

ANR Council Meeting

Agenda

- Safety Moment
- Introductions
- Council Mission
- Gas Control
- Noms & Scheduling
- Survey Update
- Group Discussion
- Feedback/Next Meeting





Safety Moment

How to handle a firearm safely

- Handle all guns as though they are loaded
- Never point a gun at something you are not willing to destroy
- Keep your finger off the trigger until you're ready to fire
- Be sure of your target and what is beyond it
- Lastly, you are not **RAMBO**...you can look the part but don't act the part



ANR Customer Council Mission

- To partner with customers and provide a means to provide feedback, priority and represent the customer community.
- Establish open communication between ANR Management and Customers
- The council is a vital source for providing information on customer issues, concerns and service requirements
- Members have the opportunity to influence decision making at the highest levels on TC Energy management
- One-year member commitment with two to three meetings a year



Gas Control

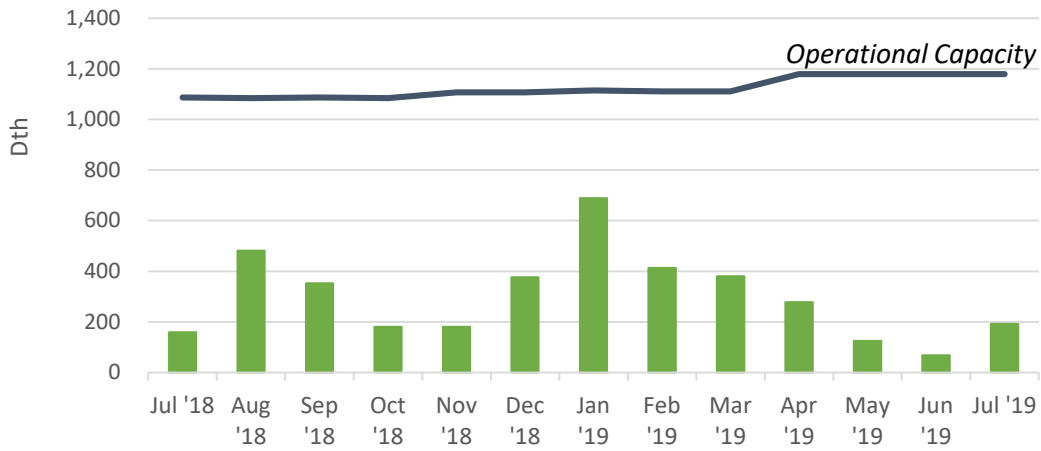
Monica Edwards

Winter 2019 Force Majeure follow-up

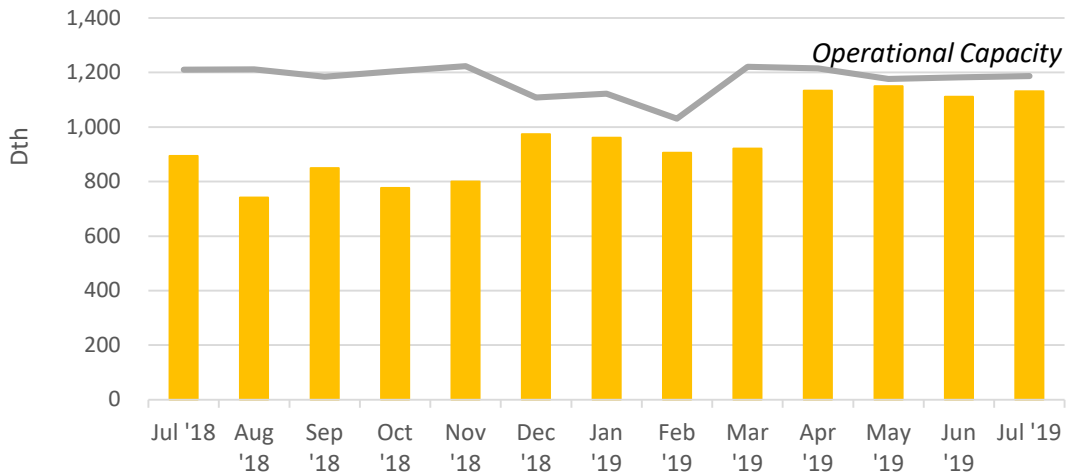
- Upgrading starting and instrument air systems at Kewaskum
- Continuing efforts to review and ensure equipment is in the best possible condition
- Conducting monthly test runs of the units to ensure reliability
- Increasing time spent training and mentoring newer employees
- Compiled a list of concerns from last winter at the Regional level
 - Working through each item on the list to ensure it is corrected ahead of next winter.
- Processes have been implemented to more closely monitor the gas flows entering the Badger Area
 - planned response times have been improved
- Field Ops would love to host customer visits at any ANR compressor or meter stations
 - If interested, please contact your Marketer to arrange a visit

