

Knowledge Building and Sharing Toolkit

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INTRODUCTION

Having a skilled and knowledgeable workforce is essential for Ameren to achieve our strategic goals and objectives today and into the future.

The Knowledge Building and Sharing (KB&S) toolkit offers a process and a set of support tools to assist leaders in collecting, assessing for prioritization critical skills and knowledge and taking action to transfer that knowledge to co-workers. It can be used in total or in part (start anywhere in the process or tools) and to supplement existing processes and practices.

The toolkit does not attempt to capture knowledge specific processes for skills qualification and position proficiency achieved through formal training (i.e. apprentice programs).

ROLES AND RESPONSIBILITIES

Effective KB&S practices require leaders at all levels to have a formal role in the process. It is essential that leaders hire for and develop critical skills of co-workers. Leaders must also proactively address knowledge transfer and retention. This is especially important in areas that may be at risk of losing critical, undocumented skill and knowledge due to retirements, transfers, or attrition.

Business Segment Officers

- Provide guidance and support for overall workforce structure in accordance with regulatory and business needs to ensure safe and reliable operations
- Support implementation of the KB&S process

Ameren Leadership Team

- Maintain ownership of the KB&S process
- Stay current with attrition forecasts and other relevant information to aid in the determination of knowledge loss risk
- Ensure appropriate plans are in place to resolve identified gaps

Other Leaders

- Monitor projected staffing needs
- Identify co-workers who possess critical or unique skills to determine potential knowledge loss risks or single-point vulnerabilities
- Identify skills and knowledge to determine knowledge loss risk
- Develop action plans to mitigate risk of knowledge loss
- Utilize Individual Development Plans (IDPs) to manage identified knowledge and skills gaps

Co-worker

- Provide information pertaining to critical or unique skills for the purpose of knowledge building and sharing
- Utilize IDPs to express career goals and/or capture personal development KB&S activities

THE PROCESS

There are many reasons that prompt the need to identify critical skills and knowledge and put a plan in place to develop or transfer the knowledge to co-workers. These include:

- Impending or unexpected departure of a co-worker from the company or to another department who has unique knowledge and/or critical skills.
- Discussions occurring during succession planning, performance management (calibrations), and development forums.
- Workforce projections identifying forecasted attrition.
- Staffing plans.

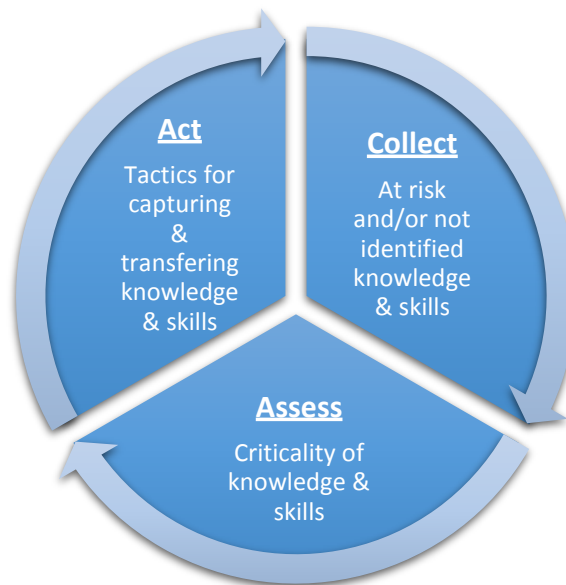
Additionally, you may have new work that requires skills not currently available within the team. Regardless of the reason, once a need to focus on knowledge building or sharing has been identified, the following process can help create a plan to reduce risks.

Ameren's KB&S process is directed by three fundamental questions:

1. What knowledge and skills are at risk of being lost, or don't currently exist?
2. How critical is this loss or lack of knowledge and skills to the organization?
3. What can be done to capture, transfer or develop this knowledge or skill?

The process and associated tools are designed with both leaders and co-workers in mind, acknowledging that local alterations may be needed for the tools. The key here is that capturing knowledge and skills can start at any level.

Process Graph:



Knowledge Building and Sharing



COLLECT

Initially, you want to identify and **collect** information about knowledge and skills within the work group that are at risk of being lost or do not currently exist. What are the knowledge and skills and where are they most needed/used.

