



Slovenské elektrárne, a.s.
Member of Enel Group

International Experts Meeting
“Leadership & Management for Safety”

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Vienna 21th – 24th May 2013

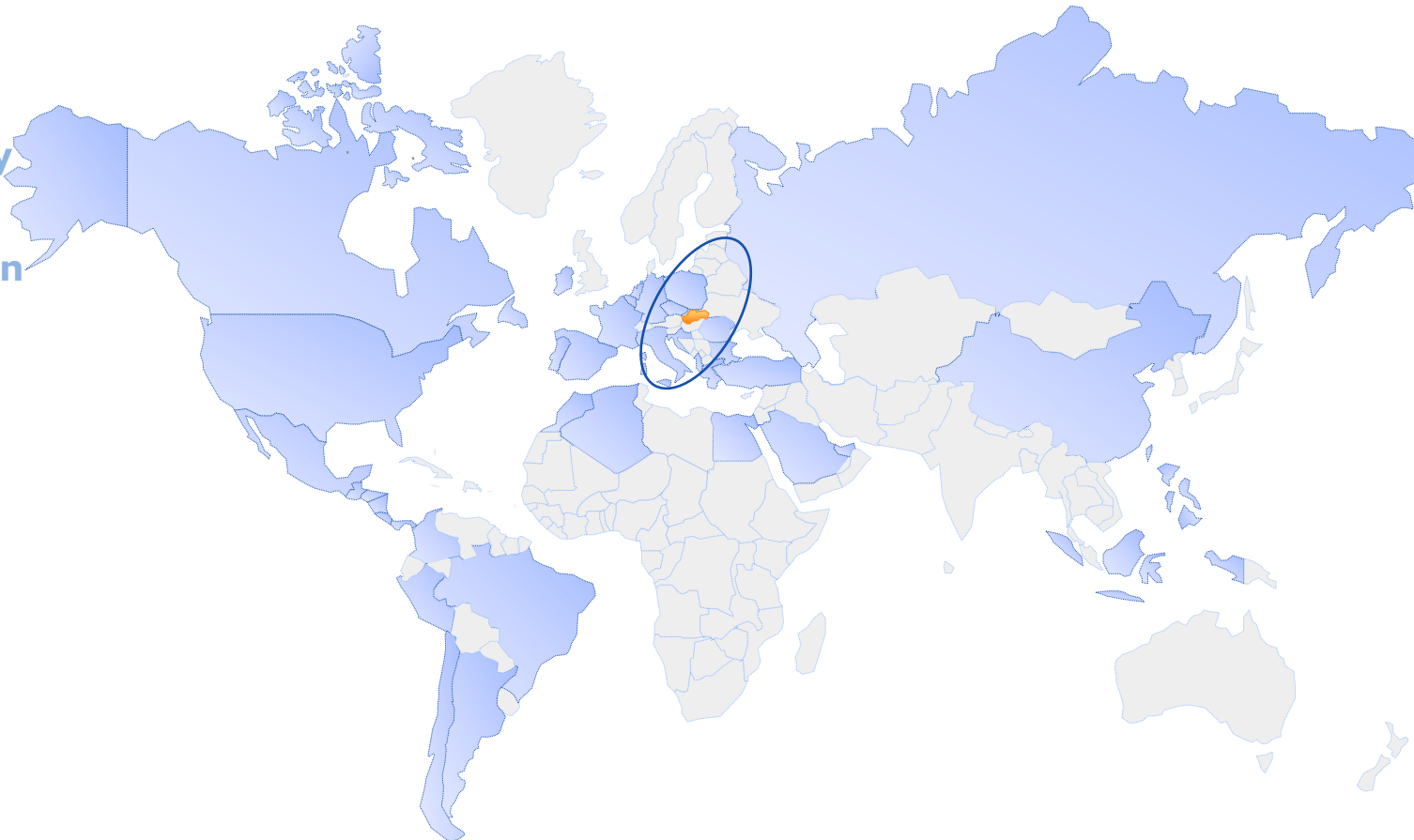
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- Organization, leadership & management
- Oversight & Governance
- Conclusion

Slovenské elektrárne, member of Enel Group

Enel world presence

Presence in
40 countries
Installed capacity
98 GW
Annual production
294 TWh
EBITDA
17.7 Bln €
Customers
61 million
Employees
74,000
Capex 2012-16
27 Bln €



Slovenské elektrárne

The Company



VISION

To be the **safest, most reliable, efficient and competitive** producer of electricity creating value for our customers, shareholders and employees