Operational Load Factors

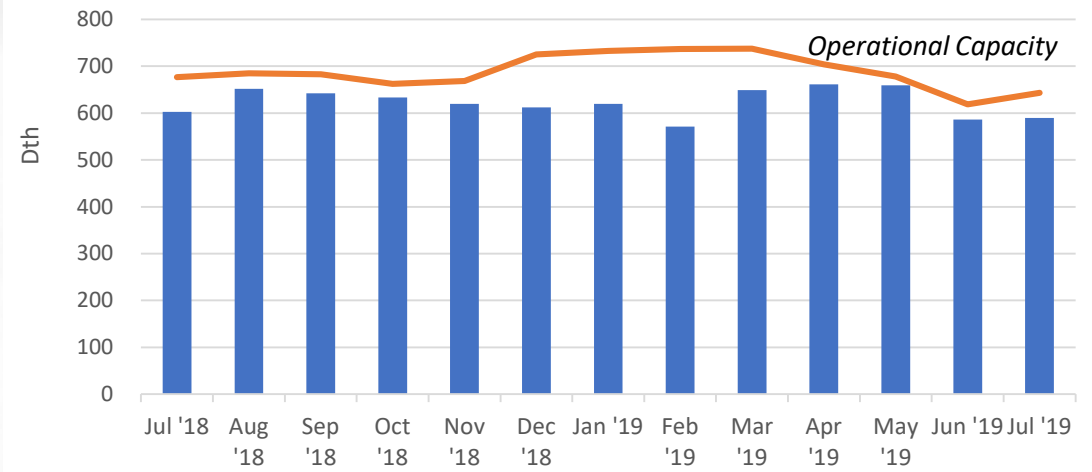
SEML-N (Defiance) Average Scheduled Quantities



