

Intertie Failures & MACD's Guidelines

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Intertie Trading Sub-Committee - February 11, 2005



- To review data regarding transactions across interties
- To discuss the existing MACD guidelines and perceived deficiencies
- To obtain input and feedback from traders
- To set out proposals for change

- **Imports**
 - Failed imports have an effect on reliability during on-peak hours
 - Scheduled energy must be delivered as promised or demand could exceed supply
- **Exports**
 - Failed exports tend to have an effect on reliability during off-peak hours
 - Fewer options are available to the IESO to avoid an over generated state (fossil and hydroelectric units are less likely to be on line and are therefore unavailable to be constrained down)

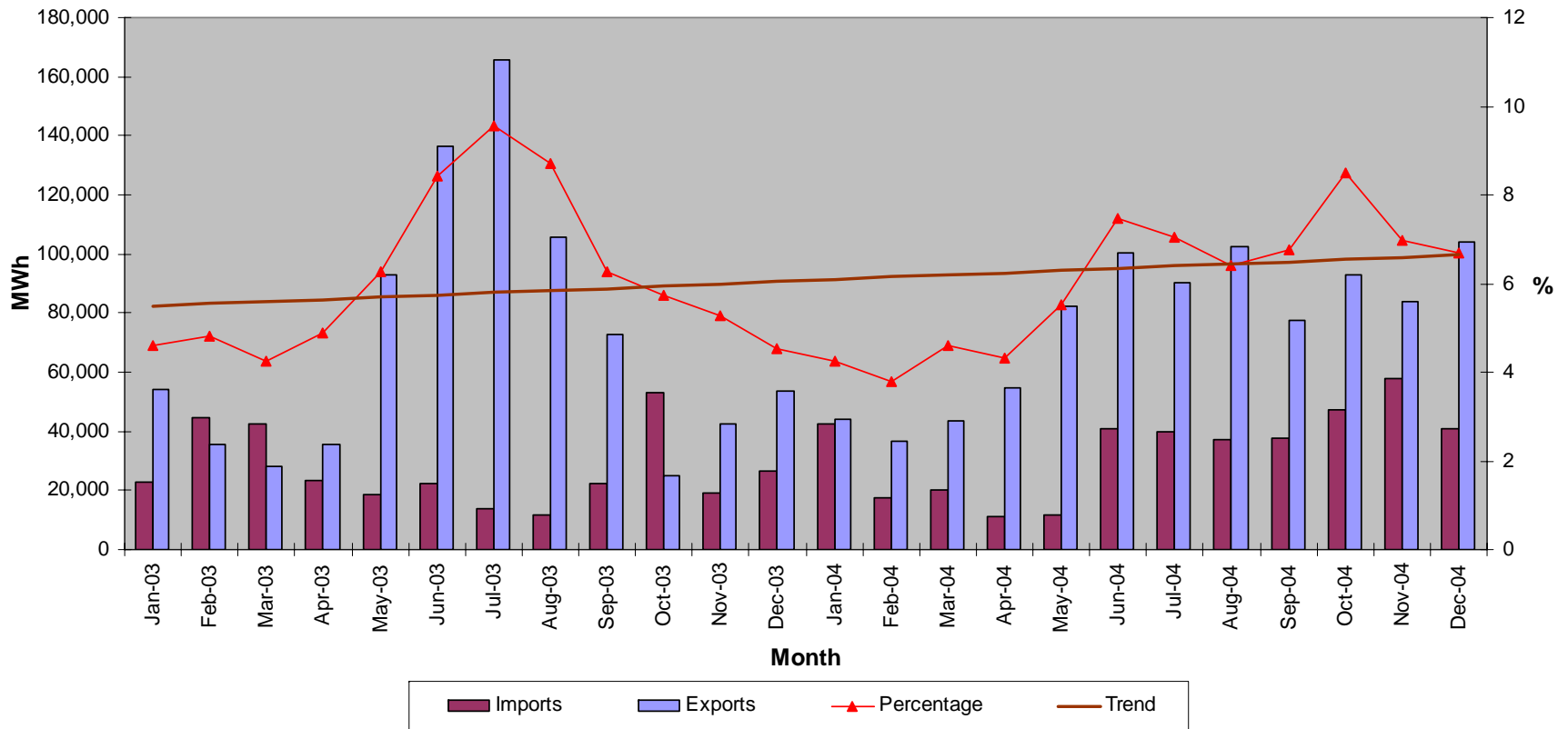
- Imports
 - When an import transaction fails, IESO must find more expensive Ontario generation
 - This tends to raise the HOEP relative to the pre-dispatch price
- Exports
 - When an export transaction fails, IESO may constrain off domestic generation to compensate for the failure
 - This tends to lower the HOEP relative to the pre-dispatch price and causes an increase in CMSC payments

