0	9.0	0.0	39.9	0.0	0.0	0.0	9.0	0.0	39.9	0.0	0.0	0.0	9.0	0.0	39.9	0.0	0.0	0.0	5.0	0.0	31.8	0.0	0.0	0.0	4.8	0.0	30.0	0.0	0.0	0.0
128	LC128 Max Wind, L, L Bl-, Z10 DE 0	-20	0.80	0	0	-3496	0	0	9.0	0.0	39.9	0.0	0.0	0.0	9.0	0.0	39.9	0.0	0.0	0.0	9.0	0.0	39.9	0.0	0.0	0.0	5.0	0.0	31.8	0.0	0.0	0.0	4.8	0.0	30.0	0.0	0.0	0.0
129	LC129 Max Ice, L NA+, Z10 DE 0	-5	0.80	0	0	0	50	8825	40.4	0.0	154.4	0.0	0.0	0.0	40.4	0.0	154.4	0.0	0.0	0.0	40.4	0.0	154.4	0.0	0.0	0.0	32.7	0.0	132.8	0.0	0.0	0.0	33.2	0.0	133.5	0.0	0.0	0.0
130	LC130 Wind+Ice, L NA+, Z10 DE 0	-5	0.80	300	1080	0	25	8825	19.7	5.4	89.6	0.0	0.0	0.0	19.7	5.4	89.6	0.0	0.0	0.0	19.7	5.4	89.6	0.0	0.0	0.0	13.8	4.6	74.6	0.0	0.0	0.0	14.0	4.7	74.3	0.0	0.0	0.0
131	LC131 Wind+Ice, L NA-, Z10 DE 0	-5	0.80	-300	-1080	0	25	8825	19.7	-5.4	89.6	0.0	0.0	0.0	19.7	-5.4	89.6	0.0	0.0	0.0	19.7	-5.4	89.6	0.0	0.0	0.0	13.8	-4.6	74.6	0.0	0.0	0.0	14.0	-4.7	74.3	0.0	0.0	0.0
132	LC132 Maintenance, I NA+, Z10 DE 0	-30	0.50	45	162	0	0	0	11.0	0.3	45.9	0.0	0.0	0.0	11.0	0.3	45.9	0.0	0.0	0.0	11.0	0.3	45.9	0.0	0.0	0.0	7.0	0.2	35.2	0.0	0.0	0.0	6.8	0.2	34.1	0.0	0.0	0.0
133	LC133 Maintenance, I NA-, Z10 DE 0	-30	0.50	-45	-162	0	0	0	11.0	-0.3	45.9	0.0	0.0	0.0	11.0	-0.3	45.9	0.0	0.0	0.0	11.0	-0.3	45.9	0.0	0.0	0.0	7.0	-0.2	35.2	0.0	0.0	0.0	6.8	-0.2	34.1	0.0	0.0	0.0
134	LC134 BR 1, C NA+, Z10 DE 0	0	0.80	0	0	0	0	0	2.7	0.0	0.0	0.0	0.0	0.0	9.0	0.0	39.3	0.0	0.0	0.0	9.0	0.0	39.3	0.0	0.0	0.0	5.0	0.0	32.4	0.0	0.0	0.0	4.8	0.0	29.4	0.0	0.0	0.0
135	LC135 BR 2, C NA+, Z10 DE 0	0	0.80	0	0	0	0	0	9.0	0.0	39.3	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	9.0	0.0	39.3	0.0	0.0	0.0	5.0	0.0	32.4	0.0	0.0	0.0	4.8	0.0	29.4	0.0	0.0	0.0
136	LC136 BR 3, C NA+, Z10 DE 0	0	0.80	0	0	0	0	0	9.0	0.0	39.3	0.0	0.0	0.0	9.0	0.0	39.3	0.0	0.0	0.0	9.0	0.0	39.3	0.0	0.0	0.0	5.0	0.0	32.4	0.0	0.0	0.0	4.8	0.0	29.4	0.0	0.0	0.0
137	LC137 BR 4, C NA+, Z10 DE 0	0	0.80	0	0	0	0	0	9.0	0.0	39.3	0.0	0.0	0.0	9.0	0.0	39.3	0.0	0.0	0.0	9.0	0.0	39.3	0.0	0.0	0.0	5.0	0.0	32.4	0.0	0.0	0.						

206	LC206 Max Wind, L NA-, Z10 Angle 45 min	-20	0.80	-971	-1942	0	0	0	-1.1	16.2	56.3	-1.1	16.2	-56.3	-1.1	16.2	56.3	-1.1	16.2	-56.3	-1.1	16.2	-56.3	-2.9	12.7	41.8	-2.9	12.7	-41.8	-2.7	12.5	42.1	-2.7	12.5	-42.1			
207	LC207 Max Wind 45°, L Bl+, Z10 Angle 45 min	-20	0.80	687	1373	2472	0	0	-1.1	16.8	37.0	-1.1	26.0	-48.3	-1.1	16.8	37.0	-1.1	26.0	-48.3	-1.1	16.8	37.0	-1.1	26.0	-48.3	-2.9	13.0	29.4	-2.9	19.0	-36.5	-2.7	12.4	27.8	-2.7	19.2	-36.2
208	LC208 Max Wind 45°, L Bl-, Z10 Angle 45 min	-20	0.80	-687	-2472	-2472	0	0	-1.1	14.2	37.7	-1.1	15.6	-52.2	-1.1	14.2	37.7	-1.1	15.6	-52.2	-1.1	14.2	37.7	-1.1	15.6	-52.2	-2.9	11.6	29.9	-2.9	12.3	-39.1	-2.7	10.9	28.3	-2.7	12.0	-39.0
209	LC209 Max Wind, L, L Bl+, Z10 Angle 45 min	-20	0.80	0	0	3496	0	0	-1.1	14.7	37.7	-1.1	16.3	-37.0	-1.1	14.7	37.7	-1.1	16.3	-37.0	-1.1	14.7	37.7	-1.1	16.3	-37.0	-2.9	11.7	29.9	-2.9	12.8	-29.4	-2.7	11.0	28.3	-2.7	12.2	-27.8
210	LC210 Max Wind, L, L Bl-, Z10 Angle 45 min	-20	0.80	0	0	-3496	0	0	-1.1	16.3	37.0	-1.1	14.7	-37.7	-1.1	16.3	37.0	-1.1	14.7	-37.7	-1.1	16.3	37.0	-1.1	14.7	-37.7	-2.9	12.8	29.4	-2.9	11.7	-29.9	-2.7	12.2	27.8	-2.7	11.0	-28.3
211	LC211 Max ice, L NA+, Z10 Angle 45 min	-5	0.80	0	0	0	50	8825	-20.0	59.1	142.6	-20.0	59.1	-142.6	-20.0	59.1	142.6	-20.0	59.1	-142.6	-20.0	59.1	142.6	-20.0	59.1	-142.6	-19.6	50.8	122.7	-19.6	50.8	-122.7	-19.9	51.1	123.4	-19.9	51.1	-123.4
212	LC212 Wind+ice, L NA+, Z10 Angle 45 min	-5	0.80	300	1080	0	25	8825	-7.5	39.2	80.8	-7.5	39.2	-80.8	-7.5	39.2	80.8	-7.5	39.2	-80.8	-7.5	39.2	80.8	-7.5	39.2	-80.8	-8.2	32.8	67.1	-8.2	32.8	-67.1	-8.3	32.8	66.8	-8.3	32.8	-66.8
213	LC213 Wind+ice, L NA-, Z10 Angle 45 min	-5	0.80	-300	-1080	0	25	8825	-7.5	29.3	84.7	-7.5	29.3	-84.7	-7.5	29.3	84.7	-7.5	29.3	-84.7	-7.5	29.3	84.7	-7.5	29.3	-84.7	-8.2	24.3	70.6	-8.2	24.3	-70.6	-8.3	24.1	70.4	-8.3	24.1	-70.4
214	LC214 Maintenance, I NA+, Z10 Angle 45 min	-30	0.50	45	162	0	0	0	0.9	17.9	42.3	0.9	17.9	-42.3	0.9	17.9	42.3	0.9	17.9	-42.3	0.9	17.9	42.3	0.9	17.9	-42.3	-0.9	13.6	32.4	-0.9	13.6	-32.4	-0.7	13.2	31.4	-0.7	13.2	-31.4
215	LC215 Maintenance, I NA-, Z10 Angle 45 min	-30	0.50	-45	-162	0	0	0	0.9	17.3	42.5	0.9	17.3	-42.5	0.9	17.3	42.5	0.9	17.3	-42.5	0.9	17.3	42.5	0.9	17.3	-42.5	-0.9	13.3	32.6	-0.9	13.3	-32.6	-0.7	12.8	31.6	-0.7	12.8	-31.6
216	LC216 BR 1, C NA+, Z10 Angle 45 min	0	0.80	0	0	0	0	0	2.7	0.0	0.0	-1.1	15.0	-36.3	-1.1	15.0	36.3	-1.1	15.0	-36.3	-1.1	15.0	36.3	-1.1	15.0	-36.3	-2.9	12.4	30.0	-2.9	12.4	-30.0	-2.7	11.3	27.2	-2.7	11.3	-27.2
