BNSF Railway

STB - Rail Energy Transportation Advisory Committee

June 12, 2008
Rail Capacity Drivers

People

Locomotives

Track and Terminals

Equipment
Planning Process

Planning Horizons:

- Long-term (CANAC)
- Annual (Nominations)
- Quarterly
- Monthly
- Weekly
- Daily: every 4 hours, update 36 hours outlook
Tri-Party Coordination

- 2 of 3 relationships have formal agreements
- Railroads and Producers coordinate informally
- Need increased transparency across all 3
Tri-Party Variables of RR Accountability

- Communication with utility and mines regarding
- Facilitate Mine and Utility Loadings Balance
- Systems Integration

Processes

- Optimize Unit Per Train Opportunities
- Fleet Velocity

Ops Execution

- Load / Empty pipeline management & execution
- Tactical communication
  - BNSF
  - Interline / Customer

Asset Optimization

- Mine Supply & Utility Demand based Trainset Count Prescriptions
- Capacity Planning

Operation Analytics

- BNSF
- Interline / Customer
The Joint Line on which BNSF and UP both serve the southern Powder River Basin mines is operated pursuant to the Joint Line Agreement approved by the ICC.

Monthly tonnage demand for each railroad by mine is determined through the PRB forecast process.

BNSF and UP management jointly assign order and quantity of loading slots at each mine.

BNSF and UP manage the flow of trains onto the Joint Line to attain ETA compliance for specific slots.

Both railroads’ coal operating groups jointly manage slotting changes to maximize the line’s efficiency.

Examples of events causing slotting changes:
- Railroad maintenance
- Inclement weather
- Mine outages
- Mechanical problems
Tri-Party Conditions RR’s Manage

Producers
- Loading systems okay? (Y/N)
- Inventory okay? (Y/N)
- Quality spec ready for plant specific set and sequence enroute? (Y/N)
- Onsite staging capacity available? (Y/N)

Consumers
- Does unload rate match enroute pace? (Y/N)
- Unloading systems okay? (Y/N)
- Does pile have capacity? (Y/N)
- Does pile need specific quality spec arrival sequence? (Y/N)
- Is onsite staging capacity available? (Y/N)

Empty Flow
- Service interruptions
- Mechanical set-outs
- Route maintenance
- Mine tons available
- Mine staging capacity
- RR staging capacity
- Train size matches available plant size

Loaded Flow
- Service interruptions
- Mechanical set-outs
- Route maintenance
- Trains ahead at plant
- Same plant trains ahead enroute
- Shared route trains ahead enroute
- Destination staging capacity
Unloading Best Practices – Investment and Management Matter

- Infrastructure investment and management of unloading operations
  - Key lever of supply chain
  - Vary widely across locations
  - Determine capacities
    - Sustainable
    - Surge
  - Add variability to the cycle

Sample Train Unloading Hrs: Spot to Release

<table>
<thead>
<tr>
<th></th>
<th>Sustained capacity</th>
<th>Surge capacity</th>
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</thead>
<tbody>
<tr>
<td>Best in Class</td>
<td>4.5 daily</td>
<td>6.0 daily</td>
</tr>
<tr>
<td>Opportunity for Improvement</td>
<td>1.0 daily</td>
<td>2.0 daily</td>
</tr>
</tbody>
</table>

| Best in Class       | 1-2 hr per train variability |
| Opportunity for Improvement | 6-9 hr per train variability |
Process Assessment

Works Well:

- Daily operating adjustments
- Mine and RR maintenance planning

Opportunities for Improvement:

- Longer mine balance timelines
- More sharing of stockpile levels
- Unloading outage communication
- Transparency of mine producer issues
- Sharing of best unloading practices
- Enhanced unload investments and management