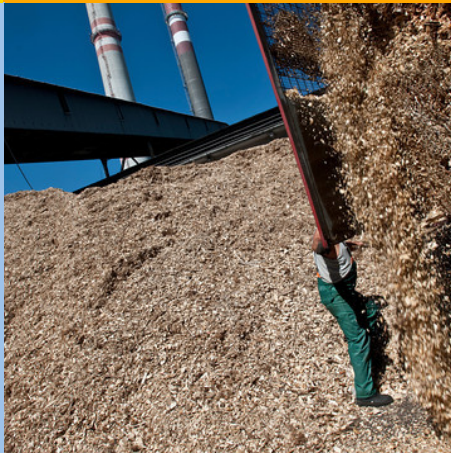


PRODUCER

SE produces electricity and heat. It is the largest power generating company in Slovakia and one of the largest in Central and Eastern Europe

MISSION

To achieve the **highest levels of safety and performance** through excellent execution, continuous improvement and teamwork



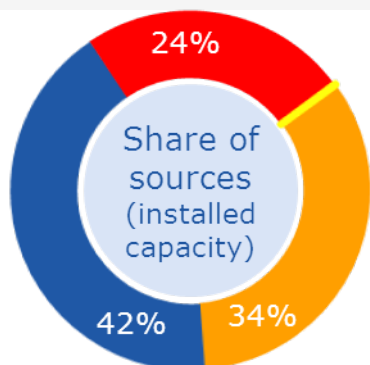
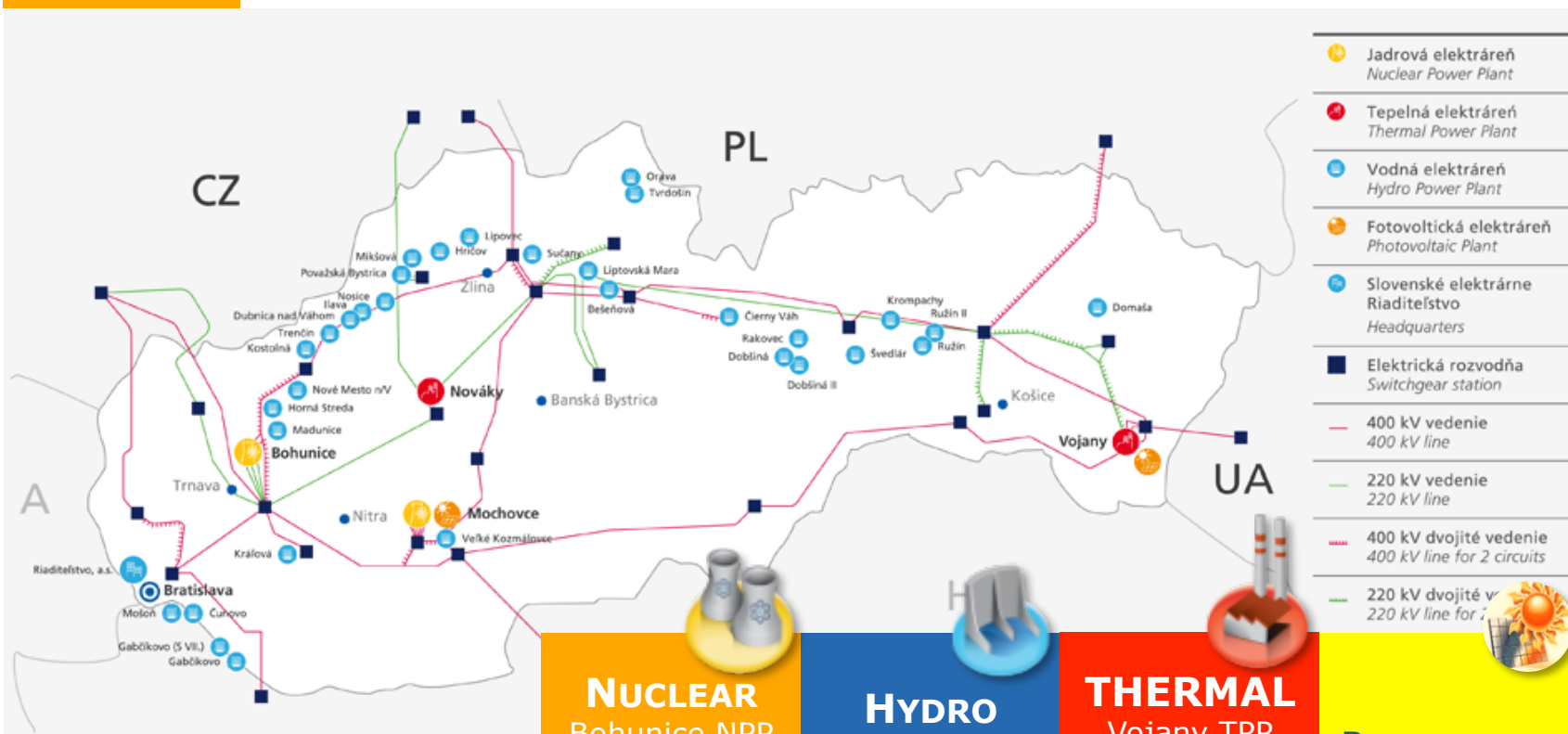
OPERATOR