217	LC217 BR 2, C NA+, Z10 Angle 45 min	0	0.80	0	0	0	0	0	-1.1	15.0	36.3	-1.1	15.0	-36.3	2.7	0.0	0.0	-1.1	15.0	-36.3	-1.1	15.0	36.3	-1.1	15.0	-36.3	-2.9	12.4	30.0	-2.9	12.4	-30.0	-2.7	11.3	27.2	-2.7	11.3	-27.2
218	LC218 BR 3, C NA+, Z10 Angle 45 min	0	0.80	0	0	0	0	0	-1.1	15.0	36.3	-1.1	15.0	-36.3	-1.1	15.0	36.3	-1.1	15.0	-36.3	-1.1	15.0	36.3	-1.1	15.0	-36.3	-2.9	12.4	30.0	-2.9	12.4	-30.0	-2.7	11.3	27.2	-2.7	11.3	-27.2
219	LC219 BR 4, C NA+, Z10 Angle 45 min	0	0.80	0	0	0	0	0	-1.1	15.0	36.3	-1.1	15.0	-36.3	-1.1	15.0	36.3	-1.1	15.0	-36.3	-1.1	15.0	36.3	-1.1	15.0	-36.3	-2.9	12.4	30.0	-2.9	12.4	-30.0	0.1	0.0	0.0	-2.7	11.3	-27.2
220	LC220 BR 5, C NA+, Z10 Angle 45 min	0	0.80	0	0	0	0	0	-1.1	15.0	36.3	-1.1	15.0	-36.3	-1.1	15.0	36.3	-1.1	15.0	-36.3	-1.1	15.0	36.3	-1.1	15.0	-36.3	0.1	0.0	0.0	-2.9	12.4	-30.0	-2.7	11.3	27.2	-2.7	11.3	-27.2
221	LC221 BR 1, 5, C NA+, Z10 Angle 45 min	0	0.80	0	0	0	0	0	2.7	0.0	0.0	-1.1	15.0	-36.3	-1.1	15.0	36.3	-1.1	15.0	-36.3	-1.1	15.0	36.3	-1.1	15.0	-36.3	0.1	0.0	0.0	-2.9	12.4	-30.0	-2.7	11.3	27.2	-2.7	11.3	-27.2
222	LC222 BR 1, 2, 3, C NA+, Z10 Angle 45 min	0	0.80	0	0	0	0	0	2.7	0.0	0.0	-1.1	15.0	-36.3	2.7	0.0	0.0	-1.1	15.0	-36.3	2.7	0.0	0.0	-1.1	15.0	-36.3	-2.9	12.4	30.0	-2.9	12.4	-30.0	-2.7	11.3	27.2	-2.7	11.3	-27.2
223	LC223 BR 3, 4, C NA+, Z10 Angle 45 min	0	0.80	0	0	0	0	0	-1.1	15.0	36.3	-1.1	15.0	-36.3	-1.1	15.0	36.3	-1.1	15.0	-36.3	2.7	0.0	0.0	-1.1	15.0	-36.3	-2.9	12.4	30.0	-2.9	12.4	-30.0	0.1	0.0	0.0	-2.7	11.3	-27.2
224	LC224 BR 4, 5, C NA+, Z10 Angle 45 min	0	0.80	0	0	0	0	0	-1.1	15.0	36.3	-1.1	15.0	-36.3	-1.1	15.0	36.3	-1.1	15.0	-36.3	-1.1	15.0	36.3	-1.1	15.0	-36.3	0.1	0.0	0.0	-2.9	12.4	-30.0	0.1	0.0	0.0	-2.7	11.3	-27.2
225	LC225 BR ALL, C NA+, Z10 Angle 45 min	0	0.80	0	0	0	0	0	2.7	0.0	0.0	-1.1	15.0	-36.3	2.7	0.0	0.0	-1.1	15.0	-36.3	2.7	0.0	0.0	-1.1	15.0	-36.3	0.1	0.0	0.0	-2.9	12.4	-30.0	0.1	0.0	0.0	-2.7	11.3	-27.2
226	LC226 BR 1 D, 1, 2, 3, 4, 5, C NA+, Z10 Angle 45 min	0	1.00	0	0	0	0	0	2.7	0.0	0.0	-1.1	37.6	-90.8	2.7	0.0	0.0	-1.1	37.6	-90.8	2.7	0.0	0.0	-1.1	37.6	-90.8	0.1	0.0	0.0	-2.9	12.4	-30.0	0.1	0.0	0.0	-2.7	11.3	-27.2
227	LC227 BR 2 D, 1, 3, 4, 5, C NA+, Z10 Angle 45 min	0	1.00	0	0	0	0	0	2.7	0.0	0.0	-1.1	37.6	-90.8	2.7	0.0	0.0	-1.1	37.6	-90.8	2.7	0.0	0.0	-1.1	37.6	-90.8	0.1	0.0	0.0	-2.9	12.4	-30.0	0.1	0.0	0.0	-2.7	11.3	-27.2
228	LC228 BR 3 D, 1, 2, 4, 5, C NA+, Z10 Angle 45 min	0	1.00	0	0	0	0	0	2.7	0.0	0.0	-1.1	37.6	-90.8	2.7	0.0	0.0	-1.1	37.6	-90.8	2.7	0.0	0.0	-1.1	37.6	-90.8	0.1	0.0	0.0	-2.9	12.4	-30.0	0.1	0.0	0.0	-2.7	11.3	-27.2
229	LC229 BR 4 D, 1, 2, 3, 5, C NA+, Z10 Angle 45 min	0	1.00	0	0	0	0	0	2.7	0.0	0.0	-1.1	37.6	-90.8	2.7	0.0	0.0	-1.1	37.6	-90.8	2.7	0.0	0.0	-1.1	37.6	-90.8	0.1	0.0	0.0	-2.9	12.4	-30.0	0.1	0.0	0.0	-2.7	28.1	-67.9
230	LC230 BR 5 D, 1, 2, 3, 4, C NA+, Z10 Angle 45 min	0	1.00	0	0	0	0	0	2.7	0.0	0.0	-1.1	37.6	-90.8	2.7	0.0	0.0	-1.1	37.6	-90.8	2.7	0.0	0.0	-1.1	37.6	-90.8	0.1	0.0	0.0	-2.9	31.0	-74.9	0.1	0.0	0.0	-2.7	11.3	-27.2
231	LC231 UBL 1, L NA+, Z10 Angle 45 min	-5	0.80	0	0	0	50	8825	-20.0	59.1	142.6	-1.1	14.5	-35.1	-20.0	59.1	142.6	-20.0	59.1	-142.6	-20.0	59.1	142.6	-20.0	59.1	-142.6	-19.6	50.8	122.7	-19.6	50.8	-122.7	-19.9	51.1	123.4	-19.9	51.1	-123.4
232	LC232 UBL 2, L NA+, Z10 Angle 45 min	-5	0.80	0	0	0	50	8825	-20.0	59.1	142.6	-20.0	59.1	-142.6	-20.0	59.1	142.6	-1.1	14.5	-35.1	-20.0	59.1	142.6	-20.0	59.1	-142.6	-19.6	50.8	122.7	-19.6	50.8	-122.7	-19.9	51.1	123.4	-19.9	51.1	-123.4
233	LC233 UBL 3, L NA+, Z10 Angle 45 min	-5	0.80	0	0	0	50	8825	-20.0	59.1	142.6	-20.0	59.1	-142.6	-20.0	59.1	142.6	-20.0	59.1	-142.6	-20.0	59.1	142.6	-1.1	14.5	-35.1	-19.6	50.8	122.7	-19.6	50.8	-122.7	-19.9	51.1	123.4	-19.9	51.1	-123.4
234	LC234 UBL 4, L NA+, Z10 Angle 45 min	-5	0.80	0	0	0	50	8825	-20.0	59.1	142.6	-20.0	59.1	-142.6	-20.0	59.1	142.6	-20.0	59.1	-142.6	-20.0	59.1	142.6	-20.0	59.1	-142.6	-19.6	50.8	122.7	-19.6	50.8	-122.7	-19.9	51.1	123.4	-2.7	11.0	-26.6
235	LC235 UBL 5, L NA+, Z10 Angle 45 min	-5	0.80	0	0	0	50	8825	-20.0	59.1	142.6	-20.0	59.1	-142.6	-20.0	59.1	142.6	-20.0	59.1	-142.6	-20.0	59.1	142.6	-20.0	59.1	-142.6	-19.6	50.8	122.7	-2.9	11.7	-28.3	-19.9	51.1	123.4	-19.9	51.1	-123.4
236	LC236 UBL 1, 5, L NA+, Z10 Angle 45 min	-5	0.80	0	0	0	50	8825	-20.0	59.1	142.6	-1.1	14.5	-35.1	-20.0	59.1	142.6	-20.0	59.1	-142.6	-20.0	59.1	142.6	-20.0	59.1	-142.6	-19.6	50.8	122.7	-2.9	11.7	-28.3	-19.9	51.1	123.4	-19.9	51.1	-123.4
237	LC237 UBL 1, 2, 3, L NA+, Z10 Angle 45 min	-5	0.80	0	0	0	50	8825	-20.0	59.1	142.6	-1.1	14.5	-35.1	-20.0	59.1	142.6	-1.1	14.5	-35.1	-20.0	59.1	142.6	-1.1	14.5	-35.1	-19.6	50.8	122.7	-19.6	50.8	-122.7	-19.9	51.1	123.4	-19.9	51.1	-123.4