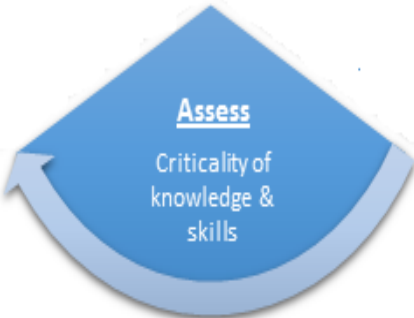


If the knowledge and skills are not identified, there are a number of tools available to help leaders identify them. The table below provides a summary to help select the tool best suited for your needs. The full tools are provided in the appendix.

Tool	Description/Use	At
Leader Questionnaire	Provides targeted questions to assist in determining needed critical job or function knowledge and skills.	Appendix i
Workforce Knowledge Loss Risk Analysis	A step-by-step approach to documentation of knowledge, skills and abilities that are critical and when they may be at risk.	Appendix ii
Co-worker Interview Form	A series of questions to assist in identifying the critical or unique skills and knowledge required for a position. <i>Note: this is a comprehensive tool; use whole or in part.</i>	Appendix iii
Co-worker Turnover Checklist	This checklist can be used "on demand" to document co-worker departures that either are planned or unplanned.	Appendix iv
Post Departure Knowledge and Skills Assessment	A tool for identifying the knowledge and skills that were not captured before a co-worker's departure.	Appendix v

ASSESS

In many cases, you may need to **assess** the criticality, or prioritize needs. This helps narrow the focus to the critical few knowledge or skill areas that will require action. While several knowledge and skill areas may have been identified during collection, resources may be limited. It is important to focus on those areas that could pose the greatest risk and are most critical in terms of safety, operational performance, compliance or customer needs.



As a result of this analysis, leaders will know which issues can wait and which require immediate action. The table below provides tools that may help assess and prioritize needs.

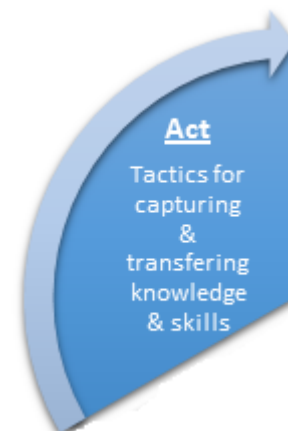
Tool	Description	Location
Knowledge Loss Items List	Part 1: A tool for documenting critical, at-risk knowledge and skills, and the associated priorities for future actions. Part 2: Prioritization of critical knowledge and skills being lost.	Appendix vi

ACT

Once assessed, you will want to **Act** by creating a plan that will ensure effective transfer or development of knowledge and skills, depending on the need.

When determining the most appropriate tool, consider following:

- Length of time the knowledge and/or skill will be relevant.
- Types of knowledge and skills involved (i.e. documented, undocumented).
- Timing of knowledge and skills loss.
- Costs of applying the tool under consideration.
- Motivation and capability of co-workers to share knowledge or develop new skills.



You may have collected information earlier to determine what knowledge and skills you had that were at risk. You may also end up collecting more information at this point as part of the tools selection.

A list of possible tools is provided below. One or more tools might be appropriate based the situation. Example: Communities of Practice and Digital, Video and Audio Methods; interested parties discussing a particular task through Yammer.

Tool	Description
Critical Job Assignment Tool *	Department procedures/policy guides used to capture and retain job, task, and activity or evolution knowledge/work instructions.
Communities of Practice *	Shared learning between co-workers on specific knowledge, job, task, activity, and/or evolution.
Post Job Briefings *	Immediate briefings conducted after a specific job, task, activity or evolution in order to capture lessons learned.
Digital, Video and Audio Methods *	<p>Video/Audio recording or digital photographs of co-worker(s) performing a job, task, activity or evolution which is best captured through a visual demonstration versus a written explanation/description.</p> <p>Department websites used for retaining/retrieving lessons learned insights.</p> <p>Office 365 for Outlook, SharePoint, Yammer, Office Apps, and Teams.</p>