SE operates 34 hydro, 2 nuclear and 2 thermal power plants, owns directly 4.993 MW of gross capacity and controls 5.739 MW of gross capacity



Slovenské elektrárne

Nuclear energy - the key building block of SE portfolio



 NUCLEAR Bohunice NPP 1000 MW Mochovce NPP 940 MW	 HYDRO 34 HPPs 2 399 MW	 THERMAL Vojany TPP 880 MW Nováky TPP 518 MW	 PHOTOVOLTAIC 2 MW
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As of Dec. 2012

Nuclear: Excluding the decommissioned Bohunice V1 units (1&2) which are not owned by SE

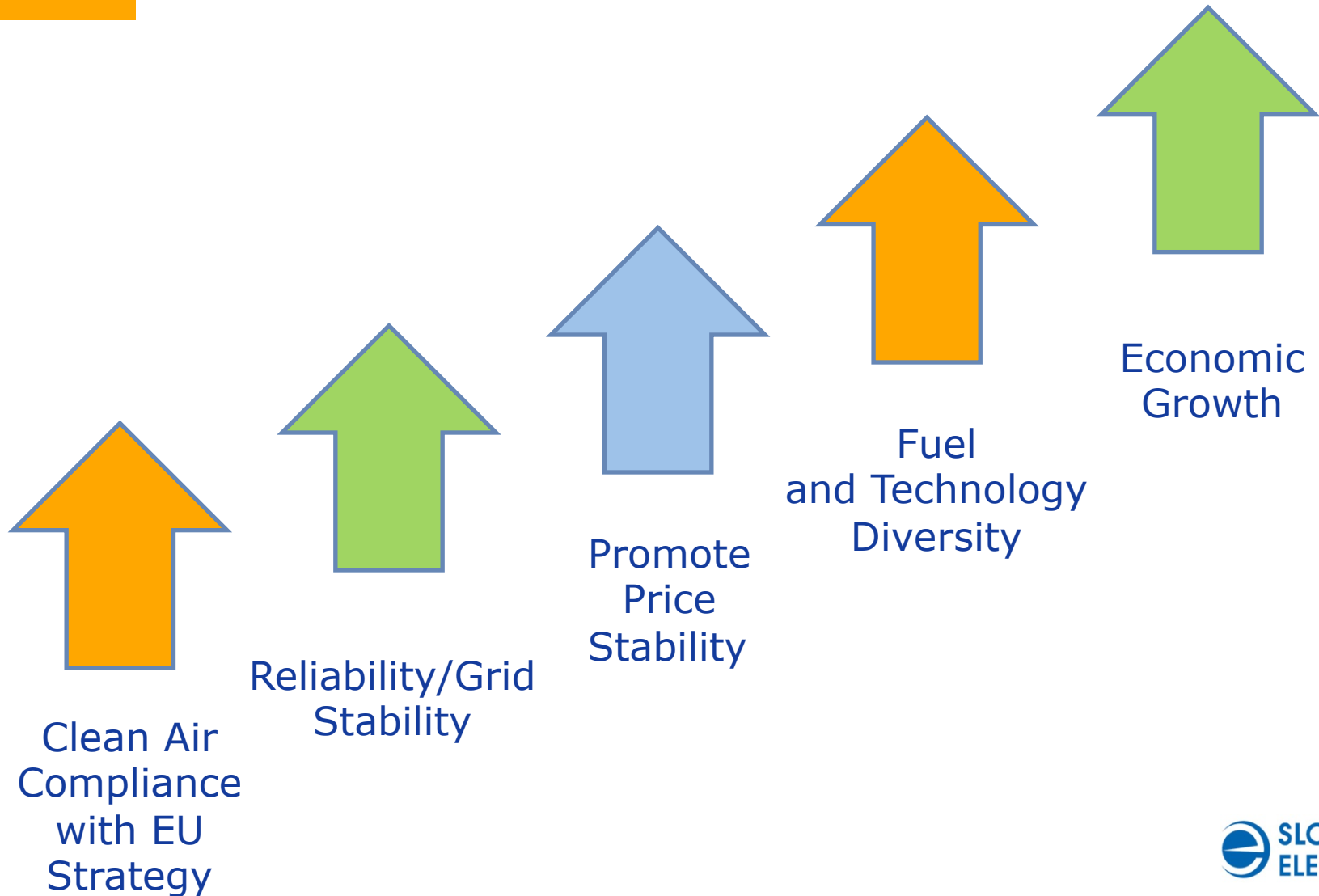
Thermal: Including 4x110 MW installed off-line capacity at TPP Vojany II