238	LC238 UBL 3, 4, L NA+, Z10 Angle 45 min	-5	0.80	0	0	0	50	8825	-20.0	59.1	142.6	-20.0	59.1	-142.6	-20.0	59.1	142.6	-20.0	59.1	-142.6	-20.0	59.1	142.6	-1.1	14.5	-35.1	-19.6	50.8	122.7	-19.6	50.8	-122.7	-19.9	51.1	123.4	-2.7	11.0	-26.6
239	LC239 UBL 4, 5, L NA+, Z10 Angle 45 min	-5	0.80	0	0	0	50	8825	-20.0	59.1	142.6	-20.0	59.1	-142.6	-20.0	59.1	142.6	-20.0	59.1	-142.6	-20.0	59.1	142.6	-20.0	59.1	-142.6	-19.6	50.8	122.7	-2.9	11.7	-28.3	-19.9	51.1	123.4	-2.7	11.0	-26.6
240	LC240 UBL 1, 2, 3, 4, 5, L NA+, Z10 Angle 45 min	-5	0.80	0	0	0	50	8825	-20.0	59.1	142.6	-1.1	14.5	-35.1	-20.0	59.1	142.6	-1.1	14.5	-35.1	-20.0	59.1	142.6	-1.1	14.5	-35.1	-19.6	50.8	122.7	-2.9	11.7	-28.3	-19.9	51.1	123.4	-2.7	11.0	-26.6
241	LC241 Extreme UBL 1, L NA+, Z10 Angle 45 min	-5	1.00	0																																		

311	LC311 UBL 3, 4, L NA+, Z10 DE 45	-5	0.80	0	0	0	50	8825	40.4	59.1	142.6	0.0	0.0	0.0	40.4	59.1	142.6	0.0	0.0	0.0	40.4	59.1	142.6	0.0	0.0	0.0	32.7	50.8	122.7	0.0	0.0	0.0	33.2	51.1	123.4	0.0	0.0	0.0
312	LC312 UBL 4, 5, L NA+, Z10 DE 45	-5	0.80	0	0	0	50	8825	40.4	59.1	142.6	0.0	0.0	0.0	40.4	59.1	142.6	0.0	0.0	0.0	40.4	59.1	142.6	0.0	0.0	0.0	32.7	50.8	122.7	0.0	0.0	0.0	33.2	51.1	123.4	0.0	0.0	0.0
313	LC313 Extreme UBL 1, L NA+, Z10 DE 45	-5	1.00	0	0	0	50	8825	40.4	59.1	142.6	0.0	0.0	0.0	40.4	59.1	142.6	0.0	0.0	0.0	40.4	59.1	142.6	0.0	0.0	0.0	32.7	50.8	122.7	0.0	0.0	0.0	33.2	51.1	123.4	0.0	0.0	0.0
314	LC314 Extreme UBL 2, L NA+, Z10 DE 45	-5	1.00	0	0	0	50	8825	40.4	59.1	142.6	0.0	0.0	0.0	40.4	59.1	142.6	0.0	0.0	0.0	40.4	59.1	142.6	0.0	0.0	0.0	32.7	50.8	122.7	0.0	0.0	0.0	33.2	51.1	123.4	0.0	0.0	0.0
315	LC315 Extreme UBL 3, L NA+, Z10 DE 45	-5	1.00	0	0	0	50	8825	40.4	59.1	142.6	0.0	0.0	0.0	40.4	59.1	142.6	0.0	0.0	0.0	40.4	59.1	142.6	0.0	0.0	0.0	32.7	50.8	122.7	0.0	0.0	0.0	33.2	51.1	123.4	0.0	0.0	0.0
316	LC316 Extreme UBL 4, L NA+, Z10 DE 45	-5	1.00	0	0	0	50	8825	40.4	59.1	142.6	0.0	0.0	0.0	40.4	59.1	142.6	0.0	0.0	0.0	40.4	59.1	142.6	0.0	0.0	0.0	32.7	50.8	122.7	0.0	0.0	0.0	33.2	51.1	123.4	0.0	0.0	0.0
317	LC317 Extreme UBL 5, L NA+, Z10 DE 45	-5	1.00	0	0	0	50	8825	40.4	59.1	142.6	0.0	0.0	0.0	40.4	59.1	142.6	0.0	0.0	0.0	40.4	59.1	142.6	0.0	0.0	0.0	32.7	50.8	122.7	0.0	0.0	0.0	33.2	51.1	123.4	0.0	0.0	0.0
318	LC318 EDT, C NA+, Z10 DE 45	0	0.80	0	0	0	0	0	9.0	15.0	36.3	0.0	0.0	0.0	9.0	15.0	36.3	0.0	0.0	0.0	9.0	15.0	36.3	0.0	0.0	0.0	5.0	12.4	30.0	0.0	0.0	0.0	4.8	11.3	27.2	0.0	0.0	0.0
319	LC319 Cold, I NA+, Z10 DE 45	-15	0.80	0	0	0	0	0	9.0	16.6	40.0	0.0	0.0	0.0	9.0	16.6	40.0	0.0	0.0	0.0	9.0	16.6	40.0	0.0	0.0	0.0	5.0	12.9	31.1	0.0	0.0	0.0	4.8	12.4	30.0	0.0	0.0	0.0
320	LC320 Max Wind, L NA+, Z11 DE 0	-20	0.80	1536	5530	0	0	0	0.0	0.0	0.0	7.5	8.3	60.5	0.0	0.0	0.0	7.5	8.3	60.5	0.0	0.0	0.0	7.5	8.3	60.5	0.0	0.0	0.0	3.8	5.2	43.7	0.0	0.0	0.0	3.7	5.6	46.2
321	LC321 Max Wind, L NA+, Z11 DE 0	-20	0.80	-1536	-5530	0	0	0	0.0	0.0	0.0	7.5	-8.3	60.5	0.0	0.0	0.0	7.5	-8.3	60.5	0.0	0.0	0.0	7.5	-8.3	60.5	0.0	0.0	0.0	3.8	-5.2	43.7	0.0	0.0	0.0	3.7	-5.6	46.2
322	LC322 Max Wind 45° L Bl+, Z11 DE 0	-20	0.80	1086	3910	3910	0	0	0.0	0.0	0.0	7.5	4.4	41.9	0.0	0.0	0.0	7.5	4.4	41.9	0.0	0.0	0.0	7.5	4.4	41.9	0.0	0.0	0.0	3.8	2.7	31.3	0.0	0.0	0.0	3.7	2.9	32.2
323	LC323 Max Wind 45° L Bl+, Z11 DE 0	-20	0.80	-1086	-3910	-3910	0	0	0.0	0.0	0.0	7.5	-4.4	41.9	0.0	0.0	0.0	7.5	-4.4	41.9	0.0	0.0	0.0	7.5	-4.4	41.9	0.0	0.0	0.0	3.8	-2.7	31.3	0.0	0.0	0.0	3.7	-2.9	32.2
324	LC324 Max Wind, L L Bl+, Z11 DE 0	-20	0.80	0	0	5530	0	0	0.0	0.0	0.0	7.5	0.0	32.1	0.0	0.0	0.0	7.5	0.0	32.1	0.0	0.0	0.0	7.5	0.0	32.1	0.0	0.0	0.0	3.8	0.0	24.7	0.0	0.0	0.0	3.7	0.0	24.3
325	LC325 Max Wind, L L Bl-, Z11 DE 0	-20	0.80	0	0	-5530	0	0	0.0	0.0	0.0	7.5	0.0	32.1	0.0	0.0	0.0	7.5	0.0	32.1	0.0	0.0	0.0	7.5	0.0	32.1	0.0	0.0	0.0	3.8	0.0	24.7	0.0	0.0	0.0	3.7	0.0	24.3
326	LC326 Max Ice, L NA+, Z11 DE 0	-5	0.80	0	0	0	75	8825	0.0	0.0	0.0	54.7	0.0	194.9	0.0	0.0	0.0	54.7	0.0	194.9	0.0	0.0	0.0	54.7	0.0	194.9	0.0	0.0	0.0	46.8	0.0	171.4	0.0	0.0	0.0	47.4	0.0	174.7
327	LC327 Wind+Ice, L NA+, Z11 DE 0	-5	0.80	309	1112	0	45	8825	0.0	0.0	0.0	27.6	6.3	117.3	0.0	0.0	0.0	27.6	6.3	117.3	0.0	0.0	0.0	27.6	6.3	117.3	0.0	0.0	0.0	21.4	5.7	100.6	0.0	0.0	0.0	21.7	5.8	102.6
328	LC328 Wind+Ice, L NA-, Z11 DE 0	-5	0.80	-309	-1112	0	45	8825	0.0	0.0	0.0	27.6	-6.3	117.3	0.0	0.0	0.0	27.6	-6.3	117.3	0.0	0.0	0.0	27.6	-6.3	117.3	0.0	0.0	0.0	21.4	-5.7	100.6	0.0	0.0	0.0	21.7	-5.8	102.6