SEML-S (Jena) Monthly Average Load Factor

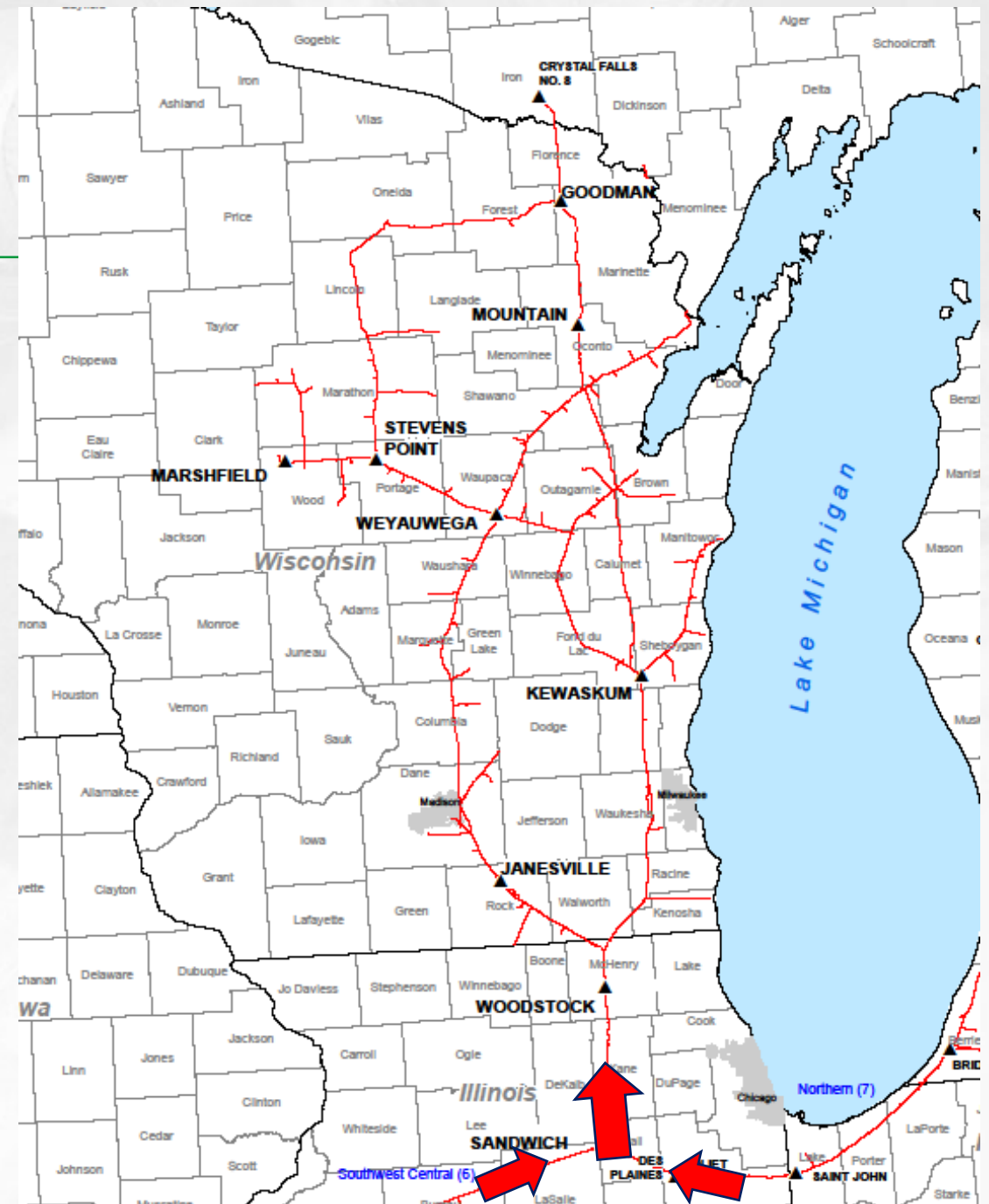


SWML Monthly Average Load Factor



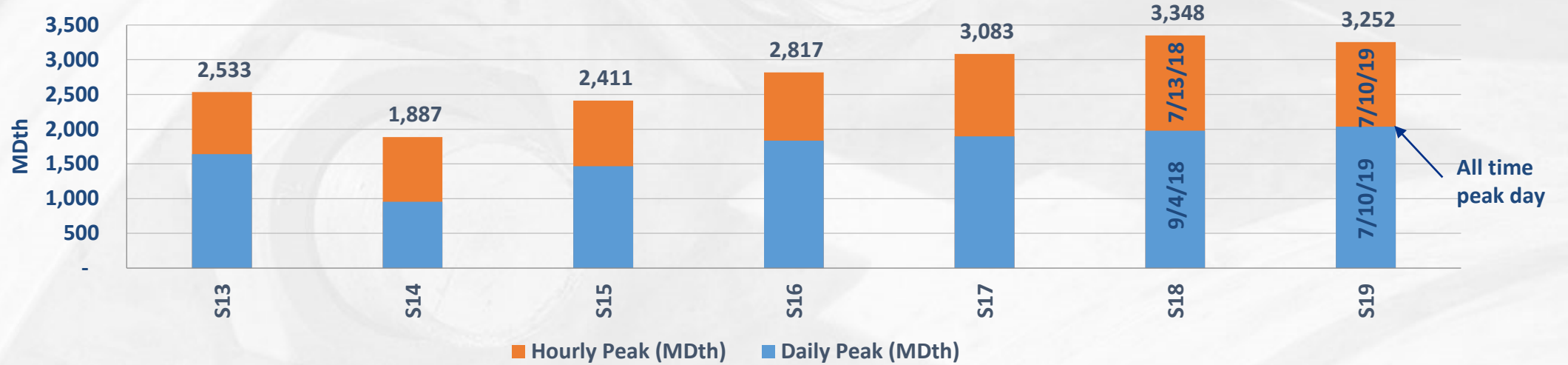
The Danger

- In past winters, ANR has used Sandwich Northbound as the controlling constraint location. Secondary services were not restricted.
- Secondary deliveries can adversely impact delivery pressures, particularly the further north they go into the state and the further they go down a lateral line.
- Changes aim to protect ANR's Firm commitments, but still maximize Firm Secondary flexibility.

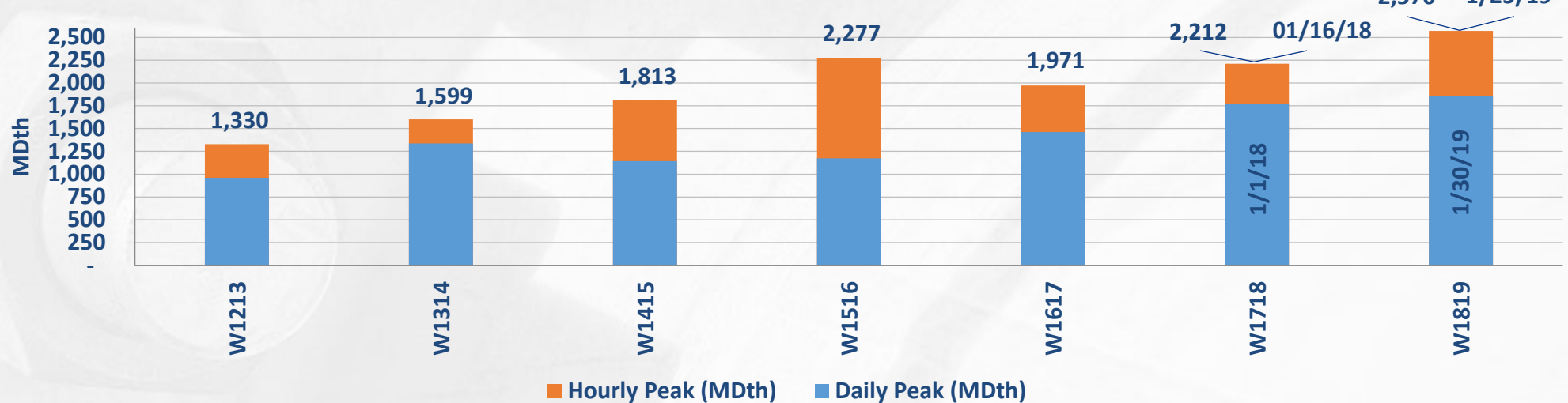


Peak Daily & Hourly Power Load by season

Peak Daily & Hourly Power Load - Summer (MDth)



