Office of Environment, Health, Safety and Security
Operating Experience Summary

OES 2026-01 January 2026

ORPS Fiscal Years 2022-2025 In Review

Introduction

How do you use ORPS?
- **Leadership Notification**
- **Situational Awareness**
- **Analysis & Prevention**

The Occurrence Reporting and Processing System (ORPS) is a foundational Department of Energy (DOE) tool that supports leadership awareness, organizational learning, and continuous performance improvement across the DOE complex. ORPS provides timely notification of significant operational events while also serving as a structured repository of operating experience information that, when used thoughtfully, can strengthen system understanding and risk management.

This Operating Experience Summary (OES) presents selected ORPS data from Fiscal Years (FY) 2022 through 2025 to support informed dialogue within DOE line organizations and contractor management teams. The intent of this summary is not to evaluate individual events, assign causality, or assess performance. ORPS data, on its own, does not explain why events occur. Its value emerges when it is integrated with local knowledge, operational context, and complementary performance indicators. When used in this way, ORPS supports a learning-oriented approach to improvement that focuses on understanding system interactions, strengthening defenses, and enabling reliable mission execution under real-world conditions.

ORPS Occurrence Reporting & Processing System

FY 2022 – FY 2025 ORPS Reporting Summary

The tables in this OES present numbers of ORPS reports submitted DOE-wide (**Table 1**), by Program Secretarial Office (**Table 2**), by report level (**Table 3**), and by reporting criteria (**Table 4** and **Table 5**).

NOTE: This OES does not include information to make conclusions related to why the occurrences were submitted nor does it list their associated causal factors.

DOE-Wide ORPS Submittals by Fiscal Year and Quarter

Table 1. *Total ORPS Reports Submitted into ORPS Database by Quarter from FY2022 - FY 2025*

Fiscal Year	Q1	Q2	Q3	Q4	Total ORPS Events
2022	200	227	238	282	947
2023	243	273	286	303	1104
2024	258	258	263	280	1059
2025	203	233	243	238	917
Totals	**904**	**991**	**1030**	**1103**	**4027**

As shown in **Table 1**, the data indicates an upward trend in ORPS events reported from FY 2022 to FY 2023 followed by decreases in FY 2024 and FY 2025. ORPS event reporting increased from 947 in FY 2022 to 1,104 in FY 2023 before declining to 1,059 in FY 2024 and then to 917 in FY 2025. While FY 2024 and FY 2025 show reductions in annual totals, the cumulative totals across Q1-Q4 for FY 2022-FY 2025 highlight sustained operational activity over the four-year period, totaling 4,027 events. Quarterly totals show a similar pattern, with increases across Q1-Q3 from FY 2022 through FY 2024 before tapering in FY 2025.

Numbers alone do not have value without understanding what is behind them
When interpreting data trends, consider factors such as shifts in workforce activity, operational demand, and reporting practices over time. Do you have event analysis information that can point to causality?

The Numbers by Program Secretarial Office (PSO): Can we collaborate and learn?

ORPS reporting trends by PSO provide an opportunity to examine patterns across diverse mission spaces and operating environments. Differences in reporting volumes should not be interpreted as indicators of performance or effectiveness. PSOs and their individual field sites vary significantly in mission complexity, hazard profiles, operational tempo, and reporting practices, all of which influence ORPS activity. Instead of making conclusions, PSO-level data in **Table 2** can be used as a starting point for learning-oriented inquiry. Leaders and analysts may find value in asking questions such as:

- What system conditions or operational demands are shaping these patterns?
- Are similar types of issues appearing across organizations with comparable mission or size?
- Where might collaboration or shared learning reduce risk or improve performance?

When individual organizations engage in open dialogue around operating experience, the Department is better positioned to identify common vulnerabilities, share effective practices, and strengthen performance across the complex.

Effective ways to tell a helpful story across organizations include analyses of normalized data (e.g., by workhours, property valuation, funding, etc.).

