GEOLOGICAL SUMMARY

- 1. Based on existing wells, Mewbourne's claim that 28 feet of Lower Morrow Sand would be uneconomic is incorrect. By Mewbourne's map there are two orthodox locations with 28-32' of Lower Morrow Sand and an additional unorthodox location with 40' of sand (SW of SW/4).
- 2. A Mewbourne unorthodox location in the SW of the SW/4 of Section 35 would essentially have the same sand thickness as the proposed unorthodox location. The former unorthodox location would be acceptable to BEPCo/Santa Fe since it would position Mewbourne's well at a more equitable distance from where the two proration units adjoin.
- 3. Mewbourne's interpretation of the Lower Morrow Sand trends is inconsistent with BEPCo's and Industry's interpretation.
- 4. Mewbourne's well data can easily be shown to be in accordance with BEPCo and Industry's trends for the Lower Morrow.
- 5. Mewbourne's method of mapping the Lower Morrow Sand (thickness) is not representative of porosity distribution in the reservoir.
- 6. Mewbourne's interpretation only allows for 25% of their proration unit to be commercial in the Lower Morrow.
- 7. By BEPCo's reservoir mapping, Mewbourne would encounter a similar reservoir thickness of the Lower Morrow at an orthodox location in the NE of the SW/4 of Section 35 as they would at their proposed unorthodox location.
- 8. Mewbourne, in their application, has not addressed the Middle Morrow reservoir which has significant reservoir potential in the subject area.
- 9. A ruling in favor of Mewbourne would result in a severe loss of reserves to BEPCo/Santa Fe from the Middle Morrow reservoir as well as the Lower Morrow reservoir. BEPCo/Santa Fe can not currently access the Middle Morrow reserves, or the significant portion of the Lower Morrow reserves on their proration unit.

Conclusion

Only around 25% of the proposed proration unit by Mewbourne is productive from the Lower and Middle Morrow reservoirs.

An orthodox location in the NE of the SW/4 of Section 35, T18S-R28E will allow Mewbourne to have commercial access to the Lower Morrow reservoir to which BEPCo/Santa Fe has currently only limited access at this time. It will also allow Mewbourne commercial access to the Middle Morrow reservoir which currently can not be developed by BEPCo/Santa Fe in the E/2 of Section 2, T19S-R28E. Mewbourne's location (unorthodox or orthodox) will result in gas production from acreage outside of their proration unit. The proposed unorthodox location by Mewbourne should not be granted. If any unorthodox location is to be approved then it should be within the SW of the SW/4 of Section 35, T18S-R28E.