


Dispatch Down Working Group Update – 12th September 2023



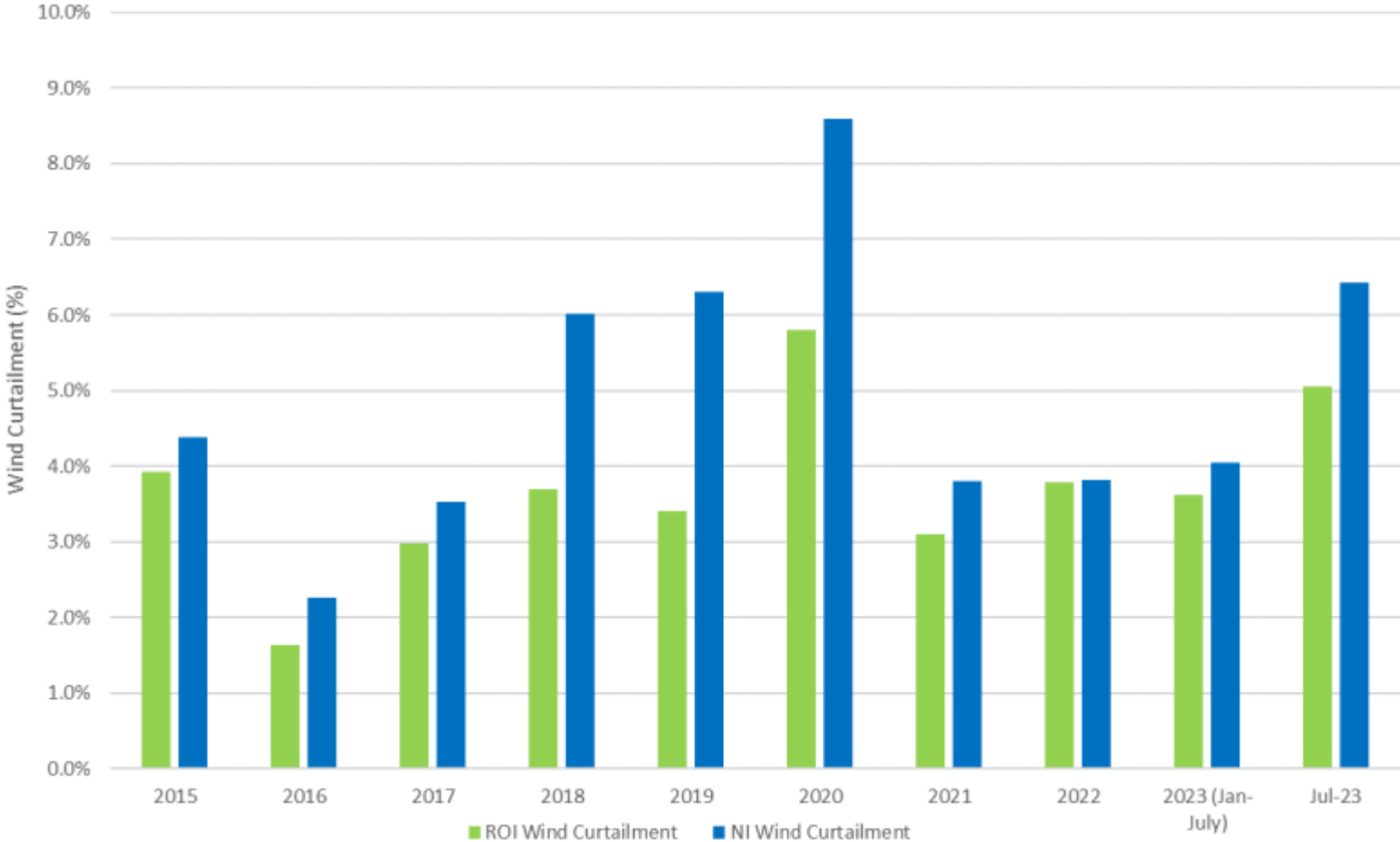
Renewableni

 **WIND** ENERGY
IRELAND

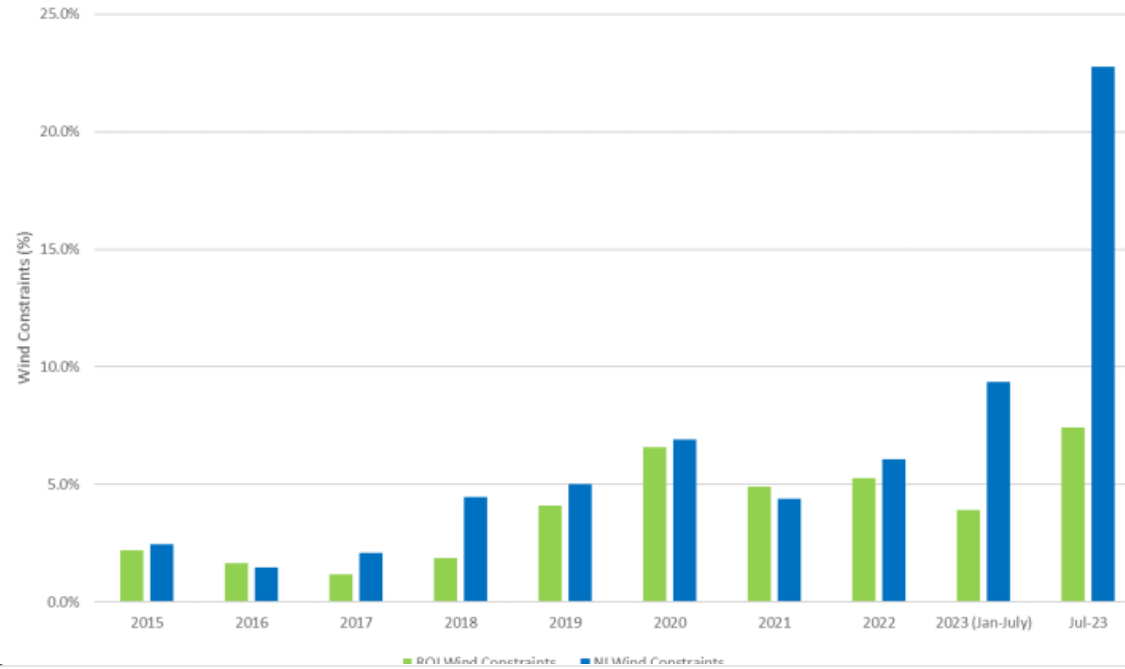
- Reducing Dispatch Down is priority policy issue for WEI
- Dispatch Down Working Group set up in Q1 2019
- MullanGrid complete analysis for the working group 
- Members of the Working Group manage 4,500 MW of operating wind farms across the island, ~85% of controllable wind generation



Curtailment levels

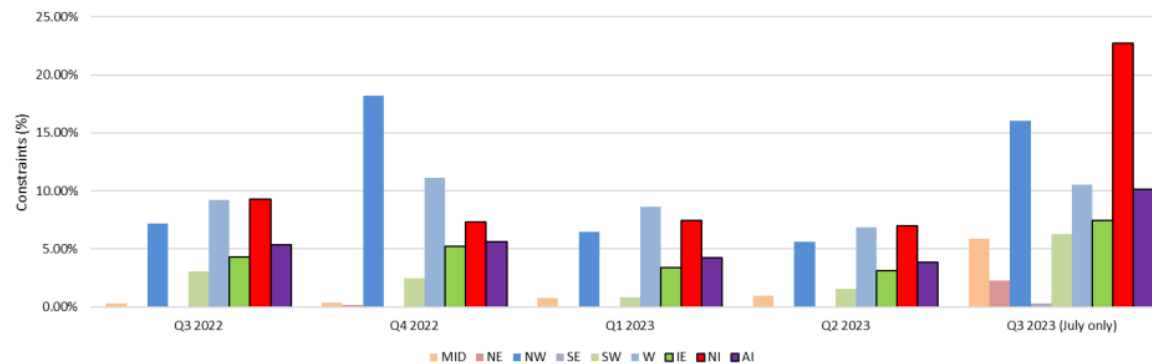


Constraint levels



- What will constraints levels be for new wind farms with the grandfathering of constraints - potentially 300% higher

Constraints by Region (rolling 5 quarters)



Parameter	2018	2019	2020	2021	2022	2023 Jan-July
Curtailment (%)	4.2%	4.0%	6.4%	3.2%	3.8%	3.7%
Constraints (%)	2.5%	4.3%	6.7%	4.8%	5.4%	4.9%
Total Dispatch Down (%)	6.7%	8.3%	13.1%	8.0%	9.2%	8.6%
Estimated Dispatched Down Energy (GWh)	705	1015	1874	912	1380	768
Lost Revenue (€)*	€49m	€77m	€129m	€81m	€106m	€54m
Dispatched Down Energy equivalent to CO ₂ emissions from thermal generators (Mt CO ₂)**	0.256	0.370	0.688	0.345	0.721	0.263 <i>(Jan-Jun)</i>
Estimated Lost Wind Energy as Percentage of All-Island Electricity Demand***	1.9%	2.8%	5.2%	2.4%	3.5%	3.3%