Table 2. *Total ORPS Reports Submitted by PSOs into ORPS Database from FY 2022 - FY 2025*

Code	DOE Secretarial Office *Office names are as of end of FY 2025, prior to November 2025 re org.*	FY 2022	FY 2023	FY 2024	FY 2025	Occurrence Count Total
CR	Cybersecurity Energy Security and Emergency Response	0	19	2	8	29
EE	Energy Efficiency and Renewable Energy	21	18	15	14	68
EM	Environmental Management	270	351	343	314	1278
FE	Fossil Energy and Carbon Management	16	6	8	8	38
LM	Legacy Management	3	7	3	2	15
NA	National Nuclear Security Administration	452	523	441	398	1814
NE	Nuclear Energy Science and Technology	54	51	95	66	266
SC	Science	131	129	152	107	519
Total		**947**	**1104**	**1059**	**917**	**4027**

ORPS Report Count by Report Level

Table 3 summarizes the ORPS Report Levels of occurrences reported in FY 2022 - FY 2025. ORPS Report Levels are assigned to each of the 70 Reporting Criteria listed in DOE O 232.2A. The three Report Levels in ORPS - High (H), Low (L) and Informational (I)[1] - provide a means to reflect the impact associated with a given occurrence. There are 29 criteria designated as "H", 21 designated as "L" and 20 designated as "I". For the FY 2022 - FY 2025 period, **Table 3** shows consistently the highest reporting as Low - **2309** (57.3%), followed by Informational - **1349** (33.5%) and High - **369** (9.2%). Since many "I" level reports may be reported only to local issues management systems, the number or events that meet the "I" criteria is likely higher than those noted in **Table 3**.

Table 3. *ORPS Report Level (High, Low, Informational) Distributions for FY 2022 - FY 2025*

ORPS Report Level	FY 2022	FY 2023	FY 2024	FY 2025	Total
High	81 (8.6%)	97 (8.8%)	94 (8.9%)	97 (10.6%)	**369** (9.2%)
Low	538 (56.8%)	637 (57.7%)	636 (60.1%)	498 (54.3%)	**2309** (57.3%)
Informational	328 (34.6%)	370 (33.5%)	329 (31.1%)	322 (35.1%)	**1349** (33.5%)
Totals	**947**	**1104**	**1059**	**917**	**4027**

ORPS Report Count by Reporting Criteria Groups

Table 4 looks at events by ORPS reporting Criteria. Note: multiple reporting criteria can be applied to a single event. The top five ORPS Criteria Group contributors are: Group 2 - Personal Safety and Health (35.9%), Group 10 - Management Concerns and Issues (26.0%), Group 4 - Facility Status (22.0%), Group 3 – Nuclear Safety Basis (9.7%), and Group 6 - Contamination/Radiation Control (4.1%). ORPS occurrences in the top three categories (Group 2, 4, and 10) combined, account for 84% of all ORPS reports submitted.

Table 4. *ORPS Reporting Criteria Group Distributions for FY 2022 - FY 2025*

Reporting Criteria Groups	FY 2022	FY 2023	FY 2024	FY 2025	Total
Group 1 - Operational Emergencies	3	3	6	1	13 (0.3%)
Group 2 - Personnel Safety and Health	312	373	406	355	1446 **(35.9%)**
Group 3 - Nuclear Safety Basis	92	98	99	101	390 **(9.7%)**
Group 4 - Facility Status	227	302	221	135	885 **(22.0%)**
Group 5 - Environmental	10	19	19	15	63 (1.6%)
Group 6 - Contamination/Radiation Control	39	43	38	45	165 **(4.1%)**
Group 7 - Nuclear Explosives Safety	4	8	7	5	24 (0.6%)
Group 8 - Packaging and Transportation	15	18	20	18	71 (1.8%)
Group 9 - Noncompliance Notifications	18	19	16	21	74 (1.8%)
Group 10 - Management Concerns and Issues	258	263	266	262	1049 **(26.0%)**

Table 5 looks further at the Subgroup Criteria within the Top 5 ORPS Criteria contributors (Groups 2, 3, 4, 6 and 10) since about 95% of ORPS reports in FY2022-2025 were reported using at least one of these Criteria.