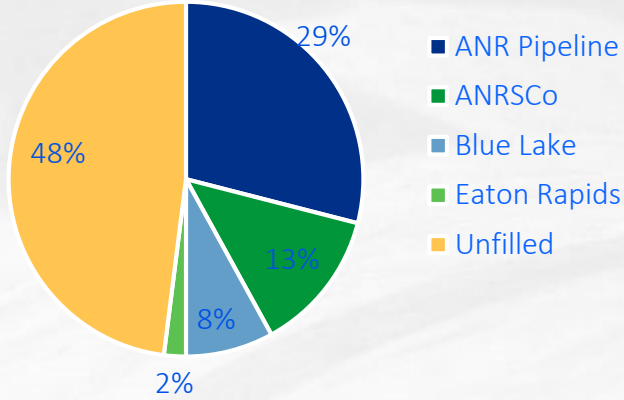
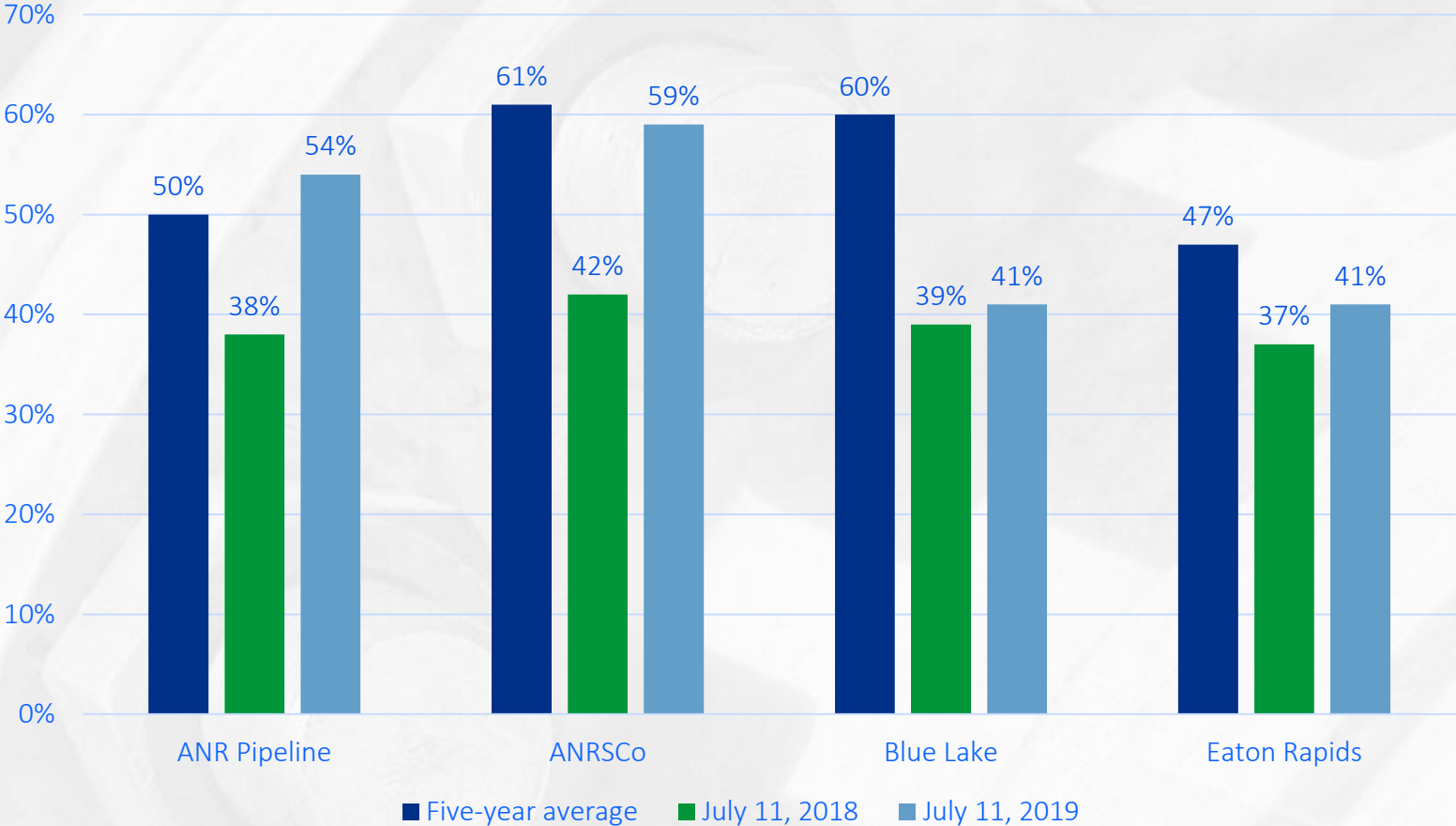
Peak Daily & Hourly Power Load - Winter (MDth)



Storage inventory – 2019 vs. 2018

% of Certificated Storage Capacity

Physical Inventory Positions as of July 11



Percent of Storage Capacity	2019 Percent Full	YOY Difference (2018-19) July 11
ANR Pipeline	54%	15.5%
ANRSCO	59%	16.5%
Blue Lake	41%	2.2%
Eaton Rapids	41%	4.1%



