DRAFT CONCEPT OUTLINE

BOSNIA & HERZEGOVINA
ELECTRICITY MARKET STRUCTURE

January, 2009

I. OVERVIEW

Reform and rationalization of the power market in Bosnia & Herzegovina has been stymied during the recent past because of a number of factors. Initial reform efforts, commencing with the State Law on Electricity, the Entity Laws on Electricity, and the creation of the Transmission Company and the Independent System Operator at the State level in the early parts of the last decade laid a promising foundation for continued efficiency gains, market opening, greater customer choice, and overall improvement in quality in the sector. Initial implementation of the reform efforts resulted in solid progress: the three independent regulators established operations and effective licensing and tariff programs. Bosnia & Herzegovina signed the Energy Treaty and participated with neighboring countries in plans to develop a Southeast Europe regional electricity market. Donor funded studies created blueprints for unbundling and reorganization of the sector into more commercially viable companies, clear and distinct business lines, and the capacity to trade within the entire State and regionally consistent with the Energy Treaty.

These earlier promises have failed to come to fruition. This impasse warrants a fresh "rethink" of the market design and market reform process in Bosnia & Herzegovina. Set forth below is a brief outline on how a different approach could help push sector reform forward.

This publication is made possible by support from the American People sponsored by the United States Agency for International Development (USAID). The contents are the sole responsibility of the author/s and do not necessarily reflect the views of USAID or the United States Government.

II. WORK WITH ONE ENTITY AT FIRST, NOT THE ENTIRE COUNTRY.

The current market design in Bosnia & Herzegovina and structure of the power sector are complex. Three power companies, stretched across two Entities, serve the population of approximately 4 million. Transmission has been legally unbundled, but full implementation of functional unbundling has stalled. Similarly, although the ISO was legally constituted, full functional implementation of the ISO law has been slowed by resistance of the three EPs, the political situation and the ISO management's hesitation to engage in proactive work on reform and transparent communication. Generation and distribution remain fully bundled within the EPs.

Efforts could be undertaken to examine whether a more modest step at market rationalization and market reform could occur within one Entity. Since the Federation of Bosnia & Herzegovina has two power companies and therefore two distribution systems and two generation systems, a logical first step would be to work on a more modest scale within the Federation on its Federation-specific, internal problems. If desired at a later time, lessons learned from the Federation effort could be applied on a country-wide basis. Republic of Srpska and EPRS could observe and learn from efforts involving EPBiH and EPHZHB and then take the resulting market design and apply it in RS at a later time.

III. THERE IS PRECEDENT FOR THIS BOTTOM-UP APPROACH.

There is precedent elsewhere in the world in power sector markets for approaching market design from a bottom-up, incremental approach, as opposed to a top down, "big bang" approach for an entire large market. Nordpool pursued such an approach with neighboring countries in Northern Europe. PJM, the largest power pool in the world and considered one of the most effective, pursued a similar strategy in building from a modest foundation and gathering additional participants, while allowing significant variation in local markets and accommodating differing regulatory structures.

IV. STREAMLINE THE FEDERATION INTERNAL MARKET AND THEN ADDRESS CROSS-BORDER TRADE

A pilot market design program in the Federation would consist of two steps:

1. The first step would address specific Federation internal market problems, such as cost-reflective tariffs and their asymmetric alignment with market prices in the

context of EPHZHB's need to import electricity; large industrial customers as tariff customers; the asymmetric supply positions of the two EPs; and address the advisability of a single Federation tariff. Also addressed could be further development of power generation potential within the Federation, assurance of adequate supplies at reasonable prices for load centers within the Federation (including, for example, Aluminij and other large industrial customers) and the creation of a stable, more predictable price curve for customers.

2. The second step could address cross-border trade, particularly because of EPHZHB's supply deficit. The market design addressing cross-border trade could include great attention to and focus on mechanisms to stimulate additional cross-border regional trade, including physical upgrades as may be necessary, dispatch protocols, commercial arrangements, and settlement functions. Such trade could induce further development of power generation potential within the Entities, ensure adequate supplies at reasonable prices for load centers within the country and create a stable, more predictable price curve for customers. Greater market efficiency, including increased trade across the border, would support the drive for end use prices to reflect cost. With full cost recovery, renewable energy and demand side management and energy efficiency programs receive proper price signals and price incentives and are more likely to develop.

V. NEXT STEPS

Steps should be taken to develop a market design in one Entity – the Federation – to serve as a first step in extending a market design to the whole country. Through this process, the possibilities for a second step – cross-border trade – could be explored. If desired by the RS, a simultaneous pilot market design process in the RS could be effected. Specifically, the process could proceed as follows:

1. Revise the Concept Outline in light of USAID Comments; Introduce to Federation Stakeholders. At this stage, the Concept Outline should be a stakeholder oriented piece. While the content would be consistent with what USAID approves, it will be adapted for public consumption perhaps with some concrete proposals/alternatives.

2. Discussion Process with Stakeholders. There will need to be a short process to present the Concept Outline to stakeholders. The Federation Ministry and FERC are logical stakeholders in that the usual principle still obtains: the Government establishes policy, and the regulator implements it. Other

stakeholders including the EPs, large customers, etc. can express opinions during the process. In this context, SERC's proper role will need to be determined.

3. Develop the Concept Outline into a Work Plan based on the Stakeholder Process Above. The outline is simply that, an outline. To be effective, the outline will have to be turned into a work plan with more detail and more sequencing. For example, it appears as though there will have to be a subgroup working on (1) internal market tariff issues including the asymmetric alignment of tariff to cost; (2) EPHZHB's need to import; (3) large industrial customers including but not limited to Aluminij. A second subgroup will need to address technical and physical constraints toward Federation wide trade and potential cross-border trade. Within this context, there also needs to be a focus on renewable and clean energy and the technical and regulatory infrastructure reforms required to sustain it. Finally, there will need to be a subgroup that works on actual functioning of the market – whether it is a day ahead bid, transparent and verifiable settlement functions, creditworthy counterparties, and so forth.

4. Extend Pilot Market Design Process to RS if Desired. In any event, the RS will be kept informed of market design activities.

5. Stage Two: Extend Pilot Project to Entire Country and Address Cross-Border Trade.

6. Establish a Timeline. Because this work could easily extend indefinitely, it will be important to establish a workable timeline.