[1] Reporting "Informational" events directly into the ORPS database is not required. **DOE O 232.2A**, Attachment 2, permits these events "to only be captured in local issues management systems" and provides that PSOs "have the authority to determine which Informational Level Reports will be submitted to the ORPS database."

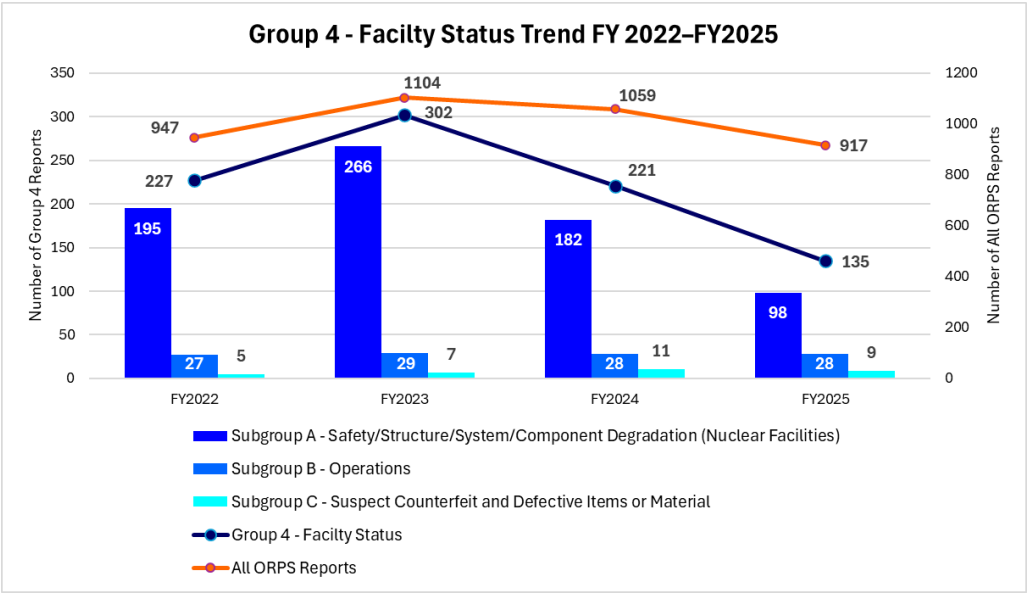
Table 5. *Top 5 ORPS Reporting Criteria Group Distributions for FY 2022 - FY 2025*

Reporting Criteria Groups	FY 2022	FY 2023	FY 2024	FY 2025	Total
Group 2 - Personnel Safety & Health					
Subgroup A - Occupational Injuries and Exposures	129	152	162	136	**579**
Subgroup B - Fires	12	29	17	14	**72**
Subgroup C - Explosions	0	1	2	1	**4**
Subgroup D - Hazardous Energy	171	191	225	204	**791**
Totals	312	373	406	355	**1446 (35.9%)**
Group 3 - Nuclear Safety Basis					
Subgroup A - TSR and Other Hazard Control Violations (excluding nuclear criticality)	49	46	41	46	**182**
Subgroup B - Documented Safety Analysis	40	44	51	49	**184**
Subgroup C - Nuclear Criticality Safety Control	3	7	7	6	**24**
Totals	92	97	99	101	**390 (9.7%)**
Group 4 - Facility Status					
Subgroup A - Safety/Structure/System/Component Degradation (Nuclear Facilities)	195	266	182	98	**741**
Subgroup B - Operations	27	29	28	28	**112**
Subgroup C - Suspect Counterfeit and Defective Items or Material	5	7	11	9	**32**
Totals	227	302	221	135	**885 (22.0%)**
Group 6 - Contamination/Radiation Control					
Subgroup A - Loss of Control of Radioactive Materials	5	7	5	3	**20**
Subgroup B - Spread of Radioactive Contamination	21	23	15	23	**82**
Subgroup C - Radiation Exposure	2	2	1	1	**6**
Subgroup D - Personnel Contamination	11	11	17	18	**57**
Totals	39	43	38	45	**165 (4.1%)**
Group 10 - Management Concerns and Issues					
Group 10 (1)- Management Concerns & Issues	184	182	194	190	**750**
Group 10 (2) - Near Misses	74	78	67	69	**288**
Group 10 (3) - DOE Credibility Inquiries to HQ	0	3	5	3	**11**
Totals	258	263	266	262	**1049 (26.0%)**
Totals for Top 5 ORPS Reporting Criteria	**928**	**1078**	**1030**	**898**	**3935**

