RWE

Risk Matrix G/P

INS_00017_03_GEN

Scope: RWE Generation, RWE Power

Date: 18.07.2023, internal

Responsible OU: GCP-G



Risk matrix

	LIKELIHOOD						
	A. very unlikely	B. unlikely	C. possible	D. likely	E. very likely		
IMPACT Severity	Never previously heard of within industry (outside RWE Business Unit). Hardly ever	Heard of once within industry (outside RWE Business Unit). Seldom	Has occurred once within RWE Business Unit Occasionally	Once or twice per year within RWE Business Unit . Yearly	Occurs several times a year within location / department Frequently		
	10 ⁻⁵ / year	10 ⁻³ / year	10 ⁻¹ / year	1 / year	10 / year		
1 Minor	1	2	3	4	15	1	
2 Limited	2	4	18	24	60	2	
3 Serious	3	18	27	72	90	3	
4 Very serious	12	24	72	96	120	4	
5 Disastrous	15	60	90	120	150	5	
	A	В	С	D	E		

RPN* Calculation and General Principles:

Low risk

RPN 0-4 (0 = no impact)
(RPN = Impact x Likelihood)
Risk requires no further follow-up action

Medium risk RPN 12 - 27

(RPN = Impact x Likelihood x 3)

Initial assessment: Additional risk reduction measures necessary.

Post-mitigation assessment: Tolerable if all reasonable risk reduction measures implemented**.



RPN 60 - 89

 $(RPN = Impact \times Likelihood \times 6)$

Initial assessment: Unacceptable, additional risk reduction measures necessary to turn risk to a lower acceptable or tolerable level

Post-mitigation assessment: Risk can only be taken by exception. Sign off process necessary**.



RPN 90 and higher

Absolutely unacceptable, additional risk reduction measures essential to turn risk to a lower acceptable or tolerable level.

^{*} RPN Risk Priority Number

^{**} See guidance for more detailed information on decision making process and sign off requirements in specific areas

IMPACT / Severity - Explanation per area

Category	Safety, Health & Wellbeing	Environment	Public Interest	Finance ¹⁾	OT Operational consequences	OT Data Security and OT Data Protection
1 Minor	First aid treatment	No or negligible impact on ecosystems or environmental standards.	No interest	< 10.000 Euro	OT security event, e.g. policy breach, with no immediate impact on operation.	Compromise of information otherwise available in the public domain. Data does not facilitate further exploitation.
2 Limited	Slight injury, medical treatment, temporary adapted work. Full recovery expected.	Minor impact that is mainly localised to the site or having short term impacts. No permit breach.	Local interest	> 10.000 till 100.000 Euro	OT security incident with limited impact on plant operation and no immediate impact on ability to generate.	Compromise of internal information. Data has limited or no security impact on further exploitation.
3 Serious	Serious injury with longer absence.	Moderate impact on local/regional ecosystem component(s) or a significant exceedance of environmental standards or permit breach.	Regional or cross-regional interest	>100.000 till 500.000 Euro	Readily recoverable OT Security incident impacting ability to generate.	Exploited data may, with additional steps, enable attackers to perform activities on the targeted systems and devices.
4 Very serious	Very serious permanent injury, disability	Major impact with medium-term impairment of ecosystem or major exceedance of environmental standards or permit breach with risk of permit being revoked by the regulator. Impact could also be outside the organisation/site.	Nationwide interest	>0,5 million till 10 million Euro 2)	Major OT security incident affecting generation output (not immediately recoverable) or report to national authorities is required.	Compromise of confidential information. Exploited data could, without needing to overcome further security controls, enable attackers to perform activities on critical targeted systems and devices.
5 Disastrous	One or more fatalities	Severe impact with long-term impairment of ecosystem or severe exceedance of environmental standards with potential for significant harm to human health or permit breach with permit being revoked by the regulator. Recovery and continued operation is not possible for an indefinite period of time.	International interest	> 10 million Euro	Major OT Security incident affecting safe operation of plant where this could endanger life. Recovery and continued operation is not possible for an indefinite period of time. Report to national authorities is required.	Compromise of (strictly) confidential information. Exploitation of combined data would fundamentally undermine security of affected systems and devices, enable actors to perform significant attacks with minimal effort.

¹⁾ With regard to repair, profit, use and availability costs
2) risks and opportunities >1m€ with a probability of occurrence above 1% needs to be reported to Controlling (RWE G); see DIR_00068_03_GEN, reporting requirements RWE P see DI_012