Noms & Scheduling

Keith Flynn

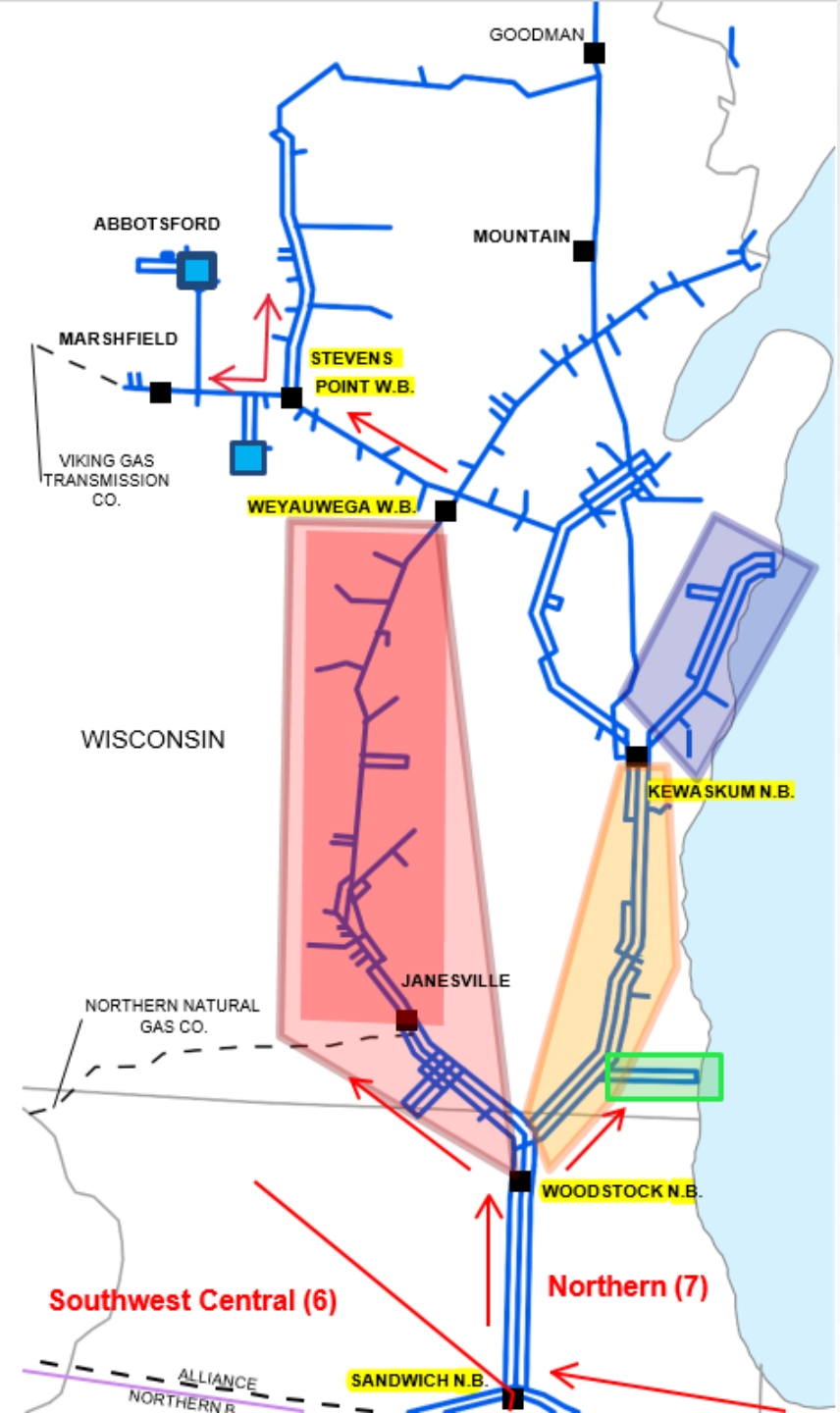
Wisconsin Area Constraints

Flow Throughs:

- Sandwich Northbound
- Woodstock Northbound
- Kewaskum Northbound
- Stevens Point Westbound
- Weyauwega Westbound

Groups and Points:

- Two Rivers Lateral (Group)
- Madison Lateral (Group)
- Madison Lateral North (Group)
- Milwaukee Lateral (Group)
- Racine Lateral (Group)
- Wisconsin Rapids (Point)
- Abbotsford/Edgar (Point)



Extreme Condition Situation Notices – Phased Philosophy

During peak Winter periods, ANR can declare an Extreme Condition Situation when:

- Any portion of ANR's system throughput approaches capacity
- Extreme weather conditions exist
- ANR experiences operating pressures that can be significantly greater or less than normal operations, such that ANR's ability to receive or deliver quantities of gas to meet service obligations is impaired.

To communicate these Extreme Conditions to our Customers, ANR uses a Phased Philosophy when posting Extreme Condition Situation Critical Notices as follows:

Note that these phases are generally applied and are subject to change based on operating conditions in order to ensure system integrity.

Extreme Conditions - Phase 1 and 2

Phase 1: Post a weather advisory indicating colder weather is forecast & that shippers should align receipts and deliveries to minimize imbalances to support system integrity.

- Guidance for notice is forecast for Green Bay, Madison & Milwaukee, Wisc., where high temperatures are **less than 20° F for two or more consecutive days**.

Phase 2: Post Declaration of Extreme Condition Situation indicating the Area(s) of ANR's system that are affected, typically ANRs Northern Market Area (ML7).

- Guidance for notice is forecast for Green Bay, Madison & Milwaukee, Wisc., where Average temperatures are **less than 15° F for two or more consecutive days** or other operational conditions exist.

Actions and Impacts associated with **Phase 2** Notices could include some or all the following:

- Indicate Services that are required to be on uniform hourly takes over a 24-hour period.
- Indicate Services that are required to be at their contractual hourly rate.
- Indicate ITS-3 will be approved on a best efforts basis and will flow based on the approved nominated hourly rate.
- Indicate Limitation or Denial of operational flexibility.
- Indicate ETS & FTS-3 Secondary nominations will flow on a uniform hourly basis.
- Limitation of Interruptible & Overrun Transportation Services including MBS.
- Deny Incremental ITS-3 Nominations.
- Unauthorized Overrun will not be permitted

Extreme Conditions - Phase 3 and 4

Phase 3: Post Declaration of Extreme Condition Situation indicating the Area(s) of ANR's system that are affected.

- Guidance for notice is forecast for Green Bay, Madison & Milwaukee, Wisc., where **Average temperatures are less than 10° F**, Nominations exceed 90% of the Wisconsin Contracted Capacity or other operational conditions exist.

Actions and Impacts associated with **Phase 3** Notices could include items from Phase 2 and some or all the following:

- No Interruptible, Overrun or MBS Withdrawal Services in the Area affected by the notice.
- Firm Secondary services will be scheduled up to the posted Operational Capacity in the Area affected by the notice.
- No Firm Secondary services will be scheduled in the Area affected by the notice.
- Indicate No Operational Flexibility for Power Plant, must flow based on contractual rights.
- Indicate that FTS-3 customer must flow at their Contractual Hourly profile

Phase 4: Issuance of an **OFO** – Operational Flow Order.