Within each of the 5 Groups shown in Table 5, the highest contributors are:

- **Group 2:** Hazardous Energy **(791)** and Occupational Injuries and Exposures **(579)**.
- **Group 3:** Documented Safety Analysis **(184)** and TSR and Other Hazard Control Violations **(182)**.
- **Group 4:** Safety/Structure/System/Component Degradation **(741)**.
- **Group 6:** Spread of Radioactive Contamination **(82)** and Personnel Contamination **(57)**.
- **Group 10:** Management Concerns and Issues **(750)** and Near Misses **(288)**.

Figure 1. *Group 4 - Facility Status Trend FY 2022–FY 2025*



Pulling the String on Trends
Snapshot: Group 4

Table 5 shows an increase in reported ORPS events in FY 2023. This aligns with a rise in reported events within Group 4 the same year. The lines in **Figure 1** provide this visual depiction of the Group 4 increase from 227 events in FY 2022 to 302 events in FY 2023.

The chart below the trend lines shows that the increase in Group 4 events from 227 to 302 in FY 2023 has a strong association with the higher number of Subgroup A reports. Further, in examining the specific reports, one would find that this increase also coincides with a significant cluster of Group 4 reporting at one site associated with faults in a credited fire protection system. This OES does not include information that would allow conclusions regarding the reasons these occurrences were submitted, nor does it evaluate their causal factors. It does provide an opportunity for sites to follow up. Are trends local or complex-wide?

Conclusions

ORPS remains a critical component of DOE's operating experience and performance improvement ecosystem. When used as intended, it supports timely awareness of significant events and enables organizations to identify signals that warrant deeper examination and learning.

This OES is designed to promote thoughtful engagement with ORPS data and encourage organizations to integrate this information with local operational knowledge, event analysis, and other performance indicators. Meaningful improvement does not come from event counts alone, but from understanding how organizational systems, decision-making environments, and work conditions interact to shape outcomes.

Going beyond the data:

How is work being performed?

What conditions shape the outcomes?

Where do learning opportunities exist?

DOE Orders establish clear expectations[2] for line organizations and contractors to analyze ORPS events, identify contributing factors, implement effective corrective actions, and share lessons learned. By approaching ORPS through a learning-and-performance lens, organizations can move beyond compliance toward sustained improvement in reliability, safety, and mission execution. DOE headquarters offices and field sites are encouraged to share operating experience via established forums and knowledge-sharing platforms (e.g., DOE OPEXShare) to strengthen collective learning across the Department.

For questions about this OES, please contact Felix Gonzalez at 301-903-9311 or Felix.Gonzalez@hq.doe.gov or the Office of ES&H Data Strategy and Performance (EH-23) by email at OEC@hq.doe.gov.

[2] **DOE O 232.2A** includes responsibilities for Program Secretarial Officers to "*review occurrence reporting data and identify potential performance gaps that are indicative of the need for further study and evaluation*" [DOE O 232.2A, 5.a.(4)]. Further, **DOE O 210.2A** requires each organization to "*routinely screen and assess internal and external operating experience to identify significant lessons learned that may be of safety significance or have a bearing on the success of DOE missions and make them available to the DOE complex*" [DOE O 210.2A, 4.c.(2)].