STARS Alliance LLC Update

May 2016



Desired Outcome

Provide a meaningful overview of STARS Alliance
LLC including focus areas and initiatives



What is STARS?

Limited Liability Company formed in 2012

- A tool for the Members to work together to improve nuclear plant performance and save money
- An alliance, not a fleet

Comprised of 4 nuclear generating stations (7 units) in 4 western states

- PWRs
- Similar age
- Region IV
- Westinghouse OEM



STARS Alliance LLC

- Union Electric Company d/b/a Ameren Missouri
 - Callaway (Missouri)
- Pacific Gas & Electric
 - Diablo Canyon (California)
- Arizona Public Service Company
 - Palo Verde (Arizona)
- Wolf Creek (Kansas)





How Big Is Our Alliance?

| Fleet/Alliance | Number of Units | |
|------------------|-----------------|--|
| Exelon | 22 | |
| USA | 16 | |
| Duke | 11 | |
| Entergy | 10 | |
| NextEra | 8 | |
| STARS | 7 | |
| Dominion | 6 | |
| Southern Company | 6 | |
| TVA | 6 | |
| First Energy | 4 | |
| Xcel Energy | 3 | |
| Independent | 1 | |



Vision: Excellence Through a Strong Alliance

Focus Areas

Manage Projects of Common Interest

- Where coordination beyond supply chain is needed
- Improves plant performance and reduces cost

Save Money Through Supply Chain

- Total cost of ownership
- Supplier partners

Improve Station Performance

- Functional Areas/Peer Teams
- Key performance indicators
- Leverage supplier experience
- Collaboration IT infrastructure



Progress to Date – a few examples

Fukushima

Design Change Modification

| Accomplishments | 2012 | 2016 | |
|--|---|-------------------------------------|--|
| Station Performance | | | |
| INPO Index (as an Alliance) | 8 th | 2 nd | |
| Member Savings | | | |
| Savings to Members | \$7.8 million | \$17.23 million | |
| Spend with Supplier Partners (SP) | 7 Members / 55 SPs \$52 million | 4 Members / 40 SPs \$150 million | |
| Projects | | | |
| Members utilize same STARS Supplier Partner (SP) | | | |
| License Renewal Applications | 3 of 4 Members w/Renewed Operating Licenses | | |
| Emergency Action Level | 3 of 4 Members w/Rev. 4 complete | | |

✓ Common procurement for FLEX equipment

maintenance services (in progress)

Common "Mods" procedure

✓ Common SP for FLEX equipment preventative



Looking Forward – a few targets

Manage Projects of Common Interest

- Open Phase implementation
- Cyber Security
- Renewed Operating License implementation
- Obsolescence solutions

Save Money Through Supply Chain

- Efficient implementation of Delivering the Nuclear Promise
- Double Supply Chain savings by 2018

Improve Station Performance

- Hiring additional Functional Area Managers (FAM)
 - Operational Goal: Operational Excellence & NEI/DNP
 - Strategic Goal: FAM for each Peer Team
- Equipment Reliability (ER) focused assessments
 - Emergent issues process (in place)
 - Focused assessments by indicators (next up: Emergency A/C power)



Questions & Discussion