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	CBTs, and Webinars.
Individual Development Plan *	Co-worker documentation of knowledge of a specific job, task, activity and/or evolution.
Mentoring Program	An intentional relationship between two co-workers where one co-worker is the “learner” (mentee) and the other is the “teacher” (mentor). The mentor functions to provide one-on-one coaching and oversight such that the mentee gains the viewpoint of the mentor needed to perform or manage a job, task, activity or evolution. Achievement of specific goals/ learning objectives may be part of the mentee’s “program”. The mentor provides insights that they learned through experience such that the mentee’s success path is streamlined/efficient.
Rotational Assignments	Intentional, planned job assignments that provide specific experience considered necessary in the development of a co-worker. Assignments are designed to provide broad-based exposure to key responsibilities in a number of organizational functions. Co-workers involved generally move into new positions with new duties, coworkers and supervisors.
Job Shadowing	Observation of job, task, activity or evolution to gain exposure to and understating of the job.
Cross Training *	Training provide on how to perform a job, task, activity or evolution in another job function, department, discipline or organization such that trainees attain an understanding / awareness of the job function that they would not have received if not observed first hand.
Advanced Hiring	Hiring ahead of attrition to allow an individual to work with an expert for a period of time to facilitate the transfer of tacit knowledge from one individual to another. This can be used as a direct advanced hire where the newly hired

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	individual works directly with the expert, or to allow another more seasoned individual work with the expert while the newly hired individual is trained on the more junior employee's tasks.
Desk Guides *	Documentation used to provide details of a job or task. This does not replace current procedures but is used to supplement with a “how-to-reference” of practical insights on job and task performance. This can include by step-by-step documentation of infrequently performed jobs, tasks, activities or evolutions. They may also include pictures.
Self-capture *	Documentation of co-worker knowledge of a specific job, task, activity and/or evolution.
Simulations and Walk Through *	Transfer of work-related skills, knowledge and information in a simulated workplace setting or as a “dry run” of the actual job, task, activity or evolution.

The tools noted with an asterisk (*) provide methods for documenting *standardized work*. This term refers to the activities necessary to ensure the safest, most effective and efficient means of performing a specific process or task.

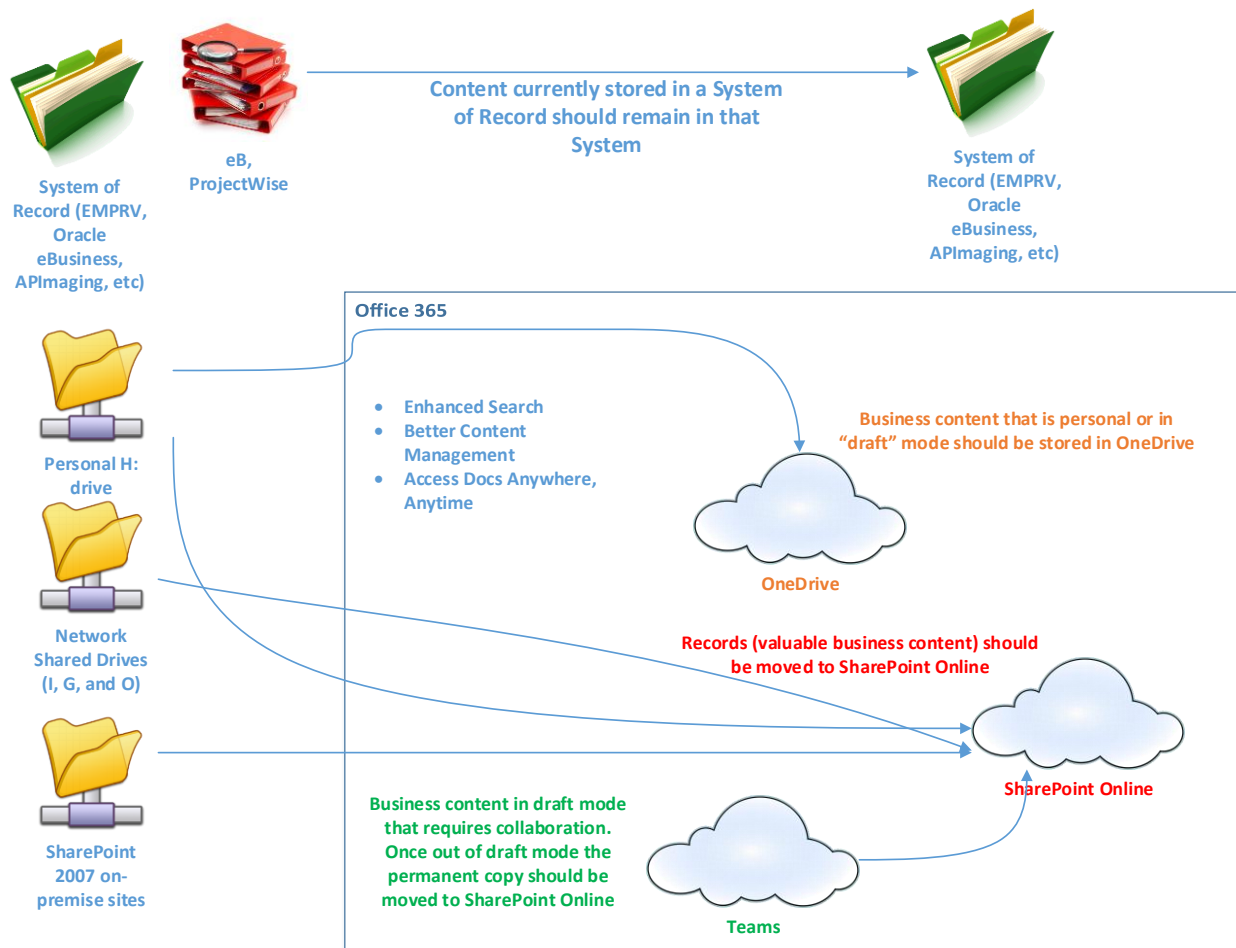
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STORE