- Guidance for an OFO Notice is System Integrity Requirements or Determination of Unacceptable Shipper(s) behavior.

Actions and Impacts to be specified in the OFO

GEMS Updates – Pooling/Capacity Allocation

Upcoming GEMS changes to the Pooling/Capacity Allocation process will address the following issues based on customer feedback.

- Customer provided Ranks will be utilized during the Pool Balancing process for nominations reduced due to Pipeline Capacity Constraints (PCC reduction reason code).
- Previously Scheduled Pooling Service Nominations will not be further reduced during bumpable intraday cycles unless derived or reprioritized by the customer as Interruptible.
- Previously Scheduled Pooling Service Nominations will not be further reduced during the non-bumpable ID3 cycle.

Submission of Customer Nominations (Regular & PMK) and the Pool Balancing Summary screen remain unchanged.

Final development is being completed & our implementation target is mid-late Q3.

TC PLUS Status

Great Lakes

The following are the changes to TC PLUS that are being developed

- Updated user interface & user experience.
- More consistent navigation & functional tools utilized across the application.
- Ability to “Save User” preferences on a variety of screens
- Enhanced sorting, filtering and customization features for screen grids/matrix outputs.
- Infrastructure changes enables TC PLUS to be moved to AWS. Development and testing are in progress & our implementation target is late October.

ANR and Storage Companies

- ANR Projected Target date: Mid-2022
- Scope definition by the end of October 2019



ANR Survey Results

Ralph Del Rio



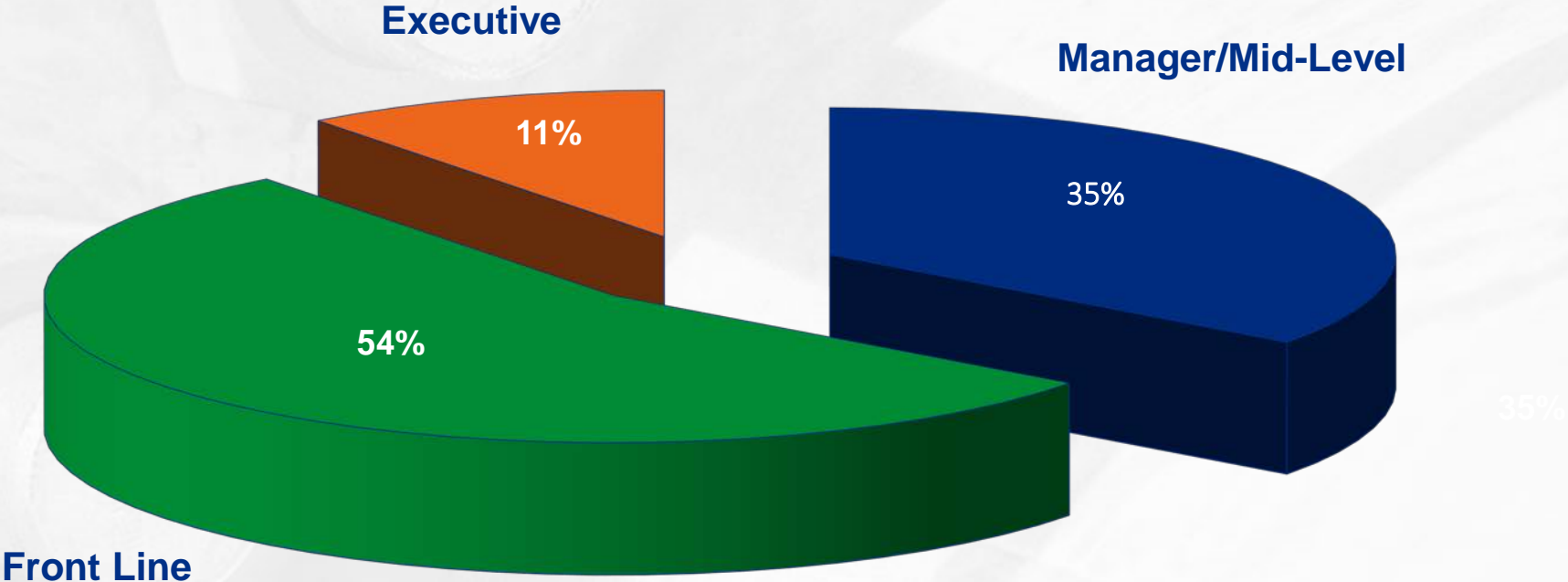
ANR Survey Participation Rate

- Overall participation rate of 42 percent
- 182 surveys completed – 101 anonymous
 - 28 by phone (38%)
 - 73 surveys online (40%)

	2018	2019	Increase
Phone interviews	58	73	15
Internet surveys	91	109	18
Total	149	182	33

