

## Risks Identified by Category

August 2005

### Safety:

- People related risks (below) contribute to poor safety performance
  - (workload, downsizing stress, short service workers, attitude, distractions...)

### People:

- Unable to retain critical skill employees due to current job market opportunities
  - High performing employees seeking other employment
- Staff size falls below minimum regulatory requirements (e.g. OSCP, O&M)
  - YTD 8 FTE PL techs absent due to illness
  - 10 PL techs on restricted duty
  - BP and COP continue to post for technician jobs in Alaska
- Post SR manning levels turn out to be inadequate for remaining maintenance
  - Maintenance requirements not yet defined (RCM underway but slow, technical vendor information unavailable)
- Stress & low morale leads to distraction and decreased productivity
- Workload exceeds remaining employees
- NLRB decision on Valdez causes another union campaign and P/L involvement
- Employee concerns increase after staff selection (use of internal & external avenues)
- Increase in whistleblower actions and employment lawsuits
- Techs not adequately trained to troubleshoot new equipment
- Staff selections (PL technicians) expose Section 28 diversity challenges
  - Many Sec 28 and 29 techs are Operators and relatively inexperienced
  - Current authorized post SR headcount allows for 5 BFEP positions. Plan to create development roles to train Operators to be Maintenance techs.

### Owner Actions:

- Owner's are not in alignment on corrective action plans for SR or other critical decisions
- SR supplemental AFE approval delays project (cash flow constraints)
- Owners do not make timely decisions on SR related project scopes or funding strategies
- Owners do not fund timely after project scopes are agreed
- Owner questions and information requests on project AFE's impact schedule; management attention required to deal with number of requests
- Plan for asset removal (DR&R) is not approved (delayed removals, increased costs and operating conflicts with new PS facilities, e.g. maintenance, access, snow removal)
- Producers & Shippers unable to provide flexibility for upsets during first six months of start-up (potential proration impacts)

### SR Project Costs:

- See Risks to SR Schedule
- Project controls are not effective
- SR related projects and non-SR projects are co-mingled
  - Gaps result due to multiple projects being managed separately
  - Scope transferred from SR PMT to Alyeska PMT not well defined
- Re-work results from quality issues or failure to follow processes
- Additional, currently undefined scope is required to complete SR
- C-Plan amendment approvals require additional enhancements

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**Strategic Reconfiguration:**

- Organization not aligned on forward plan
- Regulators not aligned
- SNC/Hinz engineering is further delayed
- Material deliveries continue to be late
- Fabrication or field installation contractors perform poorly
- Shortage of craft and management resources
- SR Security system scope (S020) does not provide full interconnection or operating requirements for PS-11, River crossings, or SOCC
- Original vision of SR simplicity not being achieved
  - Workforce reduction plans based on this vision
- **SR Specific Risks** identified through Alyeska SR project assessment:
  - Unknown design issues. (i.e., expensive relief valve internal change-outs etc.)
  - Uncontrolled delivery of numerous drawings and revisions will impact efficient construction and FCO *Functional Check out*
  - Unresolved late software delivery problems.
  - Lack of logic diagrams creates significant problems for providing comprehensive FCO and facilitation of long-term maintenance and operation activities.
  - As-builts not completed on time to support new maintenance activities causing the new maintenance work group to create and maintain their own set of as-built drawings.
  - Unproven pump motors ("Serial No. 1") may experience multiple motor failures during early operation and exhaust the supply of long-lead spare parts.
  - Inability to get long-term O&M personnel on the program so they can establish a pride of ownership and carry the facility through to successful long-term operation.
  - Alyeska O&M bench strength in mid and senior management levels not deep enough
  - Operational spares not identified, purchased and delivered prior to start-up.
  - Total Pipeline O&M structure not in place at start-up; including procedures, staffing, new reporting mechanisms, performance measurement guidelines, work processes, planning meeting formats, etc.
  - Change-out of PS09 relief valve trim dependent on isolation valves holding in order to avoid pipeline shut-down and proration.