Once critical knowledge has been captured, it is important to store it in a way that makes it easily accessible. Standardized work information should be located where the process takes place, be visual in nature, and be regularly maintained as these work processes and procedure are subject to continuous improvement.

As technology evolves, the appropriate storage mediums will also evolve. The below visual is provided for information only and depicts Ameren Digital's future plans for content sustainment and storage. Migration plans remain in development. It's anticipated that certain content (i.e. database files, applications, Access databases, extremely large data stores, etc.) will transfer from network drives as determined appropriate for the business. This effort is part of a larger objective to apply retention policies to content, verses files. All questions with regard to digital storage should be addressed with the appropriate Ameren digital team representatives. This information is included here to remind leaders and co-workers to be mindful in deciding their choice of storage medium now and for the future.



MEASURING THE BENEFIT

Identifying a measure of success for knowledge building and sharing efforts provides insight into the effectiveness of those efforts. Determining the most appropriate measures begins with a thorough analysis and understanding of the current situation. This includes knowing why a specific body of knowledge is critical to business outcomes. As a result of capturing critical knowledge, there should be an increase or decrease with a defined business outcome within a specified timeframe. Business outcomes could include:

- Increase data integrity or reliability
- Reduced operations costs
- Improved customer satisfaction
- Increased operational efficiencies

Ameren effectively measures performance through Key Performance Indicators (KPI). The KPI process equally offers a tangible approach to setting objectives when it comes to capturing and transferring knowledge and skills.

In the end, there should be no question as to the positive impact from KBS efforts on the business.

Finally, all metrics should be SMART (**S**pecific, **M**easurable, **A**ttainable, **R**elevant or focused on strategic outcomes and **T**ime-bound).

Appendix i

Leader Questionnaire

Company/Department/Workgroup	Date
Leader Name	
<ol style="list-style-type: none">1. What critical external factors (e.g., regulatory/legislative, industry, economic, environmental, technological, etc.) do you anticipate affecting your area (Company, Department, Workgroup) in the next 3-5 years?2. What impact could these factors have on the workforce?3. How might Ameren's strategic direction and goals for the next 3-5 years impact the workforce? (Consider your contribution to these)4. What new skills or knowledge will be needed to address future technology requirements or changes?5. In light of the factors listed above and based on concerns you know about your current workforce, what potential issues need to be addressed?	

Appendix ii

Workforce Knowledge Loss Risk Analysis

The Knowledge Loss Risk Analysis Tool provides a step-by-step approach to documentation of knowledge, skills and abilities that are critical and when they may be at risk. This assessment can be used at a work group, department or organization level.