- Across all interfaces the trend in transaction failures is increasing
- Across all interfaces the trend in transaction failures due to tag errors or economics is unchanged
- For NYISO the percentage of failures due to NERC tags or economics average persistently higher than 30% and were never lower than 15% and the incidents of sanctions is very low

- NYISO failures represent a high volume of total transaction failures. A significant percentage of failures are as a result of economic or tag failures
- For MISO (Michigan) the failures for NERC tags are increasing, however, the failures subject to sanctions are decreasing
- Hourly maximum failures are significantly greater than the average

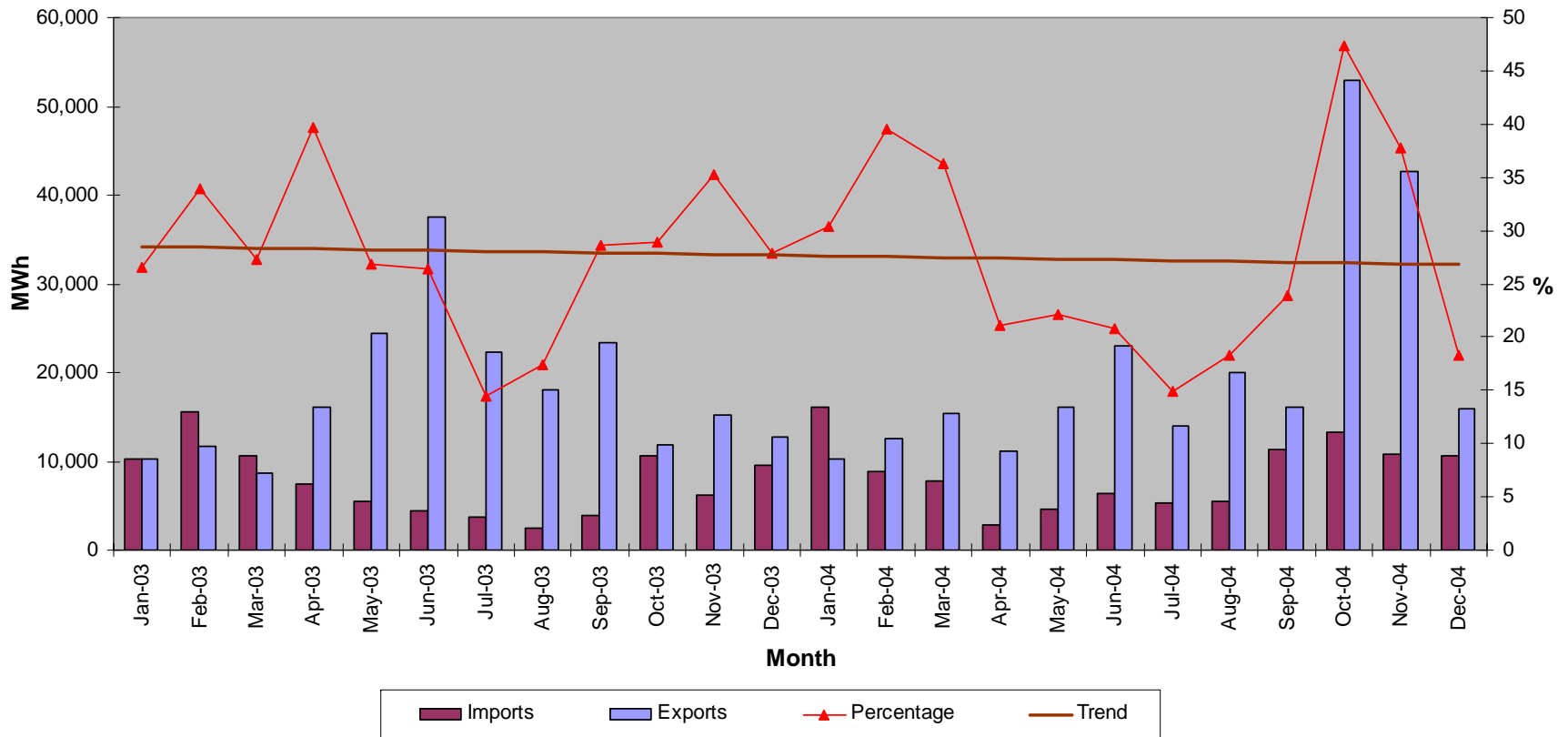
Total System Monthly Failures

Total Monthly Failures in MWh and Percentage of Total Trade



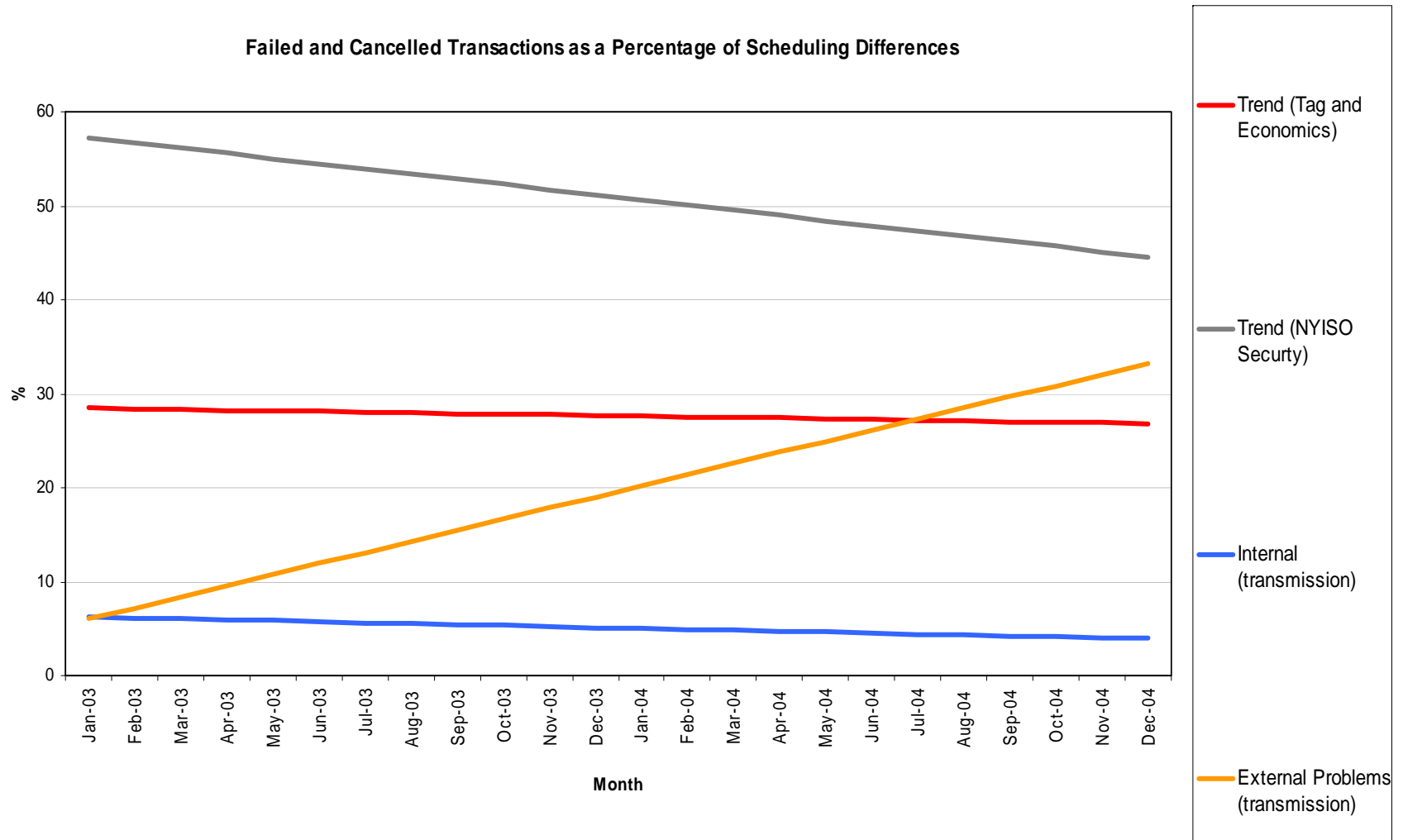
Total System Monthly Failures due to Economics and NERC Tags