329	LC329 Maintenance, I NA+, Z11 DE 0	-30	0.50	45	162	0	0	0	0.0	0.0	0.0	9.5	0.2	42.1	0.0	0.0	0.0	9.5	0.2	42.1	0.0	0.0	0.0	9.5	0.2	42.1	0.0	0.0	0.0	5.8	0.2	32.0	0.0	0.0	0.0	5.7	0.2	31.1
330	LC330 Maintenance, I NA-, Z11 DE 0	-30	0.50	-45	-162	0	0	0	0.0	0.0	0.0	9.5	-0.2	42.1	0.0	0.0	0.0	9.5	-0.2	42.1	0.0	0.0	0.0	9.5	-0.2	42.1	0.0	0.0	0.0	5.8	-0.2	32.0	0.0	0.0	0.0	5.7	-0.2	31.1
331	LC331 BR 1, C NA+, Z11 DE 0	0	0.80	0	0	0	0	0	0.0	0.0	0.0	7.5	0.0	34.6	0.0	0.0	0.0	7.5	0.0	34.6	0.0	0.0	0.0	7.5	0.0	34.6	0.0	0.0	0.0	3.8	0.0	28.8	0.0	0.0	0.0	3.7	0.0	25.8
332	LC332 BR 2, C NA+, Z11 DE 0	0	0.80	0	0	0	0	0	0.0	0.0	0.0	7.5	0.0	34.6	0.0	0.0	0.0	7.5	0.0	34.6	0.0	0.0	0.0	7.5	0.0	34.6	0.0	0.0	0.0	3.8	0.0	28.8	0.0	0.0	0.0	3.7	0.0	25.8
333	LC333 BR 3, C NA+, Z11 DE 0	0	0.80	0	0	0	0	0	0.0	0.0	0.0	7.5	0.0	34.6	0.0	0.0	0.0	7.5	0.0	34.6	0.0	0.0	0.0	7.5	0.0	34.6	0.0	0.0	0.0	3.8	0.0	28.8	0.0	0.0	0.0	3.7	0.0	25.8
334	LC334 BR 4, C NA+, Z11 DE 0	0	0.80	0	0	0	0	0	0.0	0.0	0.0	7.5	0.0	34.6	0.0	0.0	0.0	7.5	0.0	34.6	0.0	0.0	0.0	7.5	0.0	34.6	0.0	0.0	0.0	3.8	0.0	28.8	0.0	0.0	0.0	3.7	0.0	25.8
335	LC335 BR 5, C NA+, Z11 DE 0	0	0.80	0	0	0	0	0	0.0	0.0	0.0	7.5	0.0	34.6	0.0	0.0	0.0	7.5	0.0	34.6	0.0	0.0	0.0	7.5	0.0	34.6	0.0	0.0	0.0	3.8	0.0	28.8	0.0	0.0	0.0	3.7	0.0	25.8
336	LC336 BR 1, 5, C NA+, Z11 DE 0	0	0.80	0	0	0	0	0	0.0	0.0	0.0	7.5	0.0	34.6	0.0	0.0	0.0	7.5	0.0	34.6	0.0	0.0	0.0	7.5	0.0	34.6	0.0	0.0	0.0	3.8	0.0	28.8	0.0	0.0	0.0	3.7	0.0	25.8
337	LC337 BR 1, 2, 3, C NA+, Z11 DE 0	0	0.80	0	0	0	0	0	0.0	0.0	0.0	7.5	0.0	34.6	0.0	0.0	0.0	7.5	0.0	34.6	0.0	0.0	0.0	7.5	0.0	34.6	0.0	0.0	0.0	3.8	0.0	28.8	0.0	0.0	0.0	3.7	0.0	25.8
338	LC338 BR 3, 4, C NA+, Z11 DE 0	0	0.80	0	0	0	0	0	0.0	0.0	0.0	7.5	0.0	34.6	0.0	0.0	0.0	7.5	0.0	34.6	0.0	0.0	0.0	7.5	0.0	34.6	0.0	0.0	0.0	3.8	0.0	28.8	0.0	0.0	0.0	3.7	0.0	25.8
339	LC339 BR 4, 5, C NA+, Z11 DE 0	0	0.80	0	0	0	0	0	0.0	0.0	0.0	7.5	0.0	34.6	0.0	0.0	0.0	7.5	0.0	34.6	0.0	0.0	0.0	7.5	0.0	34.6	0.0	0.0	0.0	3.8	0.0	28.8	0.0	0.0	0.0	3.7	0.0	25.8
340	LC340 UBL 1, L NA+, Z11 DE 0	-5	0.80	0	0	0	75	8825	0.0	0.0	0.0	7.5	0.0	31.0	0.0	0.0	0.0	54.7	0.0	194.9	0.0	0.0	0.0	54.7	0.0	194.9	0.0	0.0	0.0	46.8	0.0	171.4	0.0	0.0	0.0	47.4	0.0	174.7
341	LC341 UBL 2, L NA+, Z11 DE 0	-5	0.80	0	0	0	75	8825	0.0	0.0	0.0	54.7	0.0	194.9	0.0	0.0	0.0	7.5	0.0	31.0	0.0	0.0	0.0	54.7	0.0	194.9	0.0	0.0	0.0	46.8	0.0	171.4	0.0	0.0	0.0	47.4	0.0	174.7
342	LC342 UBL 3, L NA+, Z11 DE 0	-5	0.80	0	0	0	75	8825	0.0	0.0	0.0	54.7	0.0	194.9	0.0	0.0	0.0	54.7	0.0	194.9	0.0	0.0	0.0	54.7	0.0	194.9	0.0	0.0	0.0	46.8	0.0	171.4	0.0	0.0	0.0	47.4	0.0	174.7
343	LC343 UBL 4, L NA+, Z11 DE 0	-5	0.80	0	0	0	75	8825	0.0	0.0	0.0	54.7	0.0	194.9	0.0	0.0	0.0	54.7	0.0	194.9	0.0	0.0	0.0	54.7	0.0	194.9	0.0	0.0	0.0	46.8	0.0	171.4	0.0	0.0	0.0	3.7	0.0	23.2
344	LC344 UBL 5, L NA+, Z11 DE 0	-5	0.80	0	0	0	75	8825	0.0	0.0	0.0	54.7	0.0	194.9	0.0	0.0	0.0	54.7	0.0	194.9	0.0	0.0	0.0	54.7	0.0	194.9	0.0	0.0	0.0	3.8	0.0	23.8	0.0	0.0	0.0	47.4	0.0	174.7
345	LC345 UBL 1, 5, L NA+, Z11 DE 0	-5	0.80	0	0	0	75	8825	0.0	0.0	0.0	7.5	0.0	31.0	0.0	0.0	0.0	54.7	0.0	194.9	0.0	0.0	0.0	54.7	0.0	194.9	0.0	0.0	0.0	3.8	0.0	23.8	0.0	0.0	0.0	47.4	0.0	174.7
346	LC346 UBL 1, 2, 3, L NA+, Z11 DE 0	-5	0.80	0	0	0	75	8825	0.0	0.0	0.0	7.5	0.0	31.0	0.0	0.0	0.0	7.5	0.0	31.0	0.0	0.0	0.0	7.5	0.0	31.0	0.0	0.0	0.0	46.8	0.0	171.4	0.0	0.0	0.0	47.4	0.0	174.7
347	LC347 UBL 3, 4, L NA+, Z11 DE 0	-5	0.80	0	0	0	75	8825	0.0	0.0	0.0	54.7	0.0	194.9	0.0	0.0	0.0	54.7	0.0	194.9	0.0	0.0	0.0	54.7	0.0	194.9	0.0											

416	LC416 BR 1 D, 2, 3, 4, 5, C NA+, Z11 Angle 45	0	1.00	0	0	0	0	0	2.7	0.0	0.0	8.7	33.1	79.8	2.7	0.0	0.0	8.7	13.2	31.9	2.7	0.0	0.0	8.7	13.2	31.9	0.1	0.0	0.0	4.7	11.0	26.6	0.1	0.0	0.0	4.6	9.9	23.9	
417	LC417 BR 2 D, 1, 3, 4, 5, C NA+, Z11 Angle 45	0	1.00	0	0	0	0	0	2.7	0.0	0.0	8.7	13.2	31.9	2.7	0.0	0.0	8.7	13.2	31.9	2.7	0.0	0.0	8.7	13.2	31.9	0.1	0.0	0.0	4.7	11.0	26.6	0.1	0.0	0.0	4.6	9.9	23.9	
418	LC418 BR 3 D, 1, 2, 4, 5, C NA+, Z11 Angle 45	0	1.00	0	0	0	0	0	2.7	0.0	0.0	8.7	13.2	31.9	2.7	0.0	0.0	8.7	13.2	31.9	2.7	0.0	0.0	8.7	13.2	31.9	0.1	0.0	0.0	4.7	11.0	26.6	0.1	0.0	0.0	4.6	9.9	23.9	
419	LC419 BR 4 D, 1, 2, 3, 5, C NA+, Z11 Angle 45	0	1.00	0	0	0	0	0	2.7	0.0	0.0	8.7	13.2	31.9	2.7	0.0	0.0	8.7	13.2	31.9	2.7	0.0	0.0	8.7	13.2	31.9	0.1	0.0	0.0	4.7	11.0	26.6	0.1	0.0	0.0	4.6	24.7	59.7	
420	LC420 BR 5 D, 1, 2, 3, 4, C NA+, Z11 Angle 45	0	1.00	0	0	0	0	0	2.7	0.0	0.0	8.7	13.2	31.9	2.7	0.0	0.0	8.7	13.2	31.9	2.7	0.0	0.0	8.7	13.2	31.9	0.1	0.0	0.0	4.7	27.6	66.6	0.1	0.0	0.0	4.6	9.9	23.9	
