Serious Injury and Fatality (SIF) Prevention in the Utility Industry - Moving Beyond Assessment to Implementation

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The utilities industry requires leadership at all levels to personally pay attention to the SIF Prevention Process on an ongoing basis. The primary reason is that utilities is one of the few industries where, to do their jobs, workers are required to interact with energized, high voltage equipment. In fact, the workforce of most major utility organizations works on transmission and distribution lines, most of which are live. They also are engaged with live natural gas lines. Additionally, installation of power lines is often over rugged terrains, involving complex aviation operations which present their own set of risks.

The exposures in this industry, therefore, are fairly unique and non-forgiving. When a worker is exposed to a dangerous risk to their safety, they typically don’t get a second chance. The potential for a serious injury or fatality is high, which is naturally why SIF prevention is such a necessity.

Yet oftentimes in the utilities industry, exposures can become normalized and not given proper attention. Despite understanding how exposures can cause great harm, leadership may ignore important warning signs, or the culture may not value speaking up when exposures are present.

It is up to the full leadership of an organization to create a safety culture where leaders understand the SIF potential of human performance. A manager or supervisor or even a top company leader may recognize the need for a SIF prevention program, but unless the executive team is on board, it will fail. Effective SIF control requires more than checking off boxes — it requires a verification process of critical controls combined with transformational discussions with employees about the importance of SIF exposure identification and mitigation and why there is no acceptable risk or exposure when it comes to working with high voltage electricity.
The Key to Unlocking the SIF Prevention Puzzle

SIF injuries are low frequency but high severity outcomes. As such, there are not enough SIF Actuals to be predictive of future SIF injuries. So simply responding to SIF actual injury data will never result in a comprehensive SIF Prevention program. The key to unlocking the SIF Prevention puzzle is looking at safety thru the lens of Potential versus the lens of Actual.

SIF Potential is the critical concept that allows you to look into the future and see where the next SIF injury is most likely to come from. It is a fundamentally different way to manage safety but once you make this change, it changes all of your Safety Management systems and processes. At its core, it is a reallocation of resources to provide more focus and attention on SIF exposures.

SIF Prevention cannot be accomplished by simply responding to the last SIF injury. Leadership must treat SIF Potential incidents as if they had resulted in an actual SIF injury and proactively respond to SIF exposure even before it turns into an incident let alone an injury.

What are the Benefits of SIF Prevention Implementation?

The SIF Prevention Implementation Strategy and Process is designed to give organizational leaders the knowledge and data necessary to govern SIF exposure control efforts and to develop SIF recognition and mitigation skills at all levels. Ultimately, the SIF Prevention Implementation Strategy and Process aligns both human resource and safety systems toward maximizing SIF prevention.

The benefits of implementation are:

- A uniform approach to SIF prevention across all levels of the organization.
- Leadership expertise in the identification of SIF exposures and precursors.
- The creation of leading SIF metrics.
- A significant reduction in SIF exposures.
- Sustainability through:
  - Gaining SMEs in SIF Prevention.
  - SIF prevention tools and processes integrated into the Management systems and processes and engrained in the culture.
  - Leadership and cultural reinforcement.
How the SIF implementation Strategy and Process Works

The SIF Prevention Process flow chart summarizes what the end state looks like when the process is fully in place. It all starts with having good decision logic (SIF Decision Tree) for consistent classification of incidents for SIF potential.

The top path, or Reactive Path, begins with classification of incidents for SIF potential. This allows for more rigorous investigations, precursor identification, and corrective actions for SIF potential incidents. The bottom path, or proactive path, involves using the Critical Control check list to conduct observations of work with SIF Potential to ensure that the controls are 100 percent in place, 100 percent of the time. They both reinforce a culture of SIF Exposure recognition and pausing work if all the proper controls are not in place.

If SIF Prevention is to become a sustainable process it must be integrated into the Safety Management Systems. This requires challenging old paradigms that are deeply embedded in the current systems. The DNA of SIF Prevention must be infused into every Safety Management System. This means you must change your Incident Management System (IMS), your Safety Metrics, and your Field Verification process. Over time, SIF Prevention will find its way into most of your Safety Management Systems.

How to Customize the SIF implementation Strategy and Process For Your Company

Customizing SIF implementation requires creating a roadmap that is tailored for the organization. When organizations try to create a process without making the strategic decisions first, it can cause friction if management does not agree with the strategy. The critical issue is getting aligned with the implementation strategy first and then customizing the roadmap.

Potential Leadership Challenges Associated with SIF Implementation

Leaders often understand the technical aspects of SIF Prevention but many underestimate or fail to anticipate some of the most significant leadership challenges they will encounter when they are implementing an SIF prevention process. While many of the technical aspects of SIF Prevention can be delegated, the leadership challenges cannot.

Understanding the challenges up front and being relentless in addressing them proactively as part of the implementation process is key to a successful implementation.

Challenge 1:

Changing the definition of a Safe Day from “No one got hurt today” to “We worked free of any uncontrolled exposures today.”

“No one got hurt today” is a great outcome but a poor definition of safety because there are two ways one cannot get hurt. One is to work safely. The other is to “get lucky.”
Leadership should not want employees relying on luck to go home safe each day. Yet that old definition of safety is deeply engrained in the organization at it is hard to change.

**Challenge 2:**

Changing the perception of risk from “It will not happen to me and what is the big deal” to “If you have enough exposures it will happen, and the consequences are significant”

Leaders can change the perception of risk two ways:

- If we have repeated SIF exposure in the workplace it is not a question of if but only a question of when we will have an SIF Injury.
- We can help change the perception of risk by talking consequences of the potential injury.

**Challenge 3:**

Changing how we look at safety: Once you start looking at safety thru the lens of potential versus the lens of outcome, everything changes.

Managing safety based on potential versus based on outcome is a profound and fundamental change and, at its core, is a reallocation of resources to provide more focus and attention on SIF exposures.

**Challenge 4:**

Changing how we view SIF Prevention to viewing it as a process not an event.

SIF Prevention cannot be accomplished by responding to the last SIF injury. We must treat SIF Potential incidents as if they had resulted in an actual SIF injury.

**Challenge 5:**

Changing the safety management systems.

If SIF Prevention is to become a sustainable process it must be integrated into the safety management systems. This requires challenging old paradigms that are deeply embedded in the current systems.

For implementation to become a reality, leaders need to challenge themselves to think differently about SIF Prevention. They can start by asking themselves five simple questions:

- Do I talk about managing exposure or avoiding injury?
- Do I take the time to discuss the potential for injury or do I just drive rule compliance?
- Do I look at potential outcome even when the actual outcome was minor?
- Do I think in terms of a wholistic SIF prevention process or am I just responding to the last SIF injury?
- Do I look for opportunities to embed SIF Prevention into our Safety Management Systems?

It is only when leadership takes a deep look into how they operate, and challenges how they talk about safety and view SIF prevention are they fully ready to implement a sustainable process that will change their safety culture.

**Conclusion**

The most significant challenges leaders face when implementing a SIF Prevention Program are leadership and cultural issues, not the technical systems and skills issues. All too often leaders seem to be surprised by these challenges. Leaders need to go into a SIF Prevention implementation with their eyes wide open to the leadership challenges they will face so they can be proactive in leading the paradigm changes and cultural changes required for success.