Percentage of total failures due to Economics or NERC Tag for all Interties



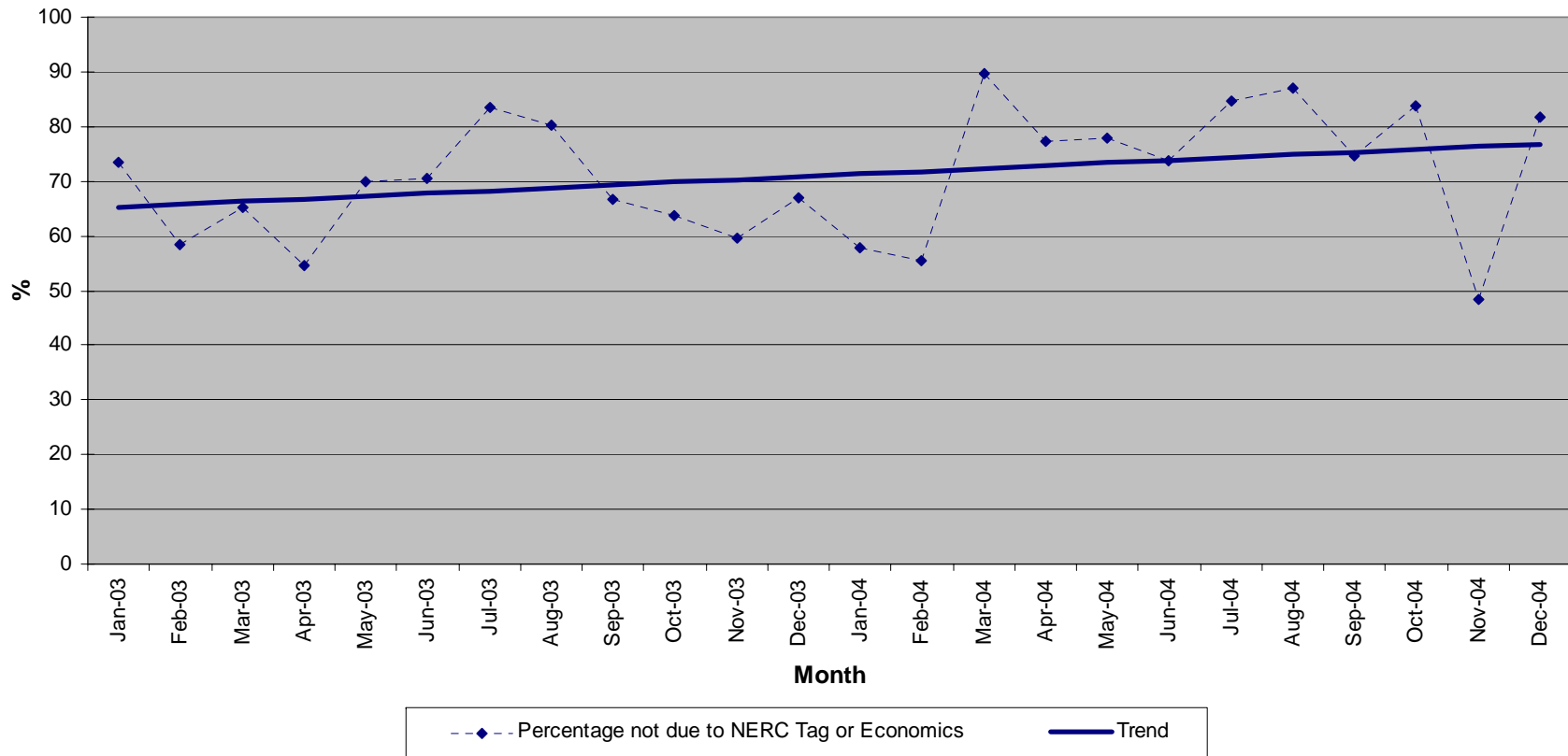
Intertie Scheduling Differences between Pre-dispatch and Real time

Failed and Cancelled Transactions as a Percentage of Scheduling Differences



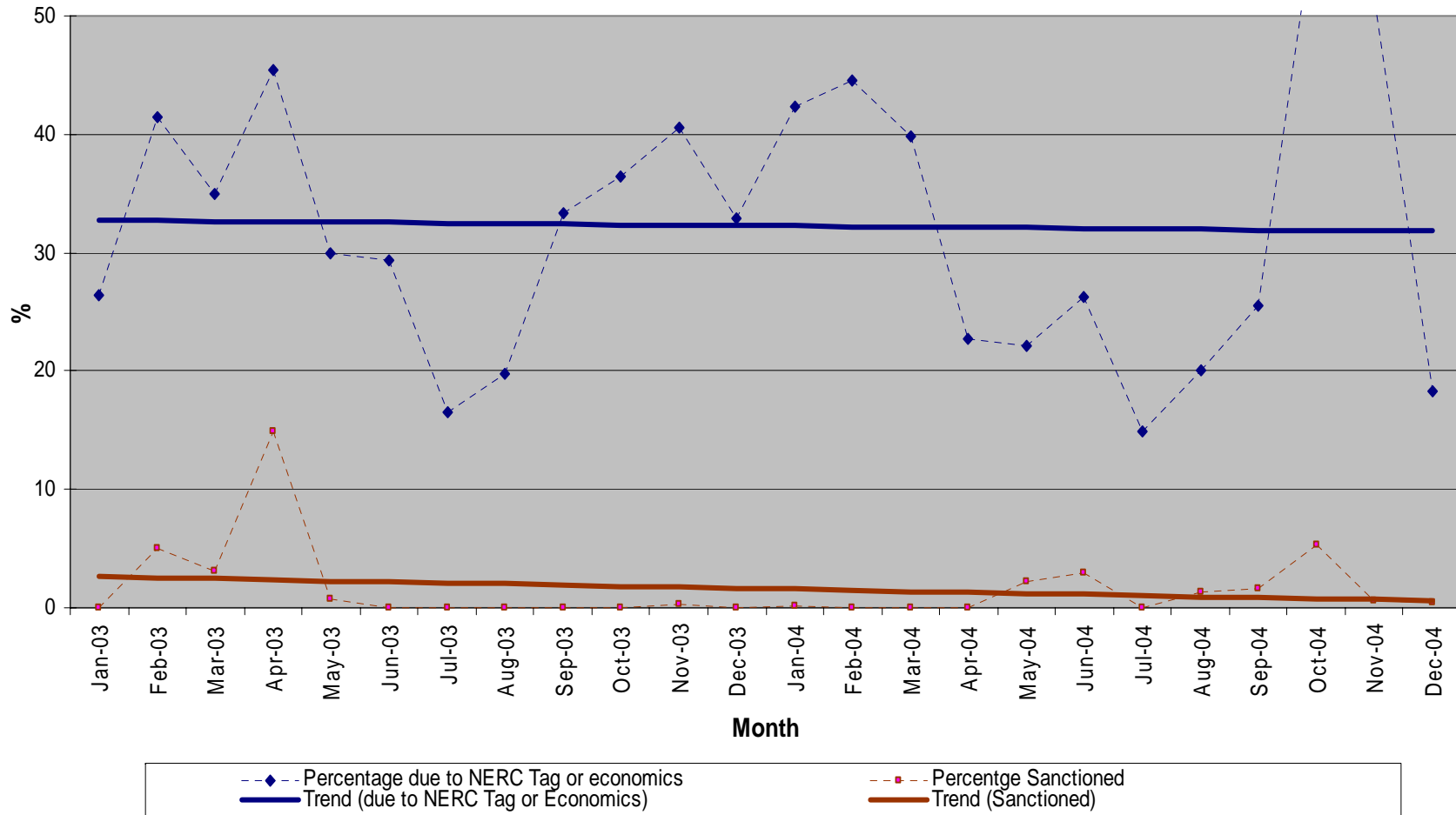
NYISO Monthly Failures Not due to NERC Tag or Economics