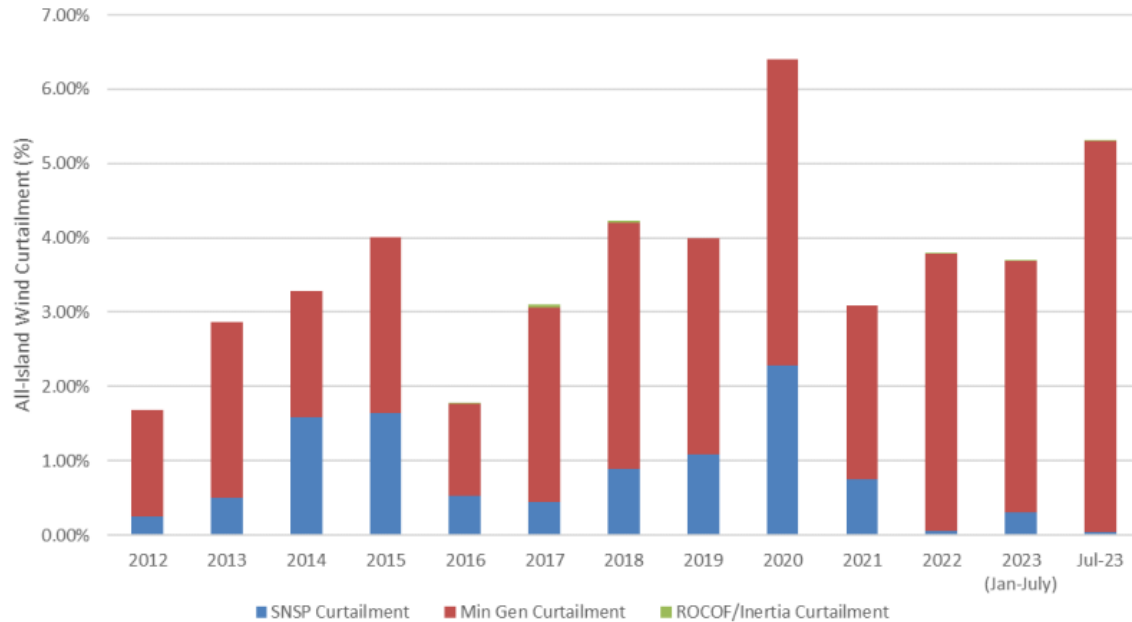
* Does not consider proposed revenue cap.

** Estimates based on SEAI data: monthly energy balances and emissions factors published on their website.

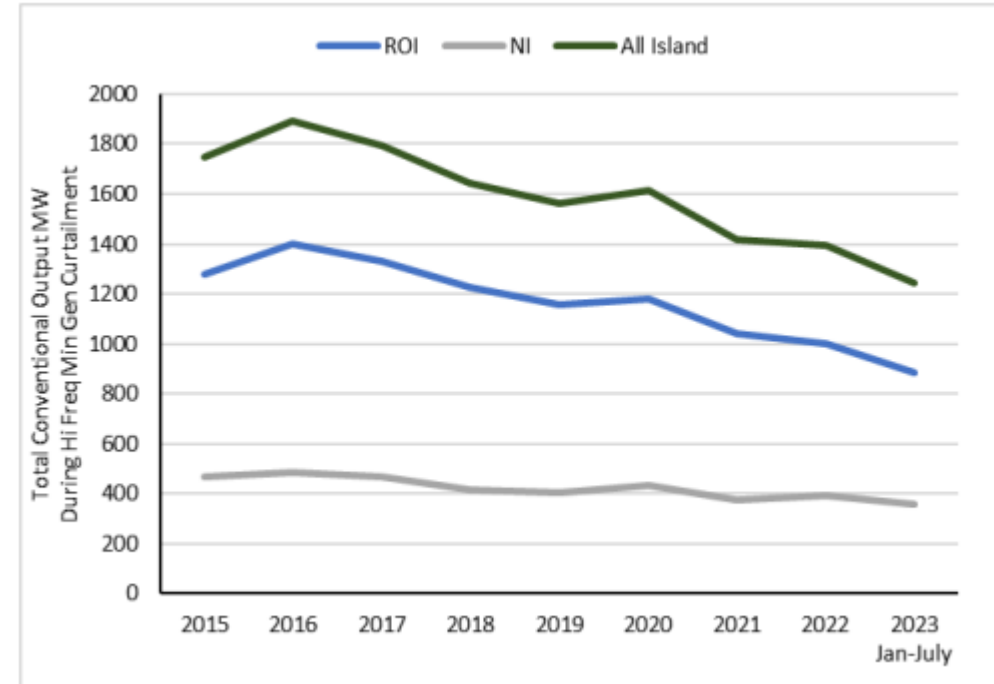
*** Based on all-island demand figure obtained from EirGrid's "System-and-Renewable-Data-Summary-Report" spreadsheet on their website.