1. **Identify Critical Positions:** Although you may want to perform a knowledge loss risk analysis for your entire organization, it is best to start with positions that are at the greatest for threatening organization success. This could include positions that provide:
 - ✓ Critical tasks or activities that if left undone, could result in an failure to accomplish organizational and business unit goals and objectives
 - ✓ Unique crucial knowledge or expertise that is inherent to the position
 - ✓ Decision-making responsibilities
2. **Anticipate Attrition Date:** It is important to have an idea of when the potential loss of critical knowledge and skill may occur. Document the origin of information used for projecting the anticipated attrition date. There are several ways to obtain attrition data:
 - Co-workers may provide information voluntarily
 - Historic information is available through Human Resources, such as the average age and service at retirement or at turnover (whether resignation or transfer out)
 - Broader workforce planning data may be available from Human Resources for the segment or function
3. **Assign an Attrition Risk Factor (ARF):** To assist with prioritization, apply a rating scale of 1 - 5 (as defined below) to estimate the timing and probability of the employee retiring or leaving the key position. The projected attrition dates add the dimension of urgency to the situation.
 - 5 – Projected attrition date within one year
 - 4 – Projected attrition date within one to two years
 - 3 – Projected attrition date within two to three years
 - 2 – Projected attrition date within three to five years
 - 1 – Projected attrition date is more than five years
4. **Position Risk Factor (PRF):** To assist with determining the level of risk to business outcomes, apply a rating scale of 1 - 5 (as defined below) to the position being assessed to estimate the level of difficulty involved in replacing the current employee in the position.

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5 – Critical and unique knowledge or skills. This is mission-critical knowledge, important to the safe and efficient operation of the facility/department. Knowledge that is undocumented and requires three to five years of experience to bring skills to expert/journey level. No skilled replacement is available to move into the position at this time.

4 – Critical knowledge and skills. The knowledge and skills are mission-critical. Limited duplication exists in other positions/business units or departments, and only limited documentation exists to guide employees moving into this position. It requires two to four years of focused training and experience.

3 – Important organizational knowledge and skills. Documentation exists for the knowledge and skills and/or other personnel on site possess the knowledge/skills necessary to be successful in these positions. New applicants/successors can generally be trained in one to two years.

2 – Procedural or Non-Mission-Critical knowledge and skills. Clear, up-to-date procedures exist. Training programs in place are current and effective. Training can be completed in less than one year.

1 – Common knowledge and skills. External hires possessing the knowledge/skills are readily available and require little additional training.

5. **Knowledge Loss Factor (KLF)**: To determine the overall level of urgency, multiply the Attribution Risk Factor by the Position Risk Factor. This will help determine the level of urgency, the amount of effort that might be required, and the options available to mitigate the impending knowledge loss.



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The knowledge loss factor weighting scale is described below:

1 – 9	10 – 14	15 – 19	20 – 25
Important	High Importance	Priority with Dedicative Planning Needed	High Priority and Immediate Action Needed
Recognize the functions of the position and determine the transfer timing and methods.	Assess how position will be filled or work accomplished in the future.	<i>Could be combined with Succession Planning</i> Planning should include method and timing of replacement, recruitment efforts and the method by which knowledge will be transferred.	An action plan with due dates should be developed to include hiring/contracting decisions, the method of knowledge transfer and specific training required.

EXAMPLE:

Discussion Detail				Assessment Detail				
Department/ WorkGroup	Co-Worker	Critical Position (Title)	Anticipated Attrition Date	Source: Co-worker, HR System, HR Rep, etc.	Attrition Risk Factor (ARF)	Position Risk Factor (PRF)		Knowledge Loss Factor (KLF)
Transmission Engineering	Jill Jones	Career Engineer	01/01/2020	Co-worker	5	X	5	= 25
Energy Delivery Operations	John Smith	Supervisor, Electric Operations	06/01/2020	Co-worker	3	X	4	= 12
Energy Center Operations	Mathew Baker	Plant Operator	Move to higher level operations role in the next two years	HR System projection and co-worker	4	X	4	= 16
						X		= 0

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Workforce Knowledge Loss Risk Analysis Tool