Percentage of NYISO Monthly Failures Not due to NERC Tag or Economics



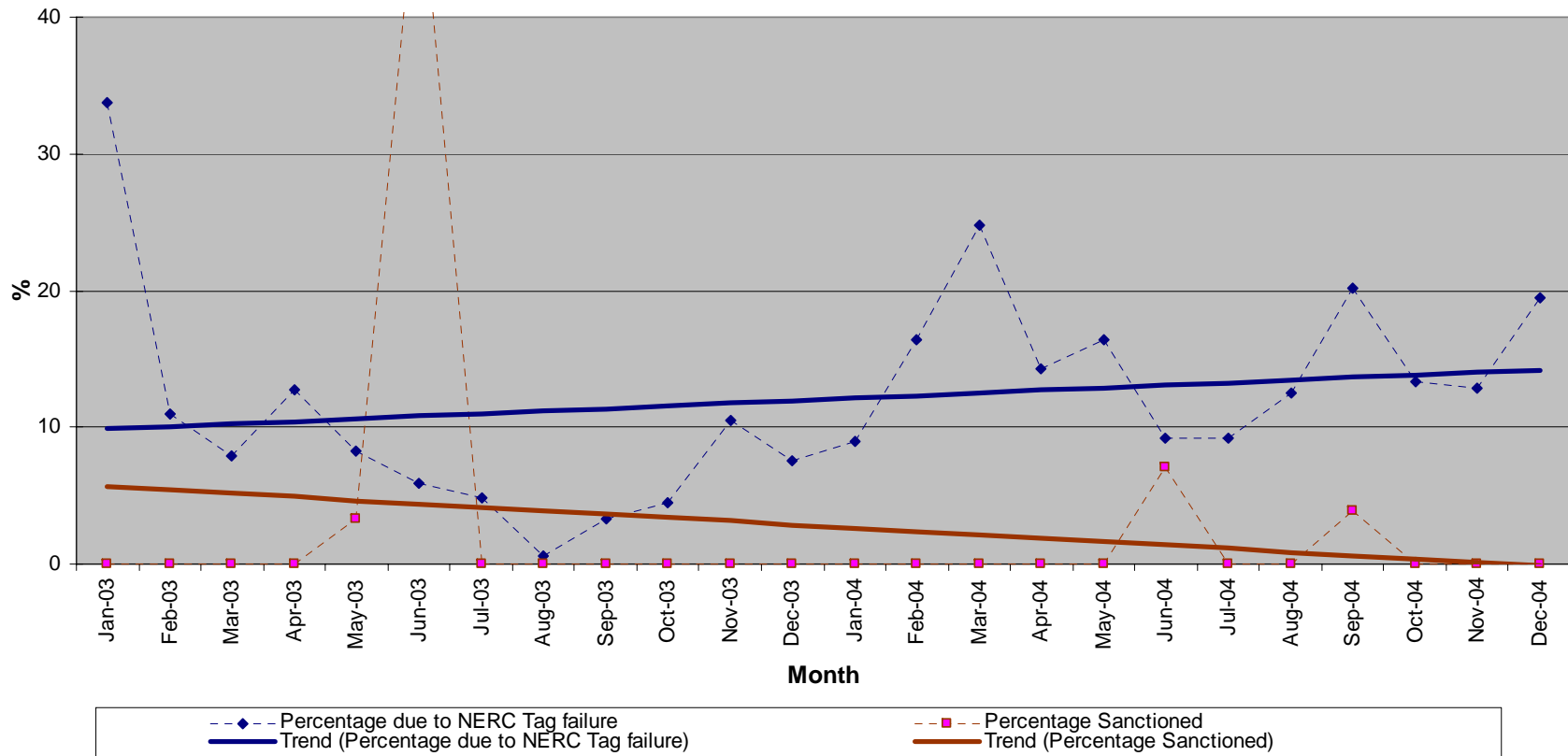
NYISO Monthly Failures due to NERC Tag or Economics vs Sanctioned