- All-Island information presented above
- Constraint higher than curtailment since 2019
- Not all lost renewable energy from outages captured in EirGrid/SONI's dispatch reports

Drivers of Wind Curtailment

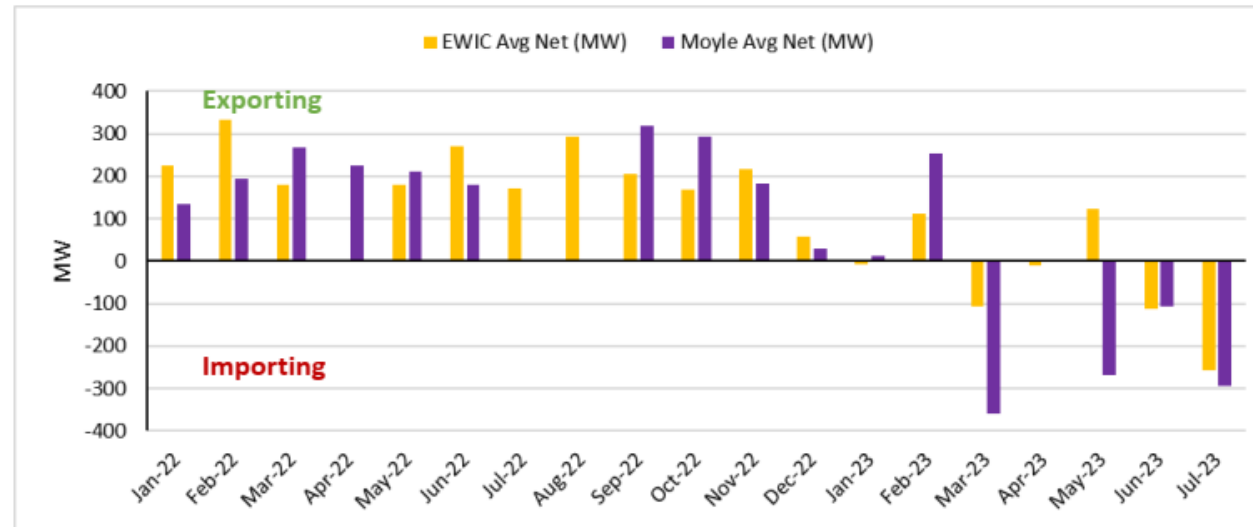


Min Gen Levels



- Very good progress being made in increasing SNSP levels
- Need for greater focus on reducing total min gen levels