421	LC421 UBL 1, L NA+, Z11 Angle 45	-5	0.80	0	0	0	75	8825	67.6	74.6	-180.1	67.6	11.9	28.7	67.6	74.6	-180.1	67.6	74.6	180.1	67.6	74.6	-180.1	67.6	74.6	180.1	58.4	65.6	-158.3	58.4	65.6	158.3	59.1	66.8	-161.4	59.1	66.8	161.4	
422	LC422 UBL 2, L NA+, Z11 Angle 45	-5	0.80	0	0	0	75	8825	67.6	74.6	-180.1	67.6	11.9	28.7	67.6	74.6	-180.1	67.6	74.6	180.1	67.6	74.6	-180.1	67.6	74.6	180.1	58.4	65.6	-158.3	58.4	65.6	158.3	59.1	66.8	-161.4	59.1	66.8	161.4	
423	LC423 UBL 3, L NA+, Z11 Angle 45	-5	0.80	0	0	0	75	8825	67.6	74.6	-180.1	67.6	74.6	180.1	67.6	74.6	-180.1	67.6	74.6	180.1	67.6	74.6	-180.1	67.6	74.6	180.1	58.4	65.6	-158.3	58.4	65.6	158.3	59.1	66.8	-161.4	59.1	66.8	161.4	
424	LC424 UBL 4, L NA+, Z11 Angle 45	-5	0.80	0	0	0	75	8825	67.6	74.6	-180.1	67.6	74.6	180.1	67.6	74.6	-180.1	67.6	74.6	180.1	67.6	74.6	-180.1	67.6	74.6	180.1	58.4	65.6	-158.3	58.4	65.6	158.3	59.1	66.8	-161.4	4.6	8.9	21.5	
425	LC425 UBL 5, L NA+, Z11 Angle 45	-5	0.80	0	0	0	75	8825	67.6	74.6	-180.1	67.6	74.6	180.1	67.6	74.6	-180.1	67.6	74.6	180.1	67.6	74.6	-180.1	67.6	74.6	180.1	58.4	65.6	-158.3	4.7	9.1	22.0	59.1	66.8	-161.4	59.1	66.8	161.4	
426	LC426 UBL 1, 5, L NA+, Z11 Angle 45	-5	0.80	0	0	0	75	8825	67.6	74.6	-180.1	8.7	11.9	28.7	67.6	74.6	-180.1	67.6	74.6	180.1	67.6	74.6	-180.1	67.6	74.6	180.1	58.4	65.6	-158.3	4.7	9.1	22.0	59.1	66.8	-161.4	59.1	66.8	161.4	
427	LC427 UBL 1, 2, 3, L NA+, Z11 Angle 45	-5	0.80	0	0	0	75	8825	67.6	74.6	-180.1	8.7	11.9	28.7	67.6	74.6	-180.1	8.7	11.9	28.7	67.6	74.6	-180.1	8.7	11.9	28.7	58.4	65.6	-158.3	58.4	65.6	158.3	59.1	66.8	-161.4	59.1	66.8	161.4	
428	LC428 UBL 3, 4, L NA+, Z11 Angle 45	-5	0.80	0	0	0	75	8825	67.6	74.6	-180.1	67.6	74.6	180.1	67.6	74.6	-180.1	67.6	74.6	180.1	67.6	74.6	-180.1	67.6	74.6	180.1	58.4	65.6	-158.3	58.4	65.6	158.3	59.1	66.8	-161.4	4.6	8.9	21.5	
429	LC429 UBL 4, 5, L NA+, Z11 Angle 45	-5	0.80	0	0	0	75	8825	67.6	74.6	-180.1	67.6	74.6	180.1	67.6	74.6	-180.1	67.6	74.6	180.1	67.6	74.6	-180.1	67.6	74.6	180.1	58.4	65.6	-158.3	4.7	9.1	22.0	59.1	66.8	-161.4	4.6	8.9	21.5	
430	LC430 UBL 1, 2, 3, 4, 5, L NA+, Z11 Angle 45	-5	0.80	0	0	0	75	8825	67.6	74.6	-180.1	8.7	11.9	28.7	67.6	74.6	-180.1	8.7	11.9	28.7	67.6	74.6	-180.1	8.7	11.9	28.7	58.4	65.6	-158.3	4.7	9.1	22.0	59.1	66.8	-161.4	4.6	8.9	21.5	
431	LC431 Extreme UBL 1, L NA+, Z11 Angle 45	-5	1.00	0	0	0	75	8825	67.6	74.6	-180.1	2.7	0.0	0.0	67.6	74.6	-180.1	67.6	74.6	180.1	67.6	74.6	-180.1	67.6	74.6	180.1	58.4	65.6	-158.3	58.4	65.6	158.3	59.1	66.8	-161.4	59.1	66.8	161.4	
432	LC432 Extreme UBL 2, L NA+, Z11 Angle 45	-5	1.00	0	0	0	75	8825	67.6	74.6	-180.1	67.6	74.6	180.1	67.6	74.6	-180.1	2.7	0.0	0.0	67.6	74.6	-180.1	67.6	74.6	180.1	58.4	65.6	-158.3	58.4	65.6	158.3	59.1	66.8	-161.4	59.1	66.8	161.4	
433	LC433 Extreme UBL 3, L NA+, Z11 Angle 45	-5	1.00	0	0	0	75	8825	67.6	74.6	-180.1	67.6	74.6	180.1	67.6	74.6	-180.1	67.6	74.6	180.1	67.6	74.6	-180.1	67.6	74.6	180.1	58.4	65.6	-158.3	58.4	65.6	158.3	59.1	66.8	-161.4	59.1	66.8	161.4	
434	LC434 Extreme UBL 4, L NA+, Z11 Angle 45	-5	1.00	0	0	0	75	8825	67.6	74.6	-180.1	67.6	74.6	180.1	67.6	74.6	-180.1	67.6	74.6	180.1	67.6	74.6	-180.1	2.7	0.0	0.0	58.4	65.6	-158.3	58.4	65.6	158.3	59.1	66.8	-161.4	59.1	66.8	161.4	
435	LC435 Extreme UBL 5, L NA+, Z11 Angle 45	-5	1.00	0	0	0	75	8825	67.6	74.6	-180.1	67.6	74.6	180.1	67.6	74.6	-180.1	67.6	74.6	180.1	67.6	74.6	-180.1	67.6	74.6	180.1	58.4	65.6	-158.3	0.1	0.0	0.0	59.1	66.8	-161.4	59.1	66.8	161.4	
436	LC436 EDT, C NA+, Z11 Angle 45	0	0.80	0	0	0	0	0	8.7	13.2	-31.9	8.7	13.2	31.9	8.7	13.2	-31.9	8.7	13.2	31.9	8.7	13.2	-31.9	8.7	13.2	31.9	4.7	11.0	-26.6	4.7	11.0	26.6	4.6	9.9	-23.9	4.6	9.9	23.9	
437	LC437 Cold, I NA+, Z11 Angle 45	-15	0.80	0	0	0	0	0	8.7	14.9	-36.0	8.7	14.9	36.0	8.7	14.9	-36.0	8.7	14.9	36.0	8.7	14.9	-36.0	8.7	14.9	36.0	4.7	11.6	-28.0	4.7	11.6	28.0	4.6	11.2	-27.0	4.6	11.2	27.0	
438	LC438 Max Wind, L NA+, Z11 Angle 45 min	-20	0.80	1536	5530	0	0	0	-0.3	30.9	-53.1	-0.3	30.9	53.1	-0.3	30.9	-53.1	-0.3	30.9	53.1	-0.3	30.9	-53.1	-0.3	30.9	53.1	-2.2	21.6	-38.5	-2.2	21.6	38.5	-2.1	22.9	-40.7	-2.1	22.9	40.7	
439	LC439 Max Wind, L NA-, Z11 Angle 45 min	-20	0.80	-1536	-5530	0	0	0	-0.3	15.4	-58.7	-0.3	15.4	58.7	-0.3	15.4	-58.7	-0.3	15.4	58.7	-0.3	15.4	-58.7	-0.3	15.4	58.7	-2.2	11.9	-42.3	-2.2	11.9	42.3	-2.1	12.5	-44.7	-2.1	12.5	44.7	
440	LC440 Max Wind 45°, L Bl+, Z11 Angle 45 min	-20	0.80	1086	3910	3910	0	0	-0.3	27.5	-48.4	-0.3	14.4	30.2	-0.3	27.5	-48.4	-0.3	14.4	30.2	-0.3	27.5	-48.4	-0.3	14.4	30.2	-2.2	19.4	-35.3	-2.2	10.6	23.2	-2.1	20.5	-37.1	-2.1	10.6	22.9	
