Refrigeration Operator Coaching (ROC)

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Conservation Advisory Council
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What Makes ROC Different?

- Kaizen Blitz / O&M Lesson:
  - Managers need to provide support, but…
  - *Operators* make the changes that deliver energy savings

- ROC Goal:
  - Provide *refrigeration operators* with the **knowledge**, **support** and **tools** they need in order to minimize refrigeration energy costs.

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ROC Delivery Format

- **Knowledge**
  - Five ½-day workshops (1 workshop/month)
  - Share ideas; discuss experiences
- **Support**
  - Monthly technician visits to discuss Action Item progress and help with documentation
- **Tools**
  - 2 yrs eSight Energy Management Software
  - “Tune-up” Kit
- Meter level energy savings analysis

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Action Items: Low/No-Cost Improvements

- Compressor tuning
- Set point changes
- Condenser Maintenance
- Evaporator optimization
- Valve group commissioning
- Defrost optimization
- Calibration

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Recruiting

- Criteria
  - At least $150,000 annual refrigeration energy cost
  - Management willing to send 1 to 3 operators to each workshop
  - Willing to think creatively, share experiences and implement lessons

- Reasons for “no”
  - Lack of human resources (fresh pack season)
  - Self-directors: cost share hurdle

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ROC Participants

	Refrigeration Energy Usage (kWh/yr)	Expected Savings	Expected Incentive ($0.02/kWh)	Effective Cost ($/first year kWh)
Food Processor	3,000,000	10%	$6,000	$0.12
Food Processor	6,500,000	10%	$13,000	$0.07
Dairy	5,200,000	10%	$10,400	$0.07
Refrigerated Warehouse	3,575,430	6%	$4,291	$0.16
Refrigerated Warehouse	4,410,000	6%	$5,292	$0.10
Total	**22,685,430**	**9%**	**$38,983**	**$0.09**

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Workshop Topics/Dates

	Workshop	Date
1	Introduction, O&M, Compressors	Tuesday May 3rd
2	Reducing Head Pressure, Condenser Tuning	Tuesday June 7th
3	Suction Pressure, Valve Group Commissioning and Evaporators	Tuesday July 12th
4	Load Reduction	Tuesday August 16th
5	Sequencing and Compressor Commissioning	Tuesday September 13th

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Questions?

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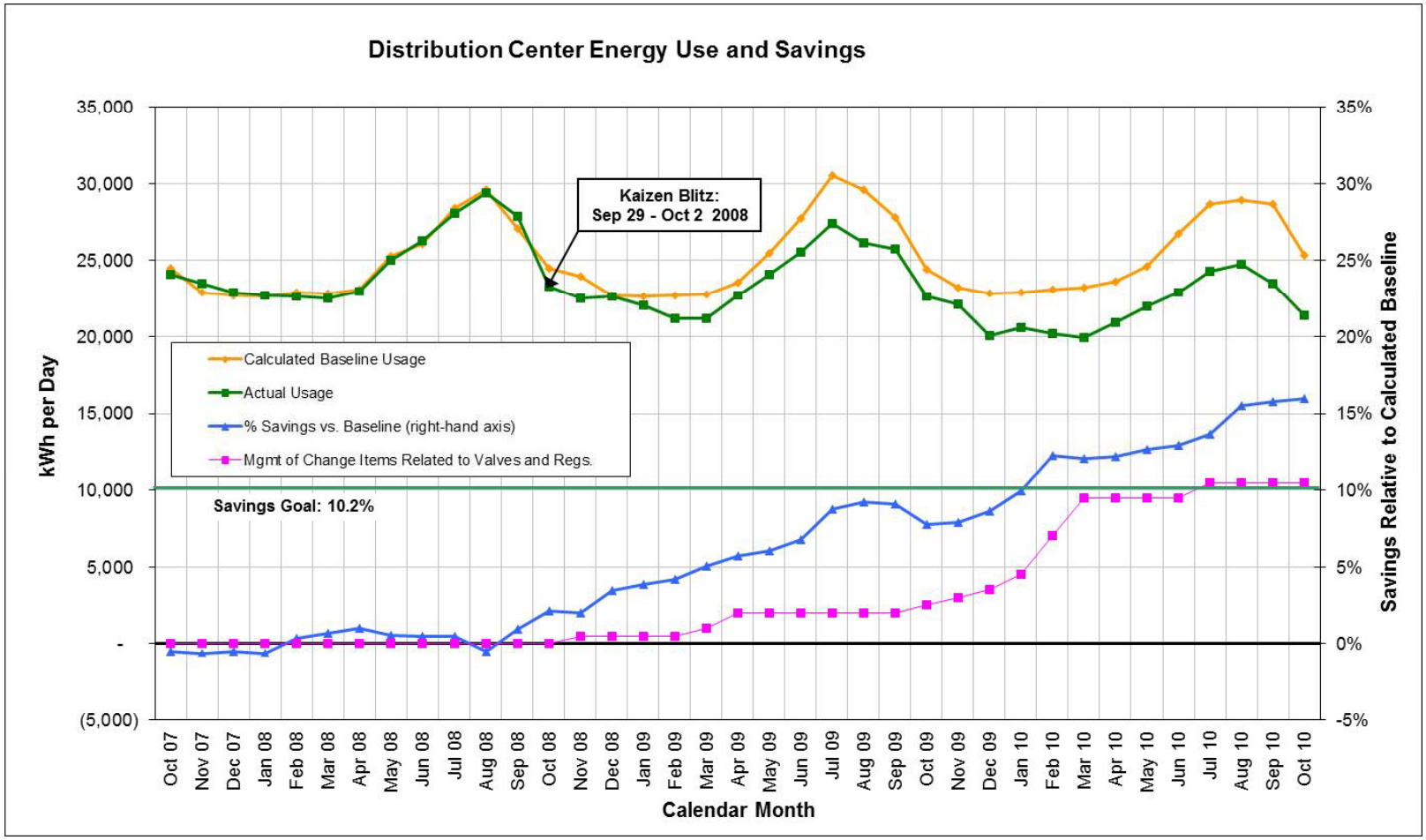
Low/No-Cost Improvements = Energy Savings



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