Discussion Detail					Assessment Detail				
Department/ Workgroup	Co-Worker	Critical Position (Title)	Anticipated Attrition Date	Source: Co-worker, HR System, HR Rep, etc.	Attrition Risk Factor (ARF)		Position Risk Factor (PRF)		Knowledge Loss Factor (KLF)
						X		=	0
						X		=	0
						X		=	0
						X		=	0
						X		=	0
						X		=	0
						X		=	0
						X		=	0
						X		=	0



Appendix iii

Co-Worker Interview Form

Co-Worker Name	Title
Department	Leader
Interviewer	Date

LEADER INSTRUCTIONS

- Provide a copy of this interview form to the co-worker in advance of the meeting to provide time for preparation.
 - ***You may elect to use all or part of the form depending on the circumstances.***
- Plan ample time for the interview, dependent on the complexity of the position. Contact Human Resources Services Point of Contact for support as needed.

CO-WORKER INSTRUCTIONS

These questions will assist in identifying the critical or unique skills and knowledge require for your position that might be lost if you left the company.

- Knowledge or skill can include anything a new co-worker would need to know to do your job.
- Consider all responsibilities and contributions, formal and informal, and all reoccurring assignments.
- Be prepared to explain the importance maintaining knowledge or skills and the potential consequences if this knowledge was lost.
- DO NOT include skills that are common to your particular job.
- DO NOT provide detailed descriptions of how tasks are done.

PART 1 – General Information

1. List any industry groups, association or Peer Groups to which you belong.
2. List any Emergency Response or Safety related positions you hold.
3. List all outside meetings you regularly attend representing the company. Indicate frequency and approximate times meetings are held. Describe your role in the meeting and any preparation and follow-up for which you are responsible.
4. Describe any support you provide other Ameren sites or locations.

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5. Describe functional titles such as Fleet Manager, Training Coordinator, etc. or other ongoing task force or team project titles you hold and how much of your time is allotted to these activities.
6. List direct interfaces you have with other departments which need to be continued by a co-worker in the future.
7. What approval authorities do you have that must be transferred to another co-worker (i.e. timesheet approval, purchase approval, etc.)?
8. What certifications or qualification do you possess that are derived from external or internal training or processes? (e.g., PE, CPA, etc.)
9. What skills and knowledge do you possess that might be considered unique and may be difficult to replace?
10. What records or data do you generate in your job? Where are they located?
11. What other information needs to be captured?

PART 2 – Critical Functions and Resources

1. What knowledge or skills do you have that will pose a hardship on the Company when you leave?
2. If you left the organization suddenly and you only have one day left to brief your replacement, what would you put on your list of things to tell them?
3. Looking back, what skill or knowledge is critical to performing your role was challenging or difficult for you to learn?
4. What are the essential tools or resources (procedures, manuals, databased, etc.) you use to do your job? Where are they located?
5. In what areas do others often seek your expertise?
6. What unique roles do you play during unexpected events (i.e. trouble shooting, problem solving, etc.)?

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7. What are the important at-skill and knowledge areas that could take a long time for someone new to learn?
8. What pieces of knowledge are you most worried about being lost if you were to leave?
9. How did you learn the things you know? What were the critical training programs, work assignments, etc.? What is unique about your background compared to others in positions like yours?

PART 3 – Task Information (apply to your role as needed)

If any of the following information has previously been provided, please skip the question.

1. Testing and Maintaining Equipment: What types of equipment must you know how to test, maintain or repair? If you were training new co-workers, how would you prioritize this list?
2. Special Tools: What types of special tools unique to your type of work must you know how to use to do your job? If you were training new co-workers, how would you prioritize this list?
3. Operation of Special Equipment: What types of special equipment must you know how to operate to do your job (i.e. forklift, bucket truck, etc.)? If you were training new co-workers, how would you prioritize this list?
4. Operation of System Devices: What types of system operation tasks (energize, re-energize, lock-out/tag-out, etc.) must be mastered to do your job? If you were training new co-workers, how would you prioritize this list?