EWIC & Moyle Avg MW During Curtailment Events

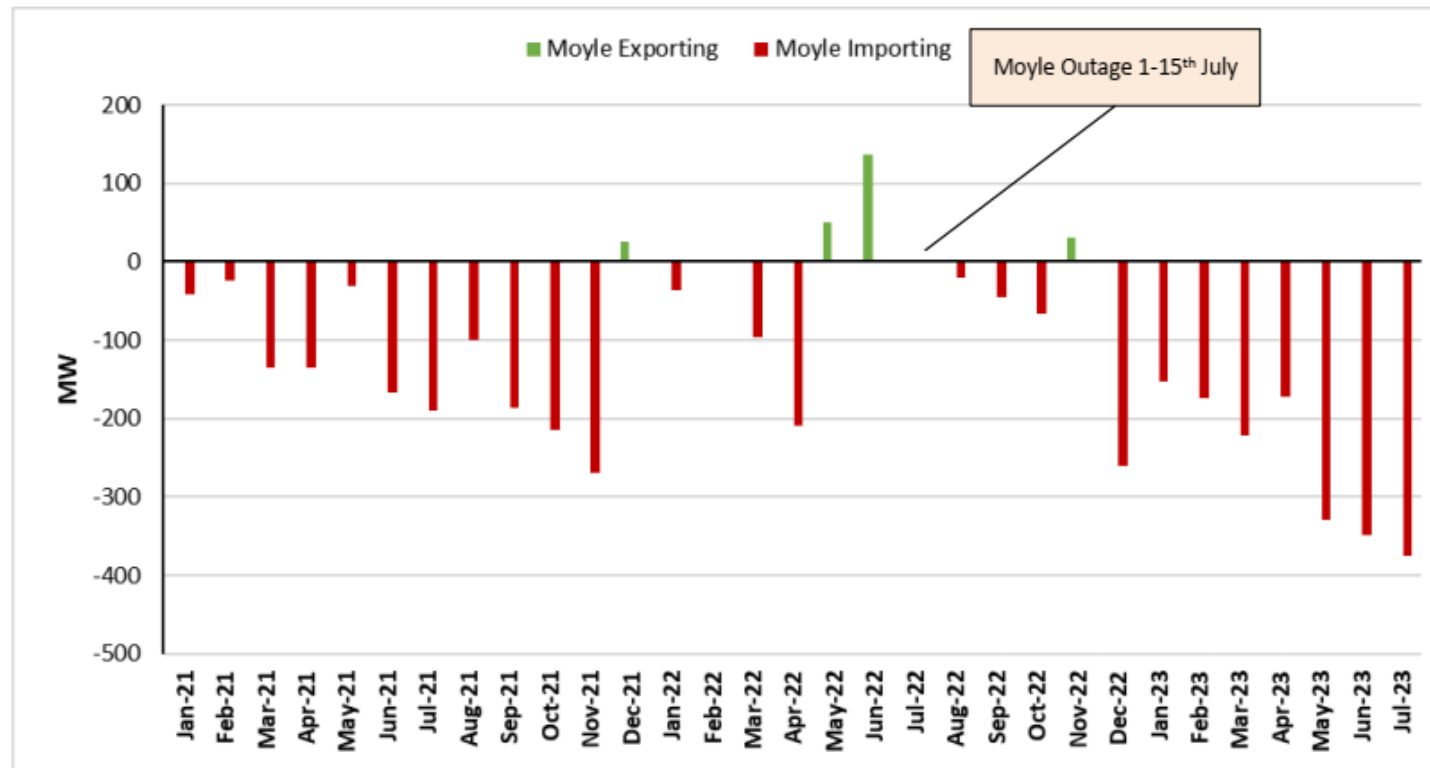


Jul-2022 & Aug-22 There was no NI curtailment

		Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23
Curtailment Event (nr.)	EWIC (ROI)	3	3	10	20	31	17	20	10	19	18	5	5	18
	Moyle (NI)	0	0	2	19	17	14	20	7	5	7	2	3	12
Curtailment Event	EWIC Avg Net (MW)	172	293	204	167	215	59	-7	113	-107	-9	123	-111	-256
	EWIC Avg Net (%)	32%	55%	38%	32%	41%	11%	-1%	21%	-20%	-2%	23%	-21%	-48%
	Moyle Avg Net (MW)	0	0	319	293	184	29	12	253	-358	-2	-268	-108	-293
	Moyle Avg Net (%)	0%	0%	80%	73%	46%	7%	3%	63%	-90%	0%	-67%	-27%	-73%
	EWIC & Moyle Avg Net (MW)	172	293	523	460	399	87	5	366	-465	-11	-145	-219	-549
	EWIC & Avg Net (%)	32%	55%	56%	49%	43%	9%	1%	39%	-50%	-1%	-16%	-24%	-59%
All Periods	EWIC Absolute Day (MW)	-6	58	76	68	106	47	-94	-58	-140	-135	-315	-304	-238
	EWIC Absolute Night (MW)	235	175	62	127	139	-10	-79	-32	-91	-57	-166	-153	-174
	Moyle Absolute Day (MW)	-8	-3	-6	34	105	6	-116	-76	-203	-218	-340	-375	-305
	Moyle Absolute Night (MW)	18	163	56	120	141	-29	-108	-27	-153	-142	-283	-286	-245

- Scope for greater use of interconnectors to reduce curtailment

Moyle Interconnector Average MW During NI North-South Constraint Events



- Concerns at Moyle generally importing on average during NI constraints events, although more frequent export trends in 2022 are more encouraging