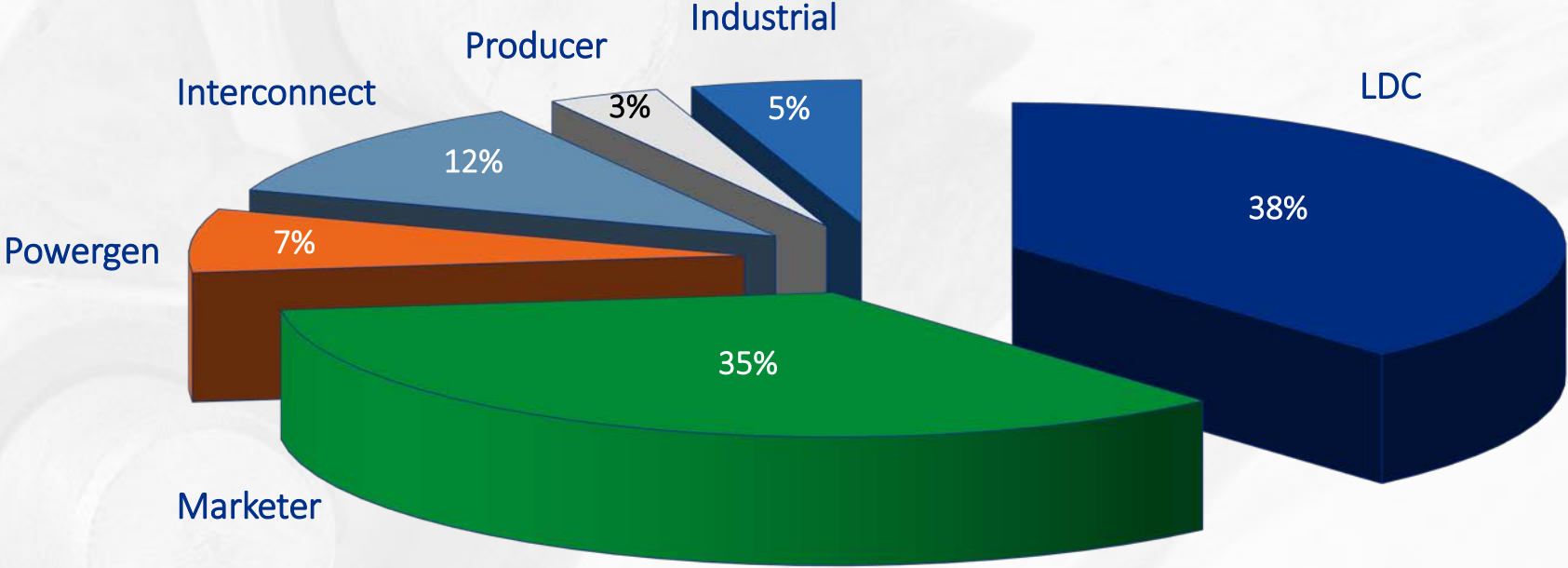
ANR Survey Sample

Management Level



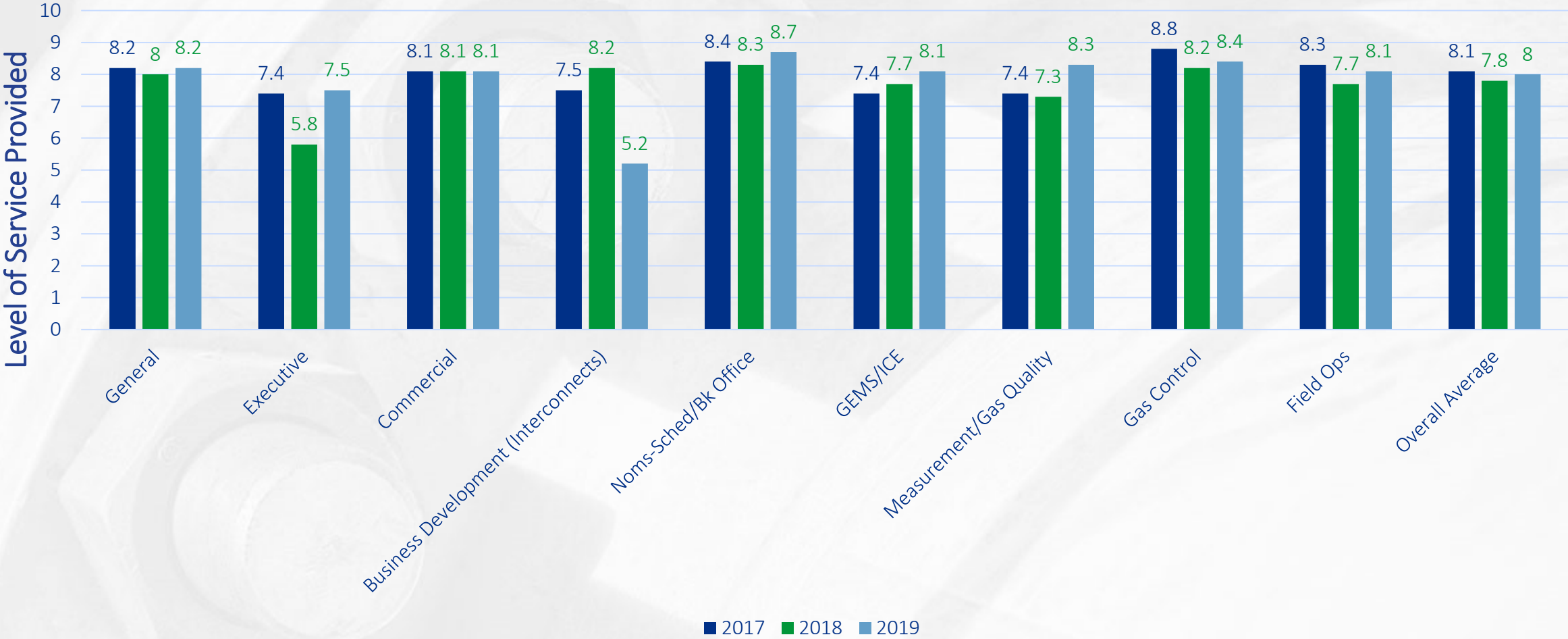
ANR Survey Sample

Business Type



ANR overall averages by module

Overall Averages by Module



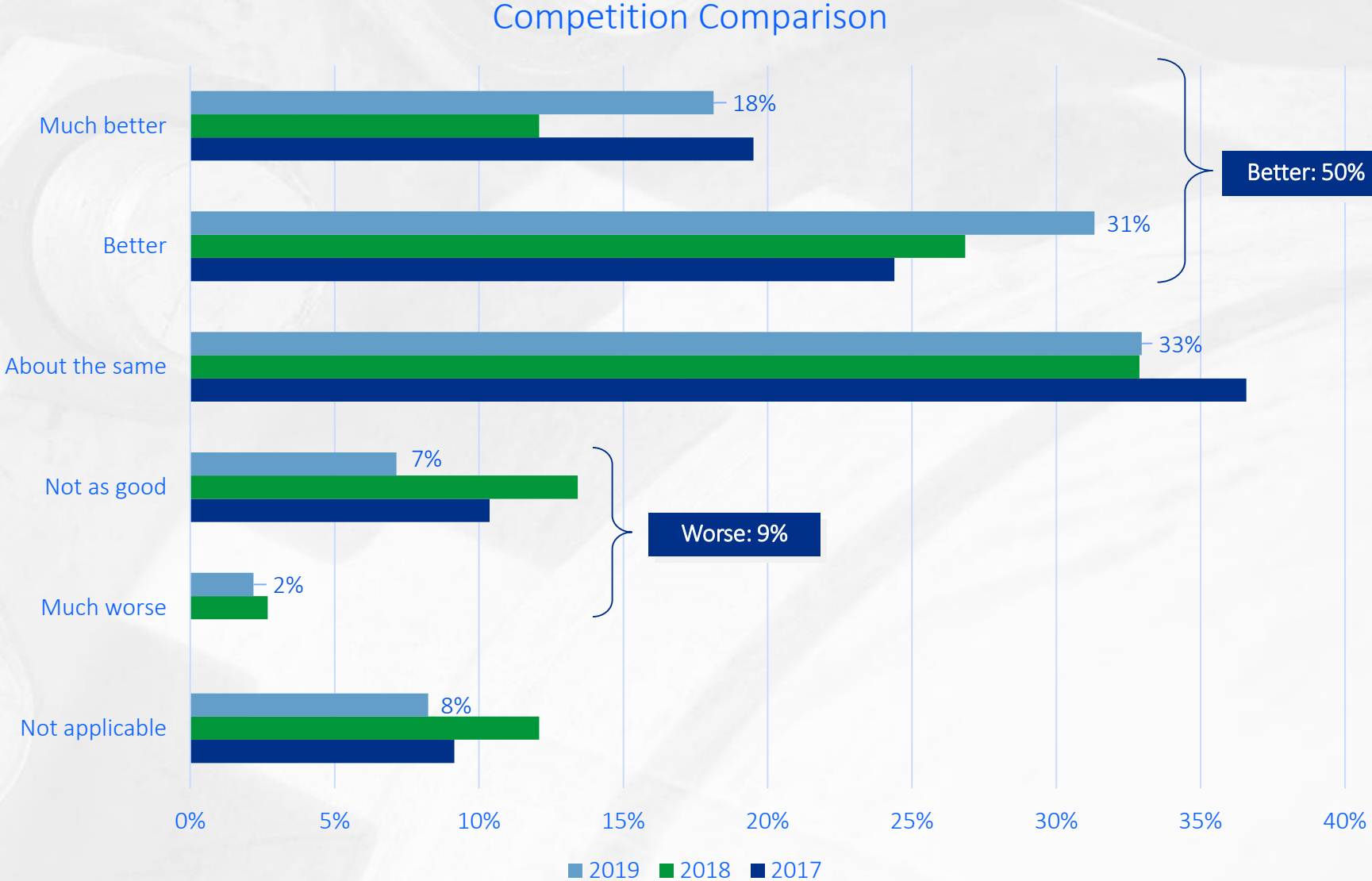
ANR summary – Exceptional Service

Overall, ANR Pipeline provides exceptional service...



ANR summary – Competition Comparison

Compared to the service provided to your company by other pipelines, ANR Pipeline provides a service level which is...



ANR Survey highlights

Positive Feedback

- Improvement with relationships at the Senior Management level, Customers would like to see more
- Good feedback on Account Managers and Service Reps, looking for stronger relationships

Areas to Improve

- Engineering projects are frustrating on cost assessment and timing
- Commercial dealings could be improved on flexibility on up charges and overall position (too high)
- Knowledge and service level during after hours could be improved

Agree/Disagree Messages

- GEMS – Some really like it, others feel it's old, when the New System coming?
- Winter Operations – Some customers felt it was handled well, others didn't and they're looking for the full story

ANR Customer Council Discussion - Proposed Topics

The following are topics for discussion based on feedback from the Energy Insights Survey and direct Customer feedback:

- GEMS Reporting
- Flat File Bulk Nomination submission option
- After hours / weekend staff, knowledge improvement
- Allocation process for Pipeline Capacity Constraint Reductions related to Pooling
- Capacity Allocation rules are difficult to understand
- Desire for more certainty for outages with impact Firm Primary services
- Reservation Charge Credit process
- Additional Title Transfer Tracking Locations or Service
- Others...

feedback
ideas
comments
thoughts
suggestions

