The Financial Case for Commissioning

Understanding the Value of Commissioning in Income Properties

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Grand Hyatt, New York City, 4 May 2005
Office property context

- Owner has more control over building systems in office than in retail, industrial, etc.

- Leasing dynamics often stall energy-efficiency advances

- HOWEVER, if properly positioned, appraisal effects can help make a compelling case for commissioning
Compelling case for income property

• “The building IS the business”
• Energy is a very large portion of operating expenses
• Need to know how costs/benefits would be shared, AND…
• Need to know how Owner’s share would affect value
Income property context

- Is commissioning “Cap Ex” or “Op Ex”?
- How would Owner/Tenant(s) pay/benefit?
- Tenant retention/attraction benefits?
- Property appraisal impact of Owner’s share of savings (and/or rental revenue gains)?
- Could rebates/incentives improve “risk/reward ratio”?
- Other resources (e.g., article reprints)
“Cap Ex” or “Op Ex”?

• Is the commissioning part of an expense-reducing capital project?
  – If so, is Cap Ex project being “passed through” to Tenant(s)?
    • BOMA standard lease clause
    • “Side agreements”
    • Limitations to recoveries
  – “Capitalize” commissioning expenses along with other A&E costs?
  – Verify savings first, then calculate savings allocation to justify recoveries
  – Owner “double-dipping”…who pays/benefits?
“Cap Ex” or “Op Ex”? (cont’d)

• Is commissioning being performed on existing building systems?
  – Addressing tenant comfort issues
  – Dealing with complaints about high operating costs
  – Owner recognizes that he/she would get most/all savings
  – Owner might want to lower “base years” before new tenants sign “fixed-base” leases
  – Could commissioning expense be “passed-through” as an operating expense?
  – Owner may stage commissioning across multiple years to minimize impact on the “base year” for new leases

• What if “Op-Ex-style” commissioning uncovers potential for an EE-related capital project?
Leasing basics

• Gross lease
  – Owner pays everything

• Net lease
  – Tenants pay everything

• Fixed-base lease
  – Owner pays up to a certain point, after which Tenant pays

• Regional variations
  – “Fixed-base” or “Modified Gross”? 

• “The devil is in the details”
  – Is “energy” part of “Operating Expenses” or “operating expenses”? 

Electricity billing varies widely

• **Direct Meter**
  Tenant pays what is on the meter directly to the utility company.  
  *(Essentially a “Net” lease…After lease signing, savings mainly benefit Tenant)*

• **Submeter**
  Applicable where permitted by law. Tenant pays the landlord what is on the meter plus a percentage "handling" fee (typically 10%). This is not always more expensive than a Direct Meter, as the landlord of a large building may be able to negotiate better rates than you can on your own.  
  *(Essentially a “Net” lease…After lease signing, savings mainly benefit Tenant)*

• **Rent Inclusion** ("Electric Rent Inclusion Factor" or “ERIF”)
  Tenant pays a fixed annual charge per rentable square foot.  
  *(Essentially a “Gross” lease…After lease signing, savings mainly benefit Owner)*

  1 Also need to consider who pays for commissioning & “persistence” of any benefits.  
  2 Does Tenant have right to adjust energy $ based on changes to equip./use/other?

• **Other arrangements…Be sure you understand who pays/benefits!**
The “fixed-base” lease

Allocating savings in a fixed-base lease

**YR 1**
- $2.00/SF Energy Cost
  - BEFORE Upgrade
- $1.90/SF “Expense Stop” for Energy
  - Requires the Tenant to Pay Energy Costs Above $1.90 Per Square Foot
- T = $0.10/SF

**YR 2**
- $1.60/SF Energy Cost
  - AFTER Upgrade
- L = $1.60/SF

**Savings**
- T saves $0.10/SF
- L saves $0.30/SF

**YR 1**
- $2.00/SF in YR1

**YR 2**
- $1.60/SF in YR2

**Total Savings**
- SAVE $0.40/SF
Best practice for analyzing upgrades to income property

1. **Data collection**
   - Identify possible upgrade
   - Energy Savings (energy units)

2. **Analysis**
   - All Costs & Benefits (dollars)
   - ANY Rebates? (dollars)

3. **Result**
   - Owner Default $ Savings
   - Tenants’ Default $ Savings
   - Recoverable by Owner
   - Non-Recoverable by Owner
Remember the impact on building value!

- **Appraisal Methods**
  - Cost approach
  - Market comparison approach
  - *Income approach*

- **Efficiency can boost NOI and appraisal**

\[
\text{net operating income} \div \text{capitalization rate} = \text{asset value}
\]
Knowing the Owner’s share

The Owner’s view of lower op ex

Before-Tax Cash Flow

- potential gross income
- vacancy and bad debt allowance
+ miscellaneous income
= effective gross income
- operating expenses
+ operating expense reimbursements
- cap ex reserve for replacements
= net operating income
- debt service (interest + princ. amort.)
= before-tax cash flow from operations

Income Approach to Appraisal

\[
\text{net operating income} \div \text{capitalization rate} = \text{asset value}
\]

Taxable Income

- net operating income
- interest portion of debt service
- depreciation allowance
= taxable income

In this example, a $1.00/SF upgrade with ~2.5-year simple payback period or $0.40/SF/year, 75% of which inures to the Owner, supports $0.30/SF in higher NOI and $3.00/SF in higher asset value.
“At the end of the day…”

Owner’s after-tax cash flow

Taxable Income
net operating income
- interest portion of debt service
- depreciation allowance
= taxable income (loss)
* tax rate
= taxes due

Before-Tax Cash Flow
potential gross income
- vacancy and bad debt allowance
+ miscellaneous income
= effective gross income
- operating expenses
+ operating expense reimbursements
- cap ex reserve for replacements
= net operating income
- debt service (interest + princ. amort.)
= before-tax cash flow from operations

After-Tax Cash Flow
before-tax cash flow from operations
- taxes due
= after-tax cash flow from operations
The importance of “persistence”

• Owner’s share of savings affects NOI
• Increases in rental income affect NOI
• Increases in NOI affect appraisal
  – Better valuations important both for sale and refinancing
• *However, how persistent are these upticks?*
  – Do benefits of commissioning last?
  – Will operating expenses remain lower?
  – Will Owner continue to enjoy his/her share of said savings?
  – Will rental rate increases last?
• Increases in tenant retention/attraction due to improved comfort generally lead to “persistent” NOI benefits
Using rebates/incentives

• More than $1.5 billion available annually
• Wide variety of sources
  – Utilities
  – State and local energy/economic development offices
  – Auxiliary agencies
  – Non-profits
  – Other
• Plenty of “technical assistance” money available
• Lots of “custom measures” programs out there
• Some specifically mention commissioning
Conclusion

• Quantify the costs and benefits of commissioning
• Properly classify it as “Cap Ex” or “Op Ex”
• Understand the leases: allocate costs/benefits
• Calculate the Owner’s share of benefits
  – Owner’s share of immediate savings
  – Capital cost recovery, if any
  – Better tenant retention/attraction
  – Effect on appraised value
  – Remember rebates/incentives for studies and upgrades!
• Properly positioned, commissioning could be a very attractive value proposition to income properties