PART 4 – Facts and Data

1. Geographic Information: Describe any special information you may have about the geographic location of tools, equipment, or buildings and directions for getting to these particular locations. Describe any information that may be common to experienced co-workers but would be critical if not known by an inexperienced co-worker.
2. Inventories: Describe any special information you have about the location or existence of material, tools and equipment. Describe any such information that may be common to experienced co-workers but would be critical if not known by an inexperienced co-worker.
3. People Facts: Describe any special information you may have about key contacts for expert advice, decision, permissions, etc. Describe any such information that may be common to experienced co-workers but would be critical if not known by an inexperienced co-worker.
4. System Equipment Facts: Describe any systems, applications, databases you utilize. Describe any special information you have about where to locate maps, lists, drawing, vendor manuals, etc. Describe any such information that may be common to experienced co-workers but would be critical if not known by an inexperienced co-worker.
5. Vendor Information: Describe critical vendor relationship and their significance. Provide vendor contact information. Describe any special information you may have about how to order parts, materials, services. Where and how to get equipment repaired. Describe any such information that may be common to experienced co-workers but would be critical if not known by an inexperienced co-worker.

PART 5 – Technical Questions (section used for highly technical roles)

1. Complex Trouble Shooting and Diagnosis: Describe or list any uncommon/unique knowledge that you possess about the diagnosis of complex problems. These often involve interaction among several system components. Name the pieces or types of equipment or describe the type of failure or fix.
2. Diagnosis Short Cuts: Describe or list any special knowledge you have about specific pieces of equipment that would lead to rapid diagnosis of failure. Name the pieces or types of equipment or describe the type of failure or fix.
3. Predictive Patterns: Describe or list any special knowledge you have about patterns of equipment performance deterioration that predict major system failures. Are there patterns that are not obvious and would easily be missed by inexperienced co-workers? Are there different patterns for particular pieces of equipment? Are there signs (sounds, readings, etc.) that might indicate a problem but are actually routine?
4. Failure Patterns: Describe or list any special knowledge you may have about failure patterns for particular pieces of equipment that would lead you to do preemptive inspection or replacement. Name the pieces or types of equipment or describe the type of failure or fix. Are there any annual or seasonal patterns that are no obvious?
5. History of Major Errors: Describe any historical knowledge (lessons learned) you have that might help avoid the repeat of major error in the future. Describe the type of failure, related equipment and timeframes.

Appendix iv

Co-worker Turnover Checklist

The following checklist can be used to document knowledge transfer activities or disbursement of job duties. Checklist items can be modified to meet the specific needs of the organization. Attach supporting documentation as appropriate.

Co-worker Name	Date
Position/Title	Department/Location
Turn over to	(Note 'vacant' if not yet filled)
Leader	
<ul style="list-style-type: none"> <input type="checkbox"/> Co-worker documents duties and responsibilities and reviews with leader. (Includes major duties/responsibilities and brief discussion of scope, skills and expectations, and required actions to complete task. <input type="checkbox"/> Position qualifications are reviewed. All unique skill sets needed are provided (e.g., security, safety, required licenses, etc.) <input type="checkbox"/> Training requirements for this position are defined. <input type="checkbox"/> Committees and meetings that involve the individual in this position are identified. All available future dates are communicated to new incumbent. <input type="checkbox"/> All current assignments and related due dates are provided. <input type="checkbox"/> Any open corrective action items are provided with corresponding, status and due dates. <input type="checkbox"/> All hardcopy and electronic files related to the position including e-file locations have been transferred to the appropriate individuals. 	

Appendix v

Post Departure Knowledge and Skills Assessment

A time may arise where there is an unexpected and/or immediate departure of a co-worker who took with them knowledge and skills on specific processes and tasks. This assessment provides an initial starting point in trying this lost knowledge and skills.

Company/Department/Workgroup	Date
Co-Worker/Leader Name	

1. What known processes and tasks did the co-worker perform?
2. Of these known processes and tasks, which ones are relevant now/near/far future? Which ones are critical?
3. Which processes and/or tasks do you want to focus on?

Sources:

Did the leader? Co-worker? Department?

1. Keep any documentation on how the process and/or tasks were performed (i.e. individual performance plans, performance documentation, job descriptions, etc.)?
2. Mentor or mentee that would offer information relative to the process and/or task?
3. Participate in internal (i.e. communities of practice) or external groups (committees, consortiums, etc.) that would offer information on the processes and/or tasks?
4. Work on these processes and/or tasks with any other department?

Additional avenues? What non-company resources might be available that may contain information about these processes and/or tasks (i.e. other utilities)