441	LC441 Max Wind 45°, L Bl-, Z11 Angle 45 min	-20	0.80	-1086	-3910	-3910	0	0	-0.3	14.6	-53.1	-0.3	11.0	31.0	-0.3	14.6	-53.1	-0.3	11.0	31.0	-0.3	14.6	-53.1	-0.3	11.0	31.0	-2.2	11.2	-38.5	-2.2	8.8	23.7	-2.1	11.7	-40.5	-2.1	8.7	23.5	
442	LC442 Max Wind, L, L Bl+, Z11 Angle 45 min	-20	0.80	0	0	5530	0	0	-0.3	13.7	-30.2	-0.3	11.7	31.0	-0.3	13.7	-30.2	-0.3	11.7	31.0	-0.3	13.7	-30.2	-0.3	11.7	31.0	-2.2	10.4	-23.2	-2.2	9.1	23.7	-2.1	10.3	-22.9	-2.1	8.9	23.5	
443	LC443 Max Wind, L, L Bl-, Z11 Angle 45 min	-20	0.80	0	0	-5530	0	0	-0.3	11.7	-31.0	-0.3	13.7	30.2	-0.3	11.7	-31.0	-0.3	13.7	30.2	-0.3	11.7	-31.0	-0.3	13.7	30.2	-2.2	9.1	-23.7	-2.2	10.4	23.2	-2.1	8.9	-23.5	-2.1	10.3	22.9	
444	LC444 Max Ice, L NA+, Z11 Angle 45 min	-5	0.80	0	0	0	75	8825	-29.8	74.6	-180.1	-29.8	74.6	180.1	-29.8	74.6	-180.1	-29.8	74.6	180.1	-29.8	74.6	-180.1	-29.8	74.6	180.1	-29.2	65.6	-158.3	-29.2	65.6	158.3	-29.6	66.8	-161.4	-29.6	66.8	161.4	
445	LC445 Wind+Ice, L NA+, Z11 Angle 45 min	-5	0.80	309	1112	0	45	8825	-12.8	50.7	-106.0	-12.8	50.7	106.0	-12.8	50.7	-106.0	-12.8	50.7	106.0	-12.8	50.7	-106.0	-12.8	50.7	106.0	-13.3	43.8	-90.8	-13.3	43.8	90.8	-13.4	44.6	-92.6	-13.4	44.6	92.6	
446	LC446 Wind+Ice, L NA-, Z11 Angle 45 min	-5	0.80	-309	-1112	0	45	8825	-12.8	39.0	-110.7	-12.8	39.0	110.7	-12.8	39.0	-110.7	-12.8	39.0	110.7	-12.8	39.0	-110.7	-12.8	39.0	110.7	-13.3	33.2	-95.1	-13.3	33.2	95.1	-13.4	33.9	-97.0	-13.4	33.9	97.0	
447	LC447 Maintenance, I NA+, Z11 Angle 45 min	-30	0.50	45	162	0	0	0	1.8	16.3	-38.8	1.8	16.3	38.8	1.8	16.3	-38.8	1.8	16.3	38.8	1.8	16.3	-38.8	1.8	16.3	38.8	-0.2	12.4	-29.5	-0.2	12.4	29.5	-0.1	12.1	-28.7	-0.1	12.1	28.7	
448	LC448 Maintenance, I NA-, Z11 Angle 45 min	-30	0.50	-45	-162	0	0	0	1.8	15.9	-38.9	1.8	15.9	38.9	1.8	15.9	-38.9	1.8	15.9	38.9	1.8	15.9	-38.9	1.8	15.9	38.9	-0.2	12.1	-29.7	-0.2	12.1	29.7	-0.1	11.8	-28.8	-0.1	11.8	28.8	
449	LC449 BR 1, C NA+, Z11 Angle 45 min	0	0.80	0	0	0	0	0	2.7	0.0	0.0	-0.3	13.2	31.9	0.0	-0.3	13.2	-31.9	-0.3	13.2	31.9	-0.3	13.2	-31.9	-0.3	13.2	31.9	-2.2	11.0	-26.6	-2.2	11.0	26.6	-2.1	9.9	-23.9	-2.1	9.9	23.9
450	LC450 BR 2, C NA+, Z11 Angle 45 min	0	0.80	0	0	0	0	0	-0.3	13.2	-31.9	-0.3	13.2	31.9	2.7	0.0	-0.3	13.2	-31.9	-0.3	13.2	31.9	-0.3	13.2	-31.9	-0.3													

521	LC521 Max Wind, L, L Bl+, Z11 DE 45 min	-20	0.80	0	0	5530	0	0	0.0	0.0	0.0	0.1	11.7	31.0	0.0	0.0	0.0	0.1	11.7	31.0	0.0	0.0	0.0	0.1	11.7	31.0	0.0	0.0	0.0	-2.0	9.1	23.7	0.0	0.0	0.0	-1.9	8.9	23.5
522	LC522 Max Wind, L, L Bl-, Z11 DE 45 min	-20	0.80	0	0	-5530	0	0	0.0	0.0	0.0	0.1	13.7	30.2	0.0	0.0	0.0	0.1	13.7	30.2	0.0	0.0	0.0	0.1	13.7	30.2	0.0	0.0	0.0	-2.0	10.4	23.2	0.0	0.0	0.0	-1.9	10.3	22.9
523	LC523 Max ice, L NA+, Z11 DE 45 min	-5	0.80	0	0	0	75	8825	0.0	0.0	0.0	-26.2	74.6	180.1	0.0	0.0	0.0	-26.2	74.6	180.1	0.0	0.0	0.0	-26.2	74.6	180.1	0.0	0.0	0.0	-25.9	65.6	158.3	0.0	0.0	0.0	-26.2	66.8	161.4
524	LC524 Wind+ice, L NA+, Z11 DE 45 min	-5	0.80	309	1112	0	45	8825	0.0	0.0	0.0	-11.1	50.7	106.0	0.0	0.0	0.0	-11.1	50.7	106.0	0.0	0.0	0.0	-11.1	50.7	106.0	0.0	0.0	0.0	-11.8	43.8	90.8	0.0	0.0	0.0	-11.9	44.6	92.6
525	LC525 Wind+ice, L NA-, Z11 DE 45 min	-5	0.80	-309	-1112	0	45	8825	0.0	0.0	0.0	-11.1	39.0	110.7	0.0	0.0	0.0	-11.1	39.0	110.7	0.0	0.0	0.0	-11.1	39.0	110.7	0.0	0.0	0.0	-11.8	33.2	95.1	0.0	0.0	0.0	-11.9	33.9	97.0
526	LC526 Maintenance, I NA+, Z11 DE 45 min	-30	0.50	45	162	0	0	0	0.0	0.0	0.0	2.1	16.3	38.8	0.0	0.0	0.0	2.1	16.3	38.8	0.0	0.0	0.0	2.1	16.3	38.8	0.0	0.0	0.0	0.0	12.4	29.5	0.0	0.0	0.0	0.1	12.1	28.7
527	LC527 Maintenance, I NA-, Z11 DE 45 min	-30	0.50	-45	-162	0	0	0	0.0	0.0	0.0	2.1	15.9	38.9	0.0	0.0	0.0	2.1	15.9	38.9	0.0	0.0	0.0	2.1	15.9	38.9	0.0	0.0	0.0	0.0	12.1	29.7	0.0	0.0	0.0	0.1	11.8	28.8
528	LC528 BR 1, C NA+, Z11 DE 45 min	0	0.80	0	0	0	0	0	0.0	0.0	0.0	0.1	13.2	31.9	0.0	0.0	0.0	0.1	13.2	31.9	0.0	0.0	0.0	0.1	13.2	31.9	0.0	0.0	0.0	-2.0	11.0	26.6	0.0	0.0	0.0	-1.9	9.9	23.9
529	LC529 BR 2, C NA+, Z11 DE 45 min	0	0.80	0	0	0	0	0	0.0	0.0	0.0	0.1	13.2	31.9	0.0	0.0	0.0	0.1	13.2	31.9	0.0	0.0	0.0	0.1	13.2	31.9	0.0	0.0	0.0	-2.0	11.0	26.6	0.0	0.0	0.0	-1.9	9.9	23.9
530	LC530 BR 3, C NA+, Z11 DE 45 min	0	0.80	0	0	0	0	0	0.0	0.0	0.0	0.1	13.2	31.9	0.0	0.0	0.0	0.1	13.2	31.9	0.0	0.0	0.0	0.1	13.2	31.9	0.0	0.0	0.0	-2.0	11.0	26.6	0.0	0.0	0.0	-1.9	9.9	23.9
531	LC531 BR 4, C NA+, Z11 DE 45 min	0	0.80	0	0	0	0	0	0.0	0.0	0.0	0.1	13.2	31.9	0.0	0.0	0.0	0.1	13.2	31.9	0.0	0.0	0.0	0.1	13.2	31.9	0.0	0.0	0.0	-2.0	11.0	26.6	0.0	0.0	0.0	-1.9	9.9	23.9
532	LC532 BR 5, C NA+, Z11 DE 45 min	0	0.80	0	0	0	0	0	0.0	0.0	0.0	0.1	13.2	31.9	0.0	0.0	0.0	0.1	13.2	31.9	0.0	0.0	0.0	0.1	13.2	31.9	0.0	0.0	0.0	-2.0	11.0	26.6	0.0	0.0	0.0	-1.9	9.9	23.9