Hydro: Including run-of-the-river plant VEGA (746,4 MW) which is operated by SE but owned by Vodohospodarska vystavba;

Hydro fleet consist of pumped storage and run-of-the river plants

Slovenské elektrárne

Nuclear Energy: A Solid Value



Organizational Factors in Nuclear Safety

- **Organizational Structure**
- **Organizational alignment**
- **Complex Bureaucratic Processes**
- **Lack of Nuclear Operational Focus**
- **Resistance to Change**
- **Compliance based approach**

Management Decision to strive for Excellence

Improvement Plan was established and approved by top management in two main areas:

1. Human Performance

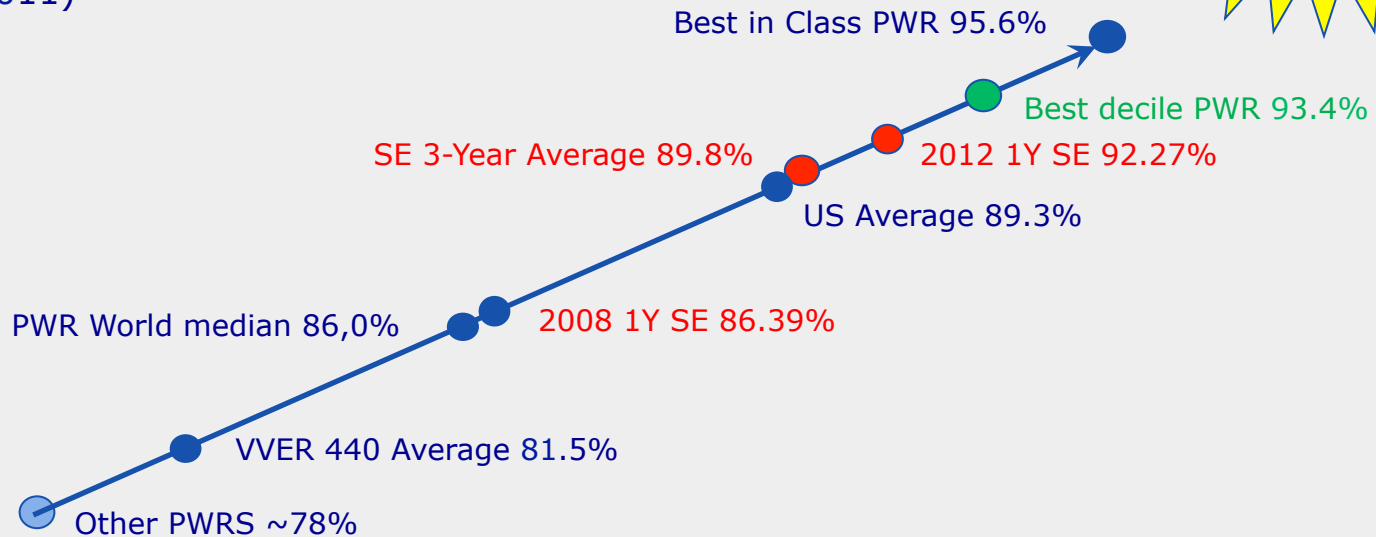
2. Equipment Reliability

Main Goal defined as TOP DECILE

- UCF > 93,5 %
- UCLF < 0,3%
- Scram = 0
- Fires = 0

ILLUSTRATION ON UCF (Unit Capability Factor)

3-years UCF (2011)



SE 3 years average 2012 – 91,13%
SE best single year 94,17% EBO4 2012

Leadership and Management

Leadership

- **Changes of organizational structure**
- **Management alignment with new goals**
- **Leadership model and its development**
- **Coaching skills development**
- **Teamwork and SAT training**

Leadership and Management

Processes

- **Observation programs in NPPs**
- **Improved Operation Decision Making Process**
- **Self –Assessment**
- **Independent Oversight**