Percentage of NYISO Monthly Failures due to NERC Tag or Economics vs Sanctioned



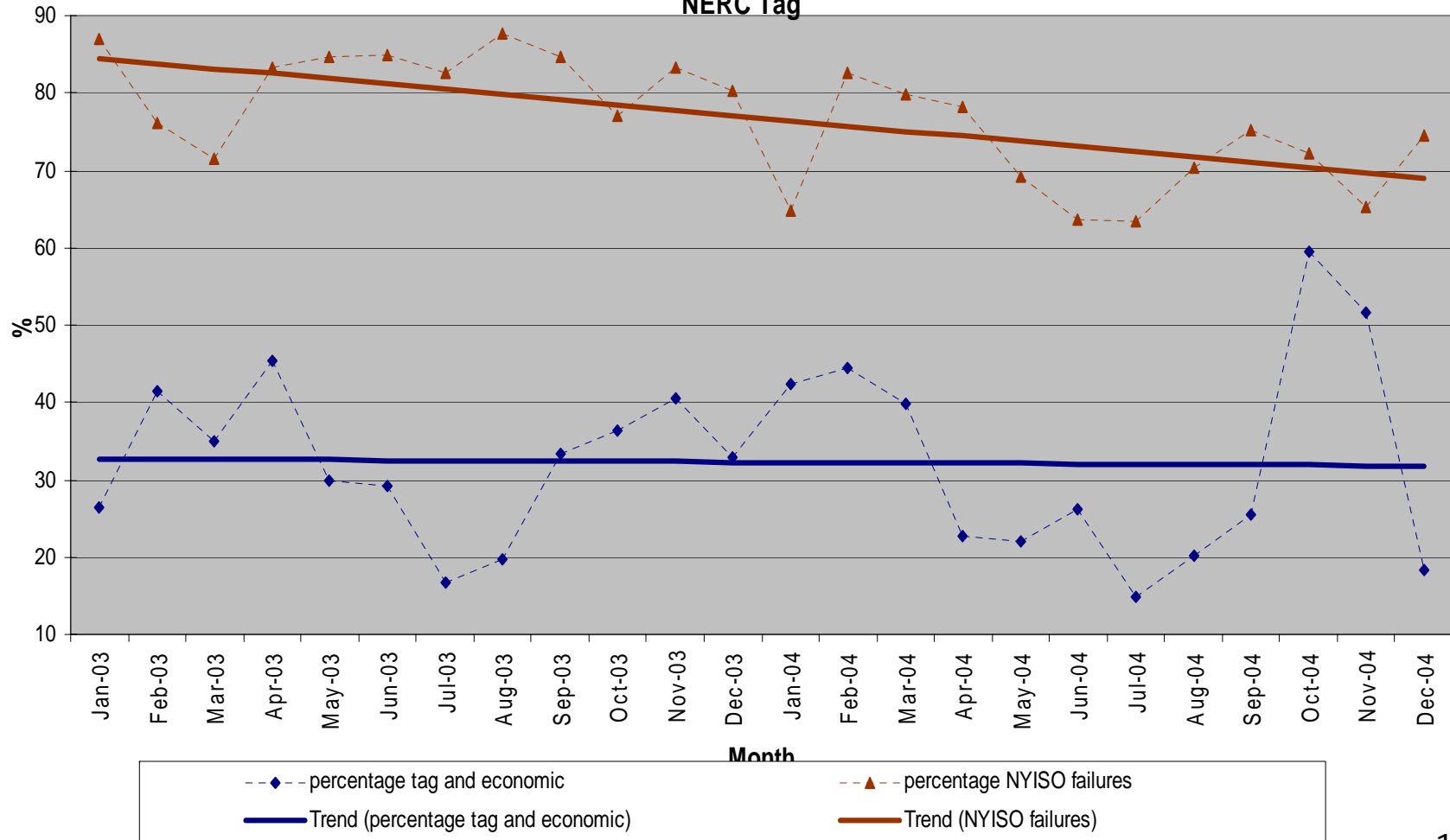
MISO (Michigan) Monthly Failures due to NERC Tag vs Sanctioned

