



## **Advance Service Transmission Right Options or ASTROs™**

It is no secret. Unregulated markets have been hampered by the lack of adequate available transmission. Deregulation has contributed to grid unreliability because the system has been forced to handle more physical transactions than it was originally designed for. In addition, grid improvements have not kept pace with demand because potential investors have felt that returns relative to risk are not adequate. In many cases, the result of deregulation has been spikes in power prices rather than the hoped for decline in prices. As a result, many market participants have been unable to experience the true effects of a competitive power market.

LECTRIX wants to change that. LECTRIX has created ASTRO's or Advance Service Transmission Right Options as a method of developing transmission projects. ASTRO's are transmission service right options entered into in advance of actual transmission development.

Why would anyone be interested in ASTRO's? ASTRO's have a dampening affect on price swings. ASTROs have the effect of increasing access and thus reducing prices in constrained markets with power supply deficits, and increasing prices in constrained markets with excess power. For example, a municipal utility may be coming to the end of its current power purchase agreement during a projected period of high prices in a transmission constrained market. Existing generators know that the municipal utility's options of sourcing power are constrained by the transmission system and therefore are prepared to hold out for a significant price increase. The municipal utility can create greater competition by entering into an ASTRO with LECTRIX. Ideally, the ASTRO would be executed far enough in advance that transmission project could be in operation prior to the date power is needed. However, even in cases when this is not possible, the ASTRO is beneficial because purchases of higher priced power can be limited to the projected development period for the new transmission project. In addition, just creating the possibility of additional access can tip negotiating leverage back to more equal footing and thus facilitate an acceptable outcome. In such a case the ASTRO is allowed to expire unexercised. In this manner the expenditure for the ASTRO can be recouped numerous times over.

ASTRO's can benefit both generators and users of power. Generators can use ASTRO's to demonstrate that their generation is a potential less expensive alternative source of power to users in supply constrained markets.

Each ASTRO is specifically tailored to the regional systems specific circumstance. In most cases the lead time to actually deliver a completed transmission project will be a long-term undertaking involving system studies, environmental impacts, technological

solutions, right of ways, regulatory approvals, public hearings, permits and financing. As a result, an ASTRO will usually cover multiple years. This long-term development effort is reflected in the required ASTRO payment. The payment contributes to the funding of a serious development effort by LECTRIX and can be structured in a manner that stages payments coincident with project development milestones and with provisions for early termination. Likewise, the strike price of the ASTRO is set at an amount and term that enables project financing and may contain some price adjustment mechanisms to ensure that the project can be financed.

LECTRIX has unregulated transmission development experience in North America and relationships with key vendors, financing sources, land acquisition and engineering firms.

Further information can be obtained by contacting Reynold Roeder at 503-643-7999 or [Rroeder@lectrix.com](mailto:Rroeder@lectrix.com).