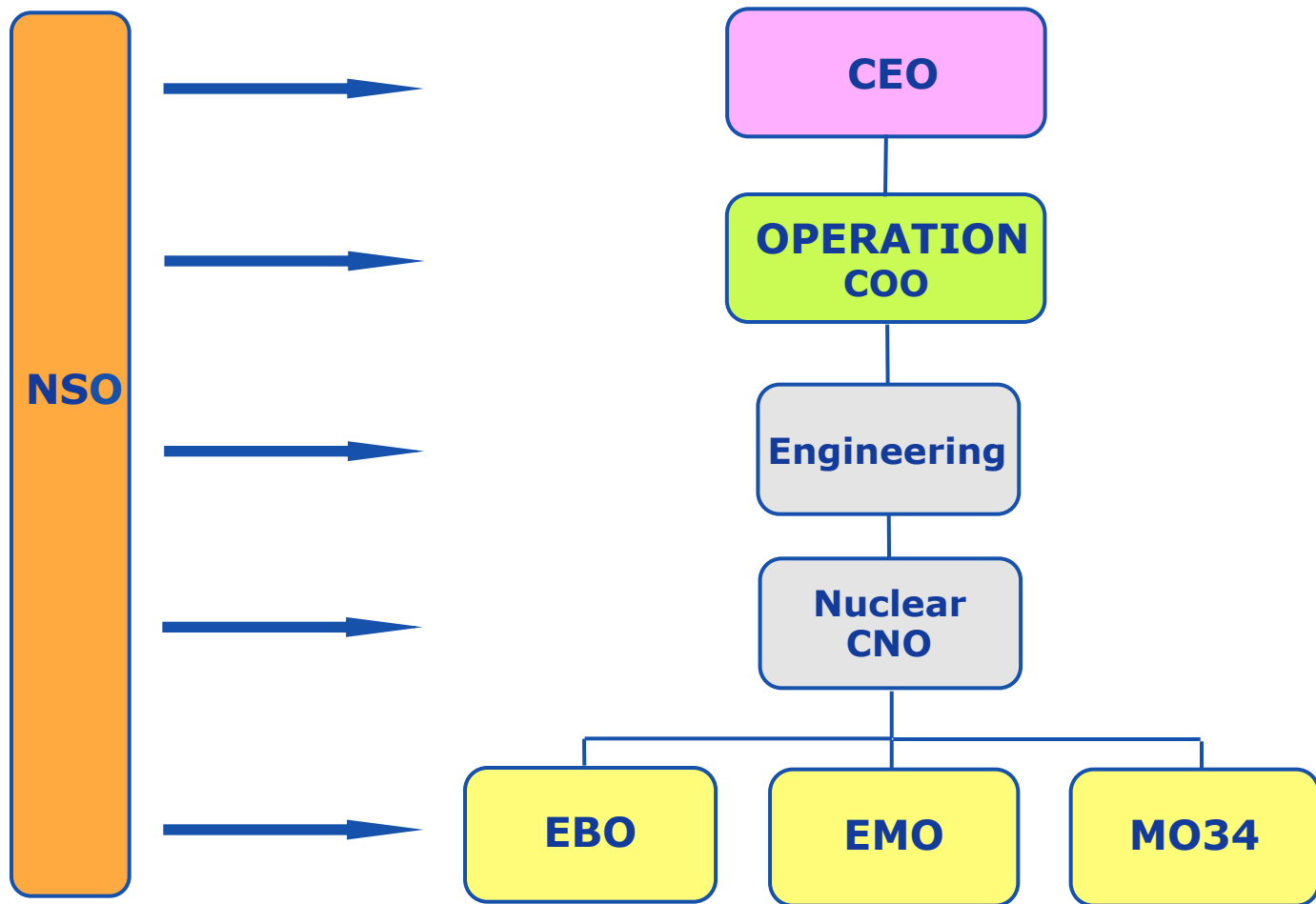
Management for Nuclear Safety in Slovenské Elektrárne

In line with WANO PO&C:

“Both line management monitoring and independent oversight are used to strengthen safety and improve performance.”