Percentage of MISO (Michigan) Monthly Failures due to NERC Tag vs Sanctioned

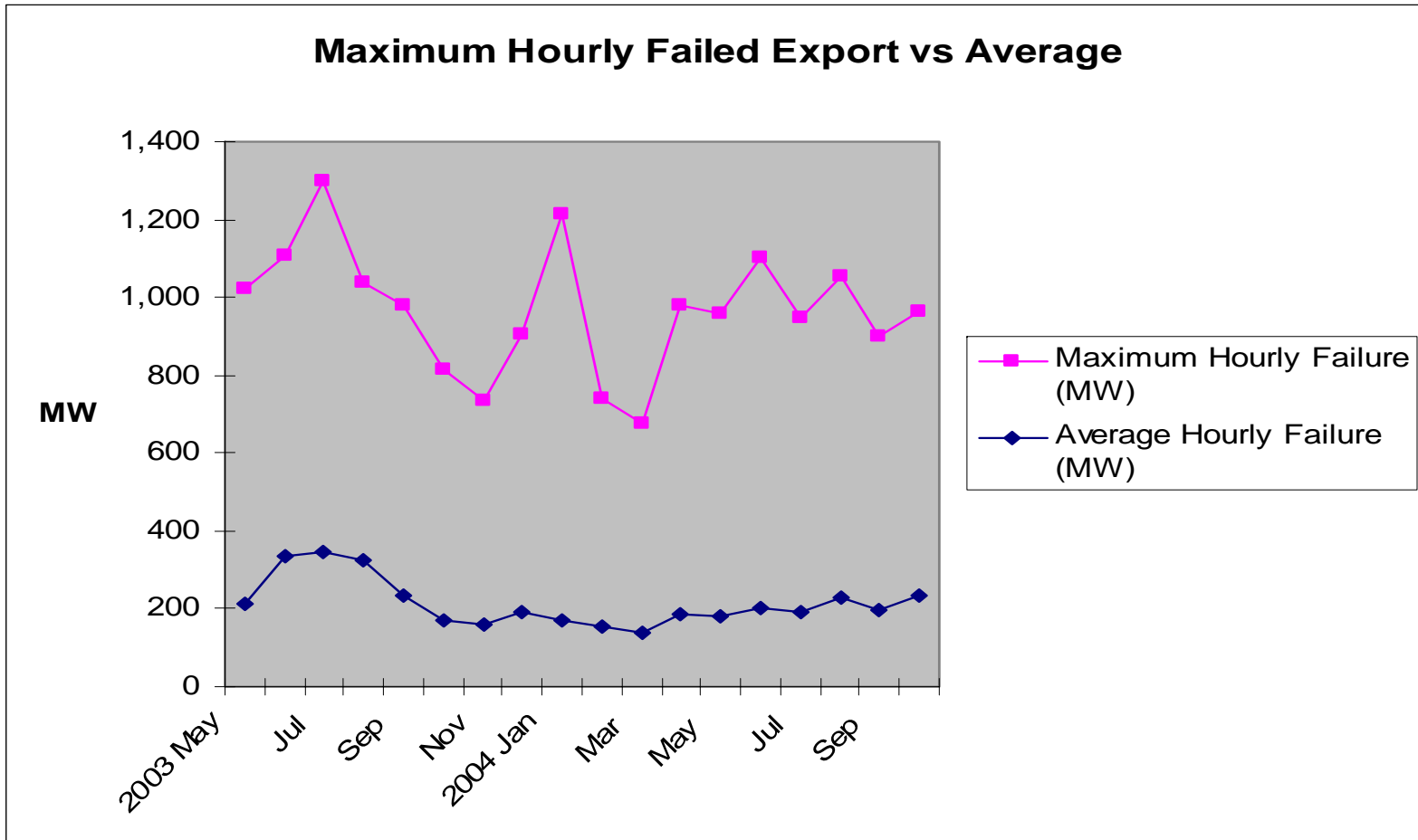


NYISO Failures and NYISO Failures for Economics and NERC Tag

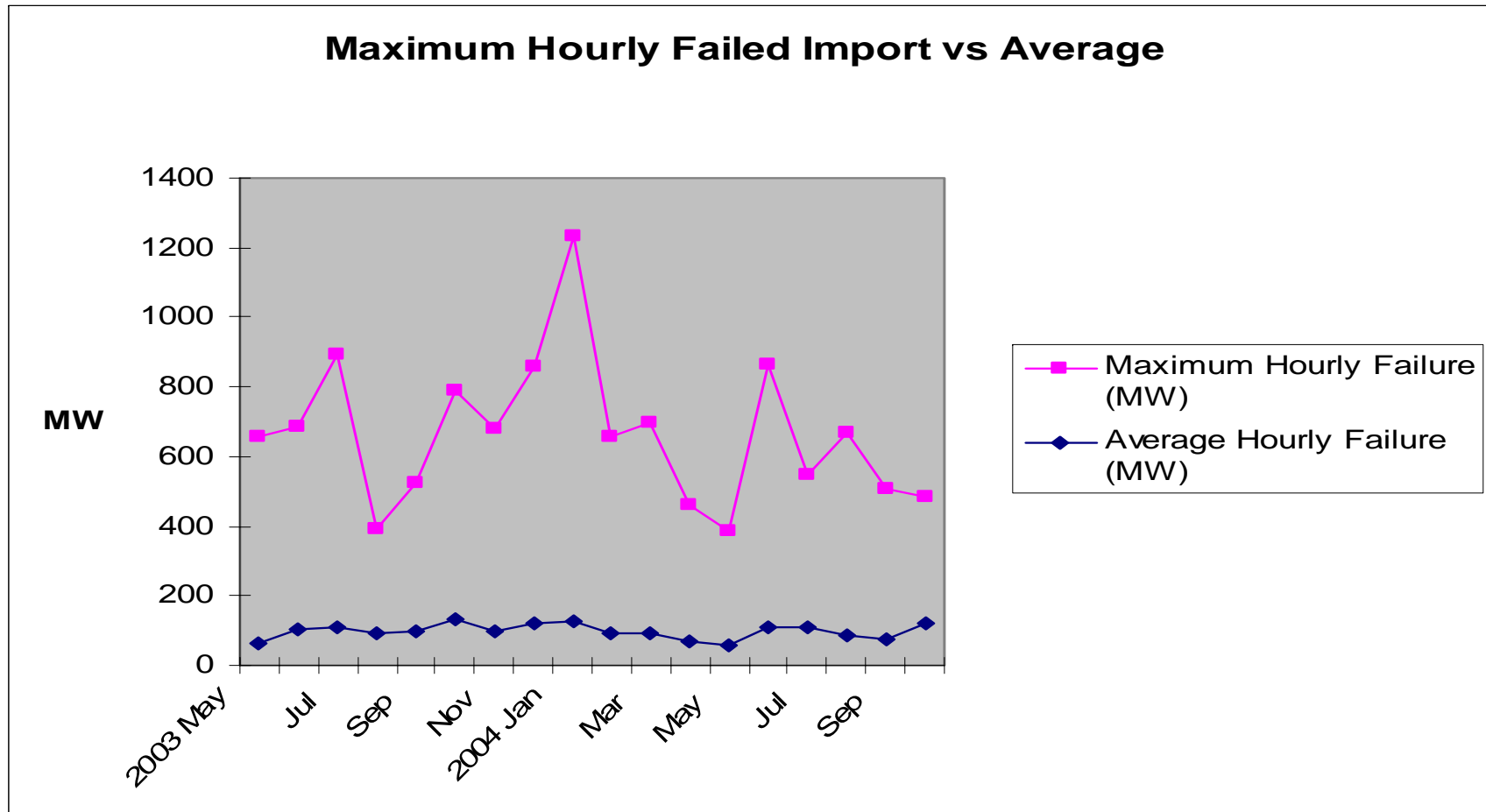
Percentage of Monthly NYISO Failures and Percentage of NYISO Monthly Failures for Economics and NERC Tag



Maximum Hourly Failed Export vs Average



Maximum Hourly Failed Import vs Average



- Chapter 7, section 7.5.8A intertie failures other than for bona fide and legitimate reasons constitute a breach
- MACD's NYISO guideline, first issued October 2002, explains MACD's enforcement screening for review under 7/7.5.8A
- NYISO guidelines provide safe harbours for 'economic' failures but do not address NERC tag obligations

- MACD elected to review transaction failures caused by incorrect NERC tags under Chapter 3, section 6.2 not 7/7.5.8A
- MACD's MISO guideline, effective June 2003, explains enforcement screening for NERC tag violations
- Provide safe harbour for failures to meet NERC tag obligations that result in transaction failures
- Does not address incorrect NERC tags that do not result in failed transactions
- Nor does it address 'economic' failures

- NYISO Intertie Guidelines, for economic failures, allow:
 - 1,000 MWh or 3% failure rate
 - No further review if HAM is volatile
 - MPs must be within \$10 or 20% of HAM price
- MISO Intertie Guidelines, for failures resulting from not meeting NERC tag obligations, allow:
 - 1,000 MWh or 3% failure rate

- Safe harbours in NYISO/MISO guidelines may actually increase transaction failures
- Guidelines for NYISO can contribute to increased failures when the HAM is volatile
- Guidelines do not capture occurrences of high volume hourly failures
- Guidelines apply only to specific interties and are not consistent for all transactions across all interties

- Guidelines ignore failures to meet NERC tag obligations that do not result in failed transactions

- Receive feedback at today's meeting and subsequent written or oral comments
- Establish small working group chaired by IESO & composed of participant representatives to:
 - review relevant data
 - receive presentations from subject matter experts on defined questions
 - explore proposals to improve transaction success
- Deliver recommendations to ITS and IESO by March 31, 2005

Total Monthly Failure as Percentage of Transaction Type

Total Monthly Failures as a Percentage of Transaction Type