533	LC533 BR 1, 5, C NA+, Z11 DE 45 min	0	0.80	0	0	0	0	0	0.0	0.0	0.0	0.1	13.2	31.9	0.0	0.0	0.0	0.1	13.2	31.9	0.0	0.0	0.0	0.1	13.2	31.9	0.0	0.0	0.0	-2.0	11.0	26.6	0.0	0.0	0.0	-1.9	9.9	23.9
534	LC534 BR 1, 2, 3, C NA+, Z11 DE 45 min	0	0.80	0	0	0	0	0	0.0	0.0	0.0	0.1	13.2	31.9	0.0	0.0	0.0	0.1	13.2	31.9	0.0	0.0	0.0	0.1	13.2	31.9	0.0	0.0	0.0	-2.0	11.0	26.6	0.0	0.0	0.0	-1.9	9.9	23.9
535	LC535 BR 3, 4, C NA+, Z11 DE 45 min	0	0.80	0	0	0	0	0	0.0	0.0	0.0	0.1	13.2	31.9	0.0	0.0	0.0	0.1	13.2	31.9	0.0	0.0	0.0	0.1	13.2	31.9	0.0	0.0	0.0	-2.0	11.0	26.6	0.0	0.0	0.0	-1.9	9.9	23.9
536	LC536 BR 4, 5, C NA+, Z11 DE 45 min	0	0.80	0	0	0	0	0	0.0	0.0	0.0	0.1	13.2	31.9	0.0	0.0	0.0	0.1	13.2	31.9	0.0	0.0	0.0	0.1	13.2	31.9	0.0	0.0	0.0	-2.0	11.0	26.6	0.0	0.0	0.0	-1.9	9.9	23.9
537	LC537 UBL 1, L NA+, Z11 DE 45 min	-5	0.80	0	0	0	75	8825	0.0	0.0	0.0	0.1	11.9	28.7	0.0	0.0	0.0	-26.2	74.6	180.1	0.0	0.0	0.0	-26.2	74.6	180.1	0.0	0.0	0.0	-25.9	65.6	158.3	0.0	0.0	0.0	-26.2	66.8	161.4
538	LC538 UBL 2, L NA+, Z11 DE 45 min	-5	0.80	0	0	0	75	8825	0.0	0.0	0.0	0.1	11.9	28.7	0.0	0.0	0.0	0.1	11.9	28.7	0.0	0.0	0.0	-26.2	74.6	180.1	0.0	0.0	0.0	-25.9	65.6	158.3	0.0	0.0	0.0	-26.2	66.8	161.4
539	LC539 UBL 3, L NA+, Z11 DE 45 min	-5	0.80	0	0	0	75	8825	0.0	0.0	0.0	0.1	11.9	28.7	0.0	0.0	0.0	-26.2	74.6	180.1	0.0	0.0	0.0	0.1	11.9	28.7	0.0	0.0	0.0	-25.9	65.6	158.3	0.0	0.0	0.0	-26.2	66.8	161.4
540	LC540 UBL 4, L NA+, Z11 DE 45 min	-5	0.80	0	0	0	75	8825	0.0	0.0	0.0	0.1	11.9	28.7	0.0	0.0	0.0	-26.2	74.6	180.1	0.0	0.0	0.0	0.1	11.9	28.7	0.0	0.0	0.0	-25.9	65.6	158.3	0.0	0.0	0.0	-1.9	8.9	21.5
541	LC541 UBL 5, L NA+, Z11 DE 45 min	-5	0.80	0	0	0	75	8825	0.0	0.0	0.0	0.1	11.9	28.7	0.0	0.0	0.0	-26.2	74.6	180.1	0.0	0.0	0.0	0.1	11.9	28.7	0.0	0.0	0.0	-2.0	9.1	22.0	0.0	0.0	0.0	-26.2	66.8	161.4
542	LC542 UBL 1, 5, L NA+, Z11 DE 45 min	-5	0.80	0	0	0	75	8825	0.0	0.0	0.0	0.1	11.9	28.7	0.0	0.0	0.0	-26.2	74.6	180.1	0.0	0.0	0.0	-26.2	74.6	180.1	0.0	0.0	0.0	-2.0	9.1	22.0	0.0	0.0	0.0	-26.2	66.8	161.4
543	LC543 UBL 1, 2, 3, L NA+, Z11 DE 45 min	-5	0.80	0	0	0	75	8825	0.0	0.0	0.0	0.1	11.9	28.7	0.0	0.0	0.0	0.1	11.9	28.7	0.0	0.0	0.0	0.1	11.9	28.7	0.0	0.0	0.0	-25.9	65.6	158.3	0.0	0.0	0.0	-26.2	66.8	161.4
544	LC544 UBL 3, 4, L NA+, Z11 DE 45 min	-5	0.80	0	0	0	75	8825	0.0	0.0	0.0	0.1	11.9	28.7	0.0	0.0	0.0	-26.2	74.6	180.1	0.0	0.0	0.0	0.1	11.9	28.7	0.0	0.0	0.0	-25.9	65.6	158.3	0.0	0.0	0.0	-1.9	8.9	21.5
545	LC545 UBL 4, 5, L NA+, Z11 DE 45 min	-5	0.80	0	0	0	75	8825	0.0	0.0	0.0	0.1	11.9	28.7	0.0	0.0	0.0	-26.2	74.6	180.1	0.0	0.0	0.0	0.1	11.9	28.7	0.0	0.0	0.0	-2.0	9.1	22.0	0.0	0.0	0.0	-1.9	8.9	21.5
546	LC546 Extreme UBL 1, L NA+, Z11 DE 45 min	-5	1.00	0	0	0	75	8825	0.0	0.0	0.0	0.1	11.9	28.7	0.0	0.0	0.0	-26.2	74.6	180.1	0.0	0.0	0.0	-26.2	74.6	180.1	0.0	0.0	0.0	-25.9	65.6	158.3	0.0	0.0	0.0	-26.2	66.8	161.4
547	LC547 Extreme UBL 2, L NA+, Z11 DE 45 min	-5	1.00	0	0	0	75	8825	0.0	0.0	0.0	0.1	11.9	28.7	0.0	0.0	0.0	0.1	11.9	28.7	0.0	0.0	0.0	-26.2	74.6	180.1	0.0	0.0	0.0	-25.9	65.6	158.3	0.0	0.0	0.0	-26.2	66.8	161.4
548	LC548 Extreme UBL 3, L NA+, Z11 DE 45 min	-5	1.00	0	0	0	75	8825	0.0	0.0	0.0	0.1	11.9	28.7	0.0	0.0	0.0	-26.2	74.6	180.1	0.0	0.0	0.0	0.1	11.9	28.7	0.0	0.0	0.0	-25.9	65.6	158.3	0.0	0.0	0.0	-26.2	66.8	161.4
549	LC549 Extreme UBL 4, L NA+, Z11 DE 45 min	-5	1.00	0	0	0	75	8825	0.0	0.0	0.0	0.1	11.9	28.7	0.0	0.0	0.0	-26.2	74.6	180.1	0.0	0.0	0.0	0.1	11.9	28.7	0.0	0.0	0.0	-25.9	65.6	158.3	0.0	0.0	0.0	0.1	0.0	0.0
550	LC550 Extreme UBL 5, L NA+, Z11 DE 45 min	-5	1.00	0	0	0	75	8825	0.0	0.0	0.0	0.1	11.9	28.7	0.0	0.0	0.0	-26.2	74.6	180.1	0.0	0.0	0.0	0.1	11.9	28.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	-26.2	66.8	161.4
551	LC551 EDT, C NA+, Z11 DE 45 min	0	0.80	0	0	0	0	0	0.0	0.0	0.0	0.1	13.2	31.9	0.0	0.0	0.0	0.1	13.2	31.9	0.0	0.0	0.0	0.1	13.2	31.9	0.0	0.0	0.0	-2.0	11.0	26.6	0.0	0.0	0.0	-1.9	9.9	23.9
552	LC552 Cold, I NA+, Z11 DE 45 min	-15	0.80	0	0	0	0	0	0.0	0.0	0.0	0.1	14.9	36.0	0.0	0.0	0.0	0.1	14.9	36.0	0.0	0.0	0.0	0.1	14.9	36.0	0.0	0.0	0.0	-2.0	11.6	28.0	0.0	0.0	0.0	-1.9	11.2	27.0
553	LC553 Max Wind, L NA+, Z11 Angle 0	-20	0.80	1536	5530	0	0	0	8.7	8.3	-60.5	8.7	8.3	60.5	8.7	8.3	-60.5	8.7	8.3	60.5	8.7	8.3	-60.5	8.7	8.3	60.5	4.7	5.2	-43.7	4.7	5.2	43.7	4.6	5.6	-46.2	4.6	5.6	46.2
554	LC554 Max Wind, L NA-, Z11 Angle 0	-20	0.80	-1536	-5530	0	0	0	8.7	-8.3	-60.5	8.7	-8.3	60.5	8.7	-8.3	-60.5	8.7	-8.3	60.5	8.7	-8.3	-60.5	8.7	-8.3	60.5	4.7	-5.2	-43.7	4.7	-5.2	43.7	4.6	-5.6	-46.2	4.6	-5.6	46.2