**Workload:**

- Owner data requests overload SR PMT
- Support for Tariff Rate Case impacts and limits internal resources
- Workforce becomes discouraged with workload in light of impending reductions
- Loss Prevention System is not effectively implemented
- Valdez SR/organizational changes add further stress and take management attention away from pipeline effort

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### **Cost Savings:**

- Transition to new equipment and organization reveals future maintenance problems
- Regulatory scrutiny increases on compliance issues during transition & post SR
- Decreased cost savings results from new requirements following OSCP studies
- Retained buildings increases maintenance costs and personnel needs
- Personnel assumptions not coming to fruition in light of maintenance needs (RCM)
- JPO intervention in de-staffing schedule
- Security posture challenged by agencies as inadequate
- Regulatory or other stakeholder challenges due to reductions

### **Budget & Productivity:**

- Stress related absences increase
- Health care costs (includes worker's comp) rise
- Risk of integration, system performance, training, resource delays of new SCADA Control system
- Regulatory agencies call for additional unplanned drills to prove new C-Plans; considerable management attention required
- PLQ/ bed space is not adequate for 2006 construction
- 2005 Berth 4 - 21 day overhaul impacts production (2006: Berth 5)
- FERC requirement for Fixed Asset Inventory impacts resources
- Oil Movements Oil Accounting system does not meet functional expectations

### **Executive Leadership:**

- Expected change of leadership/new direction leads to loss of stability & focus; lack of confidence and secondary impacts

### **Start-up:**

- Normal operations are impacted by SR implementation (upsets)
- DRA facility upgrade is delayed
- RCM is not complete in sufficient time to support optimal procurement of operating spares and full development of PM procedures
- SR delays require purchase of Avon jet rebuilds
- Upsets due to telecom changes and integration
- SR Design tagging issues impact startup
- Resources unable to support old & new facilities simultaneously
- Project timing impacts SR startup
- Risks associated with a Winter Start-up (SR) & Cold Start Plan

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**Baseline and Core Operations Cost & Budget:**

- See Owner Actions
- SR scope transferred to baseline cost centers impact Operations budgets
- Delay in fleet replacement funding of aging equipment impacts costs to SRP, future projects, and baseline costs
- VMT Firewater System – Conversion to fresh water (challenging economics)
- CV-109 replacement in 2006 (\$4 – 6MM) not in LRP impacts other project funding
- Cost & availability of ultra low sulfur diesel
- BWT-tank atmosphere risk issues are not managed aggressively due to overall uncertainty and competing priorities
- BWT flow reductions and their impact on treatment quality outpace our ability to change plant operations or make treatment modifications [also a compliance issue]
- Costs associated with hazardous waste disposal (decommissioning) impact budget
- Risks to VMT downsizing and consolidating office space
- Risks associated with 2 shutdowns/yr
- DOT- VMT jurisdictional piping appeal (losing means more OQ & compliance issues)
- Decision not made on west Tank Farm (cost savings not available)
- PS 01 Tank fire protection is required in near term

**Compliance:**

- Scheduled completion of OSCP response base at PS 11 is delayed
- Minimum requirements for OSCP are not met (staff size & training)
- Implementation to new amendment (OSCP) is delayed
- Fire systems are not completely identified in AFE S020
- Systronics systems failures prior to replacement
- SR delays require “catch-up” of deferred maintenance (fire systems, others)
- Risk of incidents due to missed or deferred maintenance
- Mainline valve maintenance (e.g. CV -109 @ Klutina River)
- Increase in regulatory NOPV's or NOV's
- Operating past 270 day air quality permit period
- Staff not properly trained for CMT/IMT after staff selection
- Governance of AMS is less than adequate
- Training of responders (VMT C-Plan) not complete
- JPO demands rapid pump station demobilization

**Reputation:**

- Latest SR forecast (cost and schedule) is not delivered for 2005 & 2006
- RCAC Management – risk of stakeholders opposition to VMT plans