*Nuclear safety is continuously **monitored by line managers and independent oversight groups** through techniques such as self assessments, plant tours and observations, performance indicators and periodic management meetings to review station performance.”*

Oversight reports to all management levels



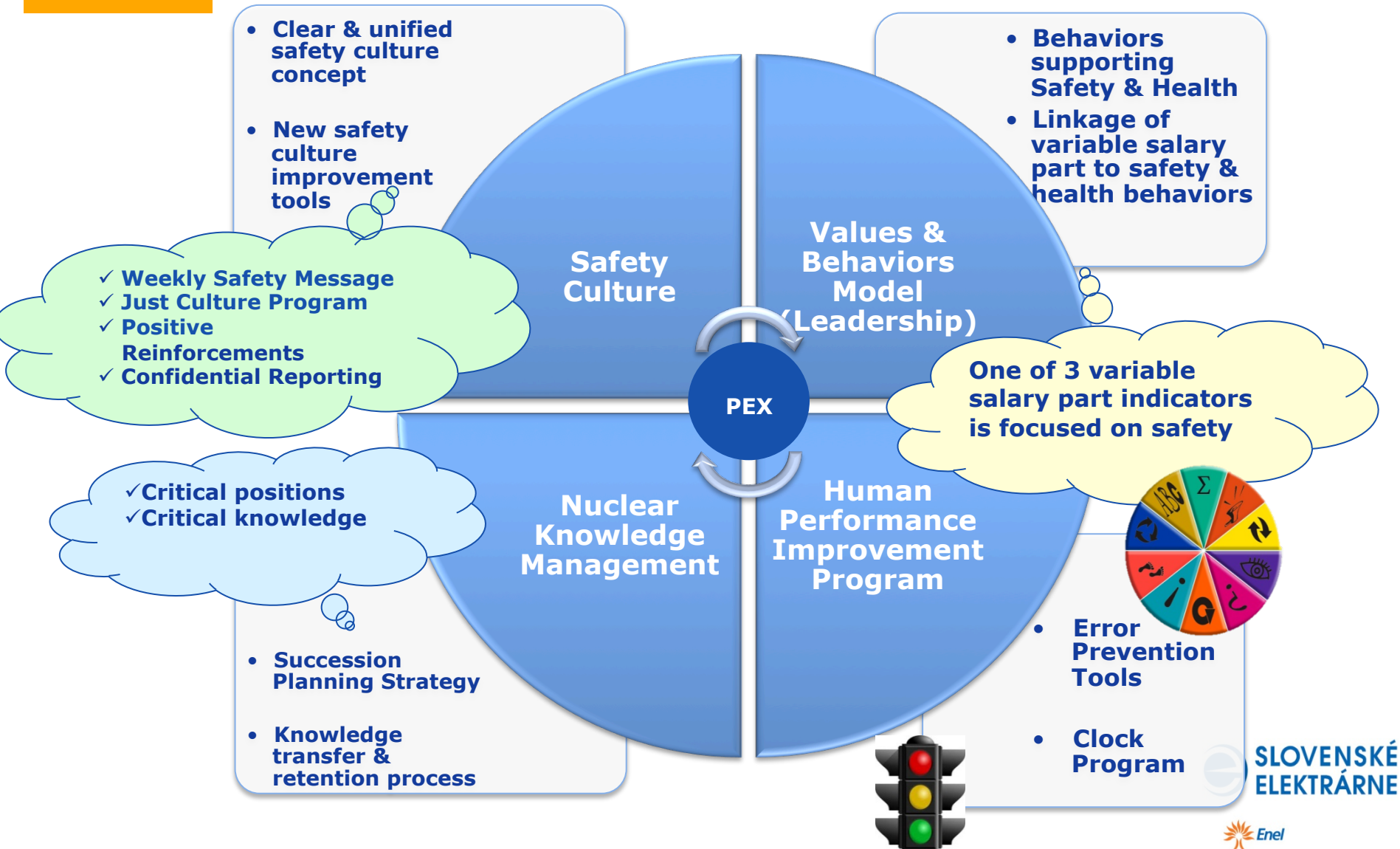
Nuclear Oversight in Slovenské Elektrárne

An independent off-line function consists of:

- 1. Nuclear Oversight** (internal unit)
- 2. NSAC - Nuclear Safety Advisory Committee** (external part of NSO)
- 3. International Safety Reviews** (WANO, OSART)
(three years programmer for each site + Corporate review)