555	LC555 Max Wind 45°, L Bl+, Z11 Angle 0	-20	0.80	1086	3910	3910	0	0	8.7	4.3	-41.9	8.7	4.3	41.9	8.7	4.3	-41.9	8.7	4.3	41.9	8.7	4.3	-41.9	8.7	4.3	41.9	4.7	2.7	-31.3	4.7	2.7	31.3	4.6	2.9	-32.2	4.6	2.9	32.2
556	LC556 Max Wind 45°, L Bl-, Z11 Angle 0	-20	0.80	-1086	-3910	-3910	0	0	8.7	-4.3	-41.9	8.7	-4.3	41.9	8.7	-4.3	-41.9	8.7	-4.3	41.9	8.7	-4.3	-41.9	8.7	-4.3	41.9	4.7	-2.7	-31.3	4.7	-2.7	31.3	4.6	-2.9	-32.2	4.6	-2.9	32.2
557	LC557 Max Wind, L, L Bl+, Z11 Angle 0	-20	0.80	0	0	5530	0	0	8.7	0.0	-32.1	8.7	0.0	32																								

626	LC626 UBL 5, L NA+, Z11 Angle 0 min	-5	0.80	0	0	0	75	8825	-29.8	0.0	-194.9	-29.8	0.0	194.9	-29.8	0.0	-194.9	-29.8	0.0	194.9	-29.8	0.0	-194.9	-29.8	0.0	194.9	-29.2	0.0	-171.4	-2.2	0.0	23.8	-29.6	0.0	-174.7	-29.6	0.0	174.7
627	LC627 UBL 1, 5, L NA+, Z11 Angle 0 min	-5	0.80	0	0	0	75	8825	-29.8	0.0	-194.9	-0.3	0.0	31.0	-29.8	0.0	-194.9	-29.8	0.0	194.9	-29.8	0.0	-194.9	-29.8	0.0	194.9	-29.2	0.0	-171.4	-2.2	0.0	23.8	-29.6	0.0	-174.7	-29.6	0.0	174.7
628	LC628 UBL 1, 2, 3, L NA+, Z11 Angle 0 min	-5	0.80	0	0	0	75	8825	-29.8	0.0	-194.9	-0.3	0.0	31.0	-29.8	0.0	-194.9	-0.3	0.0	31.0	-29.8	0.0	-194.9	-0.3	0.0	31.0	-29.2	0.0	-171.4	-29.2	0.0	171.4	-29.6	0.0	-174.7	-29.6	0.0	174.7
629	LC629 UBL 3, 4, L NA+, Z11 Angle 0 min	-5	0.80	0	0	0	75	8825	-29.8	0.0	-194.9	-29.8	0.0	194.9	-29.8	0.0	-194.9	-29.8	0.0	194.9	-29.8	0.0	-194.9	-0.3	0.0	31.0	-29.2	0.0	-171.4	-29.2	0.0	171.4	-29.6	0.0	-174.7	-2.1	0.0	23.2
630	LC630 UBL 4, 5, L NA+, Z11 Angle 0 min	-5	0.80	0	0	0	75	8825	-29.8	0.0	-194.9	-29.8	0.0	194.9	-29.8	0.0	-194.9	-29.8	0.0	194.9	-29.8	0.0	-194.9	-29.8	0.0	194.9	-29.2	0.0	-171.4	-2.2	0.0	23.8	-29.6	0.0	-174.7	-2.1	0.0	23.2
631	LC631 UBL 1, 2, 3, 4, 5, L NA+, Z11 Angle 0 min	-5	0.80	0	0	0	75	8825	-29.8	0.0	-194.9	-0.3	0.0	31.0	-29.8	0.0	-194.9	-0.3	0.0	31.0	-29.8	0.0	-194.9	-0.3	0.0	31.0	-29.2	0.0	-171.4	-2.2	0.0	23.8	-29.6	0.0	-174.7	-2.1	0.0	23.2
632	LC632 Extreme UBL 1, L NA+, Z11 Angle 0 min	-5	1.00	0	0	0	75	8825	-29.8	0.0	-194.9	2.7	0.0	0.0	-29.8	0.0	-194.9	-29.8	0.0	194.9	-29.8	0.0	-194.9	-29.8	0.0	194.9	-29.2	0.0	-171.4	-29.2	0.0	171.4	-29.6	0.0	-174.7	-29.6	0.0	174.7
633	LC633 Extreme UBL 2, L NA+, Z11 Angle 0 min	-5	1.00	0	0	0	75	8825	-29.8	0.0	-194.9	-29.8	0.0	194.9	-29.8	0.0	-194.9	2.7	0.0	0.0	-29.8	0.0	-194.9	-29.8	0.0	194.9	-29.2	0.0	-171.4	-29.2	0.0	171.4	-29.6	0.0	-174.7	-29.6	0.0	174.7
634	LC634 Extreme UBL 3, L NA+, Z11 Angle 0 min	-5	1.00	0	0	0	75	8825	-29.8	0.0	-194.9	-29.8	0.0	194.9	-29.8	0.0	-194.9	-29.8	0.0	194.9	-29.8	0.0	-194.9	2.7	0.0	0.0	-29.2	0.0	-171.4	-29.2	0.0	171.4	-29.6	0.0	-174.7	-29.6	0.0	174.7
635	LC635 Extreme UBL 4, L NA+, Z11 Angle 0 min	-5	1.00	0	0	0	75	8825	-29.8	0.0	-194.9	-29.8	0.0	194.9	-29.8	0.0	-194.9	-29.8	0.0	194.9	-29.8	0.0	-194.9	-29.8	0.0	194.9	-29.2	0.0	-171.4	-29.2	0.0	171.4	-29.6	0.0	-174.7	0.1	0.0	0.0
636	LC636 Extreme UBL 5, L NA+, Z11 Angle 0 min	-5	1.00	0	0	0	75	8825	-29.8	0.0	-194.9	-29.8	0.0	194.9	-29.8	0.0	-194.9	-29.8	0.0	194.9	-29.8	0.0	-194.9	-29.8	0.0	194.9	-29.2	0.0	-171.4	0.1	0.0	0.0	-29.6	0.0	-174.7	-29.6	0.0	174.7
637	LC637 EDT, C NA+, Z11 Angle 0 min	0	0.80	0	0	0	0	0	-0.3	0.0	-34.6	-0.3	0.0	34.6	-0.3	0.0	-34.6	-0.3	0.0	34.6	-0.3	0.0	-34.6	-0.3	0.0	34.6	-2.2	0.0	-28.8	-2.2	0.0	28.8	-2.1	0.0	-25.8	-2.1	0.0	25.8
638	LC638 Cold, I NA+, Z11 Angle 0 min	-15	0.80	0	0	0	0	0	-0.3	0.0	-39.0	-0.3	0.0	39.0	-0.3	0.0	-39.0	-0.3	0.0	39.0	-0.3	0.0	-39.0	-0.3	0.0	39.0	-2.2	0.0	-30.3	-2.2	0.0	30.3	-2.1	0.0	-29.2	-2.1	0.0	29.2

LEGEND

T	:	TRANSVERSAL LOAD
L	:	LONGITUDINAL LOAD
NA+/-	:	POSITIVE/NEGATIVE NORMAL WIND
BI+/-	:	POSITIVE/NEGATIVE WIND DIRECTION SPECIFIED RELATIVE TO STRUCTURE TRANSVERSE AXIS
C	:	CONDUCTOR
D	:	DYNAMIC COEFFICIENT INCLUDED: (1.5: FOR TOWERS TYPE A AND B) (2.0: FOR TOWER TYPE C) (2.5: FOR TOWERS TYPE D AND E)
G1	:	GROUND WIRE ATTACHMENT POINT
G2	:	GROUND WIRE ATTACHMENT POINT
C1	:	CONDUCTOR ATTACHMENT POINT
C2	:	CONDUCTOR ATTACHMENT POINT
C3	:	CONDUCTOR ATTACHMENT POINT
EDT	:	EVERYDAY TEMPERATURE, NO ICE, NO WIND
COLD	:	MINIMUM TEMPERATURE, NO ICE, NO WIND
BR	:	BROKEN CONDITION, NO ICE, NO WIND
BRH	:	BROKEN HARDWARE
UBL	:	UNBALANCED ICE
TD	:	TIE DOWN
LC	:	LOAD CASE
MAX	:	MAXIMUM
L.L.B.	:	LONG LEG BOLTED
S.L.B.	:	SHORT LEG BOLTED
D.S.	:	DOUBLE SHEAR
MAX. WIND, T: MAXIMUM WIND, TRANSVERSE DIRECTION		
MAX. WIND, L: MAXIMUM WIND, LONGITUDINAL DIRECTION		
HMIN.-x/HMAX.-x: MIN. HEIGHT/MAX. HEIGHT WIND DISTRIBUTION HEAD 100% MAST 50%		
HMIN.-y/HMAX.-y: MIN. HEIGHT/MAX. HEIGHT WIND DISTRIBUTION HEAD 50% MAST 100%		