OSART in 2010 – „good performance“

Performance Excellence Initiative & Safety

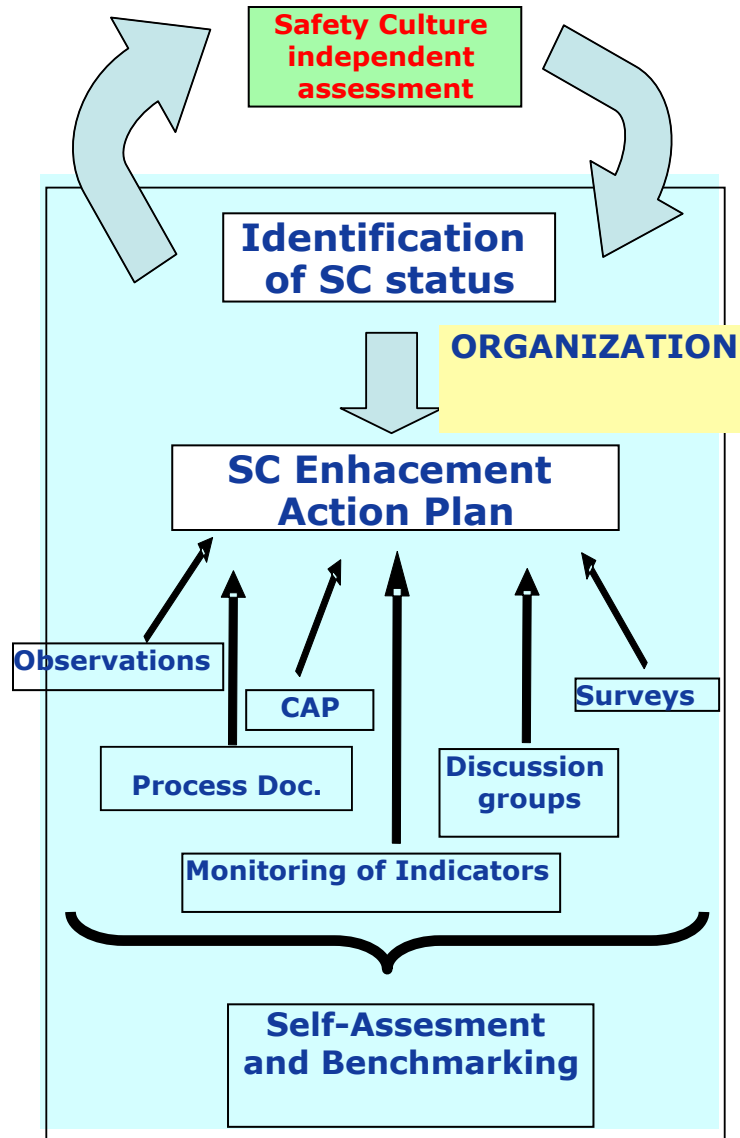


Values & Behavior Model

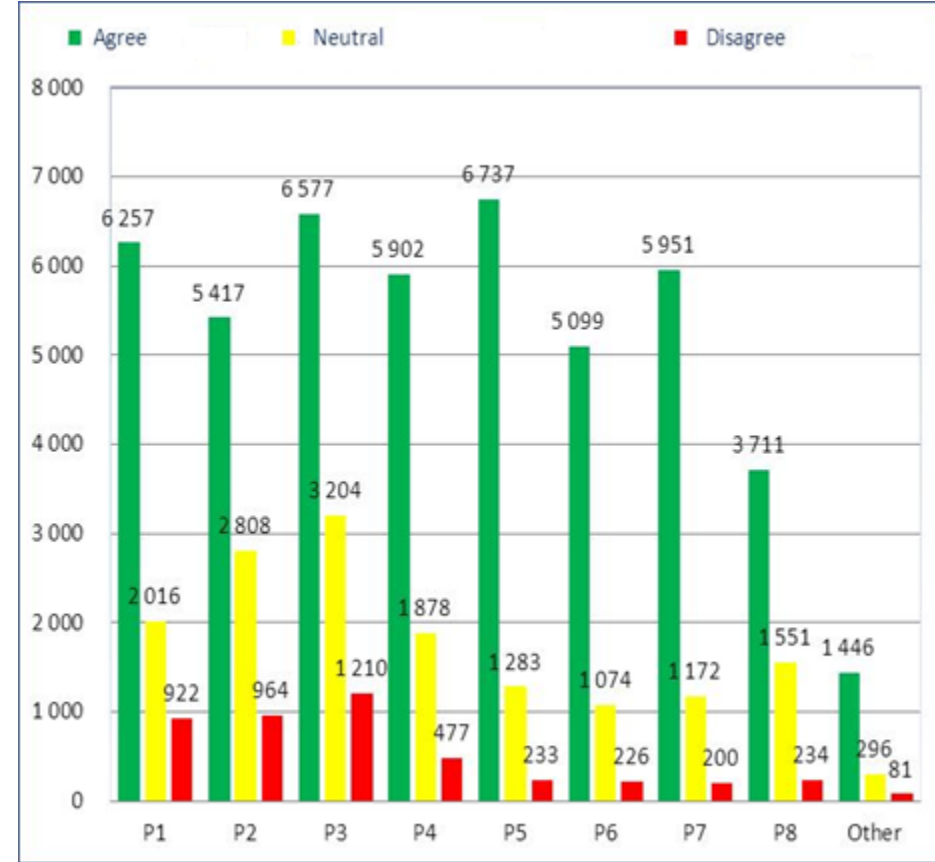
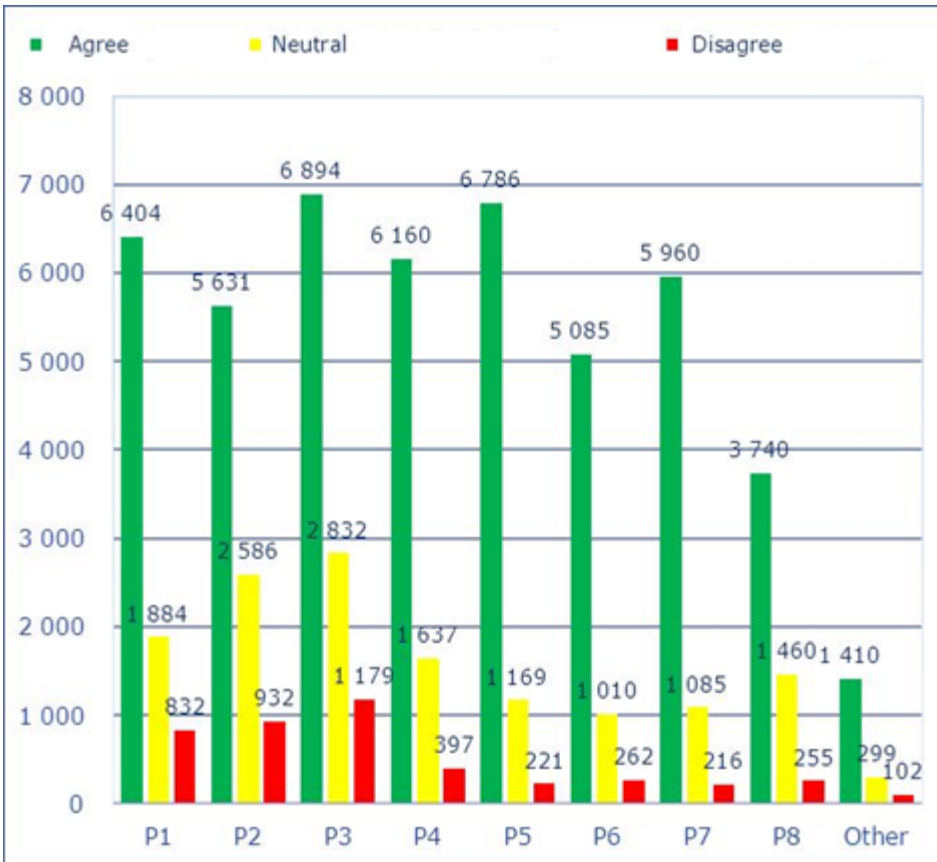
- **Model presents a culture, we wish to be a feature of our company**
- **Model summarizes basic expectations for behavior of all employees and specifically of leaders**
- **The expected behaviors are monitored through observation program**



Safety Culture Assessment & Monitoring



Independent SC Assessment - 2012



Safety Culture assessment in 2012

Lessons from the assessment & main outcomes

- **Improvement compare to 2010 and positive findings were observed in many areas**

- **Areas for improvement:**
 - **Principle 1 - Everyone is Personally Responsible for Safety**
 - **Principle 2 - Leaders Demonstrate Commitment to Safety**
 - **Principle 3 - Trust Permeates the Organization**

- **Focus on Leadership & Organizational aspects**

Nuclear Safety Culture & Leadership

Nuclear Safety Culture is a leadership responsibility

- Leaders reinforce safety culture
- Leaders ensure that everyone in organization understands his or her role in safety culture promotion
- Leaders promote trust within organization and discussions on safety culture outside organization – regulators
- Leaders measure trends in safety culture

Slovenské elektrárne

Continuous improvement and high Safety Performance

- ✓ **SE safety performance is consistently high**
- ✓ **Two our units best in the world among VVERs**
 - INPO PI Index M4 (UCF, FLR, UA7, SSP, FRI, CPI, CRE, ISA)
- ✓ **Management reviews + Nuclear Regulatory Authority:**
No significant adverse trends in safety performance
- ✓ **EU-ENSREG conclusions on „Stress Tests“ review**
confirmed high level of safety
- ✓ **How to sustain and further improve safety ...**

Conclusions

Safety as a Top Priority in all activities shall be under continuous independent assessment and monitoring with direct access to the highest level in the company

